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WHARF RESOURCES (USA) INC.

June 17, 2011

Mr. Eric Holm
Department of Environment and Natural Resources
Office of Minerals and Mining
Joe Foss Building
5223 East Capitol
Pierre, SD 57501-3181

Re: Wharf Resources Large Scale Mine Permit Application

Dear Mr. Holm:

Wharf Resources (USA), Inc. is submitting a revision to the application for a large-scale mining permit originally submitted on February 18, 2011. This revision is in response to the South Dakota Department of Environmental and Natural Resources (SD DENR) review and comments made in letters addressed to Wharf and dated March 21, 2011 and May 25, 2011. Comments are addressed both in this letter and as applicable revisions and attachments to the application report.

Please find the following included with this revised application:

- Two signed and notarized copies of the revised "Application for Mining/Milling Permit."
- Two copies of the Wharf Expansion Project Mine Permit Application report (Rev. 1.0).
- Two copies of each exhibit that is new or revised.
- Two copies of the revised baseline groundwater and surface water reports.
- Two copies of each additional consultation letter and requested supplemental item.
- Two copies of the approved Lawrence County Conditional Use Permit (CUP) for the Expansion Project.
- Two copies of the complete revised permit application material on DVD.

Documentation from the Lawrence County Register of Deeds offices stating this information is on file for public viewing will be provided, when available. Electronic copies of the revised permit documents were also sent to the following review agencies: S.D. Department of Health, S.D. Department of Agriculture, S.D. Archaeological Research Center, S.D. State Historical Society, S.D. Department of Tourism and State Development, S.D. Department of Education and Cultural Affairs, S.D. Department of Game, Fish, & Parks, U.S. Department of Game, Fish, & Parks, U.S.D.A. Natural Resource Conservation Service, Bureau of Land Management, and the Lawrence County Conservation District. Proof of submission will be provided to the SD DENR when available.

If you have any questions or require further information, please contact me at 605.584.4177.

Sincerely,

Ken Nelson
Operations Manager

Ron Waterland
Environmental Manager

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WHARF RESOURCES (USA) INC.

Response to letter from the SD DENR dated March 21, 2011

Part I -- Procedural Completeness Issues

1. SDCL 45-6B-4, ARSD 74:29:02:02, ARSD 74:29:06:04(e), ARSD 74:29:07:24(1)(g), and ARSD 74:29:07:25(1)(f). Wharf must submit proof that it is in compliance with Lawrence County ordinances or proof that the application is in substantial compliance with the procedures for obtaining a Lawrence County Conditional Use Permit. A letter from the Lawrence County Planning and Zoning Office confirming this is sufficient to meet the requirement. The county is also required to approve the postmine land uses of Industrial Use and Home Sites before the Board of Minerals and Environment can approve those land uses. This can be addressed through the same letter noted above.

   Lawrence County Planning Board and the County Commission approved a large-scale extractive industry Conditional Use Permit (CUP) for Wharf Resources' Expansion Project on June 14, 2011. A copy of the permit is included in Appendix 1 of the revised application report.

2. SDCL 45-6B-5(5) and SDCL 45-6B-91. The postclosure plan should address the treatment of tailings (spent ore) to ensure continued neutralization or immobilization of any parameters of concerns (including arsenic, nitrates, and sulfates) during the postclosure period. An updated postclosure bond calculation that includes any changes to the current postclosure bond that may result from the proposed expansion project needs to be provided.

   Additional text about the treatment of tailings has been added to Section 6.10.2.5. The post closure bond provided in Table 6-5 of the permit application report has been updated.

3. SDCL 45-6B-6. The application form should identify C.T. Corporation System as the resident agent rather than Bill Shand. Please include the correct resident agent name, address, and phone number on the application form. To correct these items, Wharf may want to submit a revised application form.

   A revised application form is included in Appendix 1 of the permit application report. The correct resident agent is also provided below.

   CT Corporation System
   319 South Coteau
   Pierre, SD 57501-3108
   605-224-5825

4. Certification of Applicant Form. Please submit a list of previous violations at the Wharf and Golden Reward mines that can be attached to the certification of applicant form.

The list is provided with this letter and should be included in Appendix 1 with the certification of applicant form.

5. SDCL 45-6B-6(2) and (3), SDCL 45-6B-10(2) and ARSD 74:29:02:03. There are a few minor errors or omissions on the Impacted Land Map in Exhibit 3 and in the land ownership tables in Appendix 1, as follows:

   a. There are no claims shown on Exhibit 3 for the extreme western end of the expansion permit boundary. The map on the Lawrence County web page shows claims in this area that need to be identified in Exhibit 3; and

      Corrected on Exhibit 3.1.

   b. Mountain View Heights, Inc. is shown as a mineral owner in the ownership list at the end of the Table 1, Appendix 3, but not in the table. Also, White House Congress is shown as a mineral owner in table 1, but not in the list at the end of the table. Are Mountain View Heights, Inc. and White House Congress both mineral owners?

      Mountain View Heights, Inc. and White House Congress are not mineral owners. The landownership tables have been corrected.

6. SDCL 45-6B-6(5) and ARSD 74:29:05. The application indicates that the applicant's right to dispose of tailings (spent ore) is addressed in Section 5.4 of the mine permit application. However, there is nothing on the legal right to dispose of spent ore in the Portland Ridgeline Pit. If Wharf is seeking to dispose of spent ore in areas other than the leach pads or the American Eagle Pit, the application will need to address those areas and the applicant's right to dispose of spent ore on those lands.

   The disposal of spent ore within the Portland Ridgeline Pit will meet off-load criteria. Currently Wharf Resources holds two (2) groundwater discharge permits (GWDP) one within the Portland Ridgeline that allows off-load of spent ore, the Foley GWDP. In addition another GWDP has been submitted which includes the eastern end of the Portland Ridgeline and the American Eagle Pit. If the permit is approved the new permit will be used to off-load spent ore contingent upon meeting ground water discharge requirements. Please refer to Exhibits 2, 2.1, and 21.1 for current and proposed POP Zones for off load of spent ore.

   For final off-load of the heap leach pads it is estimated that approximately 10 MT will be off-loaded from the heaps to a POP zone within a GWDP. It is anticipated that it will be unloaded within the current Permit boundary at Wharf Resources within the Portland Ridgeline. View Exhibit 2.1 and 21.1 for spent ore placement. Pads unloaded will meet the necessary off-load criteria set within each GWDP. It is estimated that approximately 1.5MT

will be left on the heap leach pads for use in final reclamation of the pads and ponds within the process area. This material left in-place on the heaps will meet the necessary groundwater discharge or surface water discharge requirements for final reclamation.

Concerning ARSD 74:29:05:05 through 12, all spent ore that is planned to be offloaded to an unlined area will meet the necessary off-load criteria and will be unloaded within a designated POP boundary. All spent ore subject to the above will be treated by insitu treatment through bio-denitrification within the heap leach pad system before unload or by biodenitrification of solution through a bio-sand filter similar to the Ross Valley Water Treatment Plan (Bluewater System). Treatment of the spent ore will take place during the neutralization cycle of the pad prior to off-load. Treatment by insitu-biodenitrification has been successful on current denitrification pads and the operation is set up for this type of process and is most feasible. The treatment by biodenitrification through a sand filter has also been proven to be successful in treating and eliminating nitrates (or to the groundwater standards for nitrates) within process solutions and may also be used in conjunction with insitu treatment or as a stand-alone process. All treatment reagents for this process are currently stored and used on site; the storage facilities for the reagents pass all applicable storage laws. Once the pad has been determined neutralized/denitrified the effluent solution from the treated pads will undergo off load sampling protocol to assure that the solution passes groundwater discharge standards. Once the spent ore has been cleared for off-load the material will be suitable for use in backfill of pits for reclamation. The final pads to be off-loaded will be used to help cover the remaining highwalls within the Portland Ridgeline area along with waste material in the backfill.

Prior to initiation of treatment (neutralization/denitrification) the pad will undergo the required effluent sampling of pore water for the required parameters and will be monitored throughout the treatment process. Off-load of each pad in treatment will be determined by the final off-load sampling protocol set and approved by the SD DENR.

If any pad(s) cannot meet treatment standards the pad(s) will need to be evaluated on how to prepare for final reclamation and a plan set and agreed upon with the SD DENR so that the material will not negatively affect the environment.

Note that under ARSD 74:29:01:01(104), the term "tailings impoundment" includes leach pads and dumps containing treated spent ore. The application mentions several times that about 10 million tons of the final spent ore from the leach pads will be off loaded into the Portland Ridgeline Pit to reduce the amount of exposed highwall during final reclamation. However, Section 4.2 of the Groundwater Report states none of the spent ore will be offloaded to expansion area pits. It also infers in Section 5.3.4 that the final heap leach pads may be reclaimed in place. Does Wharf plan to offload the final spent ore from the leach pads into the Portland Ridgeline Pit? Will Wharf need to obtain a ground water discharge permit to place spent or in this pit? If so, how much spent ore will remain on the leach pads to be regraded and reclaimed in place?

The baseline groundwater report has been corrected to state that spent ore is not planned for disposal at Golden Reward or Bald Mountain area pits.

If spent ore will be placed in the Portland Ridgeline Pit, it needs to be addressed in Sections 3.3.4 and 3.4.3.

Additional text has been added to the permit application report.

Since Wharf will be placing spent ore in the American Eagle Pit and possibly the Portland Ridgeline Pit, the reclamation plan should address those sections in ARSD 74:29:05 (Reclamation of Millsites) that pertain to disposal of spent ore. ARSD 74:29:05:05 through 12 should be addressed. As Wharf is already permitted to dispose of spent ore at its current operation, these regulations may be addressed in general terms. For instance Wharf may summarize data already submitted to the department to address ARSD 74:29:05:06.

Concerning ARSD 74:29:05:05 through 12, all spent ore that is planned to be offloaded to an unlined area will meet the necessary off-load criteria and will be unloaded within a designated POP boundary. All spent ore subject to the above will be treated by insitu treatment through bio-denitrification within the heap leach pad system before unload or by biodenitrification of solution through a bio-sand filter system similar to the Ross Valley Water Treatment Plant (Bluewater System). Treatment of the spent ore will take place during the neutralization cycle of the pad prior to off-load. Treatment by insitu-biodenitrification has been successful on current denitrification pads and the operation is set up for this type of process and is most feasible. The process of denitrification through a bio-denitrification sand filter has also been proven to be successful in treating and eliminating nitrates (or to the groundwater standards for nitrates) within the process solutions and may be used in conjunction or as a stand-alone system. All treatment reagents for this process are currently stored and used on site; the storage facilities for the reagents pass all applicable storage laws. Once the pad has been determined neutralized/denitrified the effluent solution from the treated pads will undergo off load sampling protocol to assure that the solution passes groundwater discharge standards for discharging. Once the spent ore has been cleared for off-load the material will be suitable for use in backfill of pits for reclamation. The final pads to be off-loaded will be used to help cover the remaining highwalls within the Portland Ridgeline area along with waste material in the backfill.

Prior to initiation of treatment (neutralization/denitrification) the pad will undergo the required effluent sampling of pore water for the required parameters and will be monitored throughout the treatment process. Off-load of each pad in treatment will be determined by the final off-load sampling protocol set and approved by the department (DENR). If any pad(s) cannot meet treatment standards the pad(s) will need to be evaluated on how to prepare for final reclamation and a plan set and agreed upon with the DENR so that the material will not negatively affect the environment.

Wharf mentions in the application it may construct another leach pad in the expansion area just to the north of the current process area. ARSD 74:29:05:01, 02, and 05 through 12 should be addressed for the potential new leach pad.

Plans for this area do not currently include an additional pad or pad expansion; if future uses lend the need for an additional pad, additional studies and a technical revision will be submitted to the DENR for approval. Clarification of this issue is included in Section 5.2 of the permit application report.

ARSD 74:29:05:05 requires plans and specifications and a stability analysis for spent ore depositories. For the purposes of completing the application, Wharf need only address conceptual plans and specifications at this point. Final plans and specifications and the stability analysis will be required prior to disposal of spent ore in areas not already permitted.

The disposal of spent ore for pit backfill will be used for reclamation material to enhance the area for final reclamation. The material will be used along with other non-ore material (discard material) intermingled and will be sloped at a 3:1 for optimal reclamation and sloping to tie in with the native landscape. Current practices at Wharf Resources over the last 25 years have shown that these current reclamation practices of sloping and pit backfill with these materials is practical and stable for this need and has no adverse erosional problems.

Also note for SDCL 45-6B-91(1) regarding the postclosure plan, the treatment of tailings to ensure continued water quality compliance in the postclosure period must be addressed (see item no. 2 above).

Refer to Item 2 above.

7. SDCL 45-6B-6(8)(d) and ARSD 74:29:02:04:(6). The blasting plan should also address minimizing undetonated and spilled blasting agent (ANFO), which will in turn minimize the concentration of nitrate in surface and ground waters.

The text below has been added to Section 3.10.3.

The spill plan for undetonated or spilled blasting agent is to clean by means of shovel and 5 gallon buckets in small quantities of approximately 10 - 15 gallons in size; larger spills will require small loader and dump trucks or vacuum trucks to clean-up the material. Material will then be either used immediately back in an un-shot blast to be detonated or mixed back in within the blasting agent holding tank or truck for later use. Any soil or subsoil that is contaminated by the blasting agent will be excavated and placed in the

contaminated soil storage bin to be disposed of at an appropriate contaminated soil disposal site.

8. SDCL 45-6B-7(2). The local conservation district should be consulted regarding the soil survey of the affected land.

A copy of the soil survey has been sent to the Lawrence County Conservation District. A copy of the letter from the conservation district will be forwarded upon receipt.

9. SDCL 45-6B-7(5). In section 2.3, please include a statement summarizing any characteristics of the proposed affected land having historic, archaeologic, geologic, scientific, or recreational significance.

Summary information and reference to Wharf Resource's Request for Determination of Special, Exceptional, Critical, or Unique Lands has been included in Section 2.3.

10. SDCL 45-6B-7(9) and ARSD 74:29:02:11. Please address the following sections of this regulation:

(1) Baseline surface water and ground water reports:

a. From previous baseline sampling at Golden Reward, it is known that radionuclides tend to be elevated. However, in Table 3-6 in Appendix 6, the radon concentration in the Nevada Gulch well appears to be excessively high. Please collect another radon sample from this well to verify the concentration;

An additional sample from the Nevada Gulch well was collected on April 21, 2011. Radiological results are included in the revised Groundwater Report (see Table E-40).

b. Wharf needs to submit ten more months of data for well PW-2 to complete baseline data requirements; and

Additional data collected from well PW-2 is now incorporated into the Groundwater Report. The complete twelve months of data is forthcoming with the final monthly sample at this well anticipated to be collected in fall 2011. Monthly samples will continue to be taken and results will be forwarded to the SD DENR.

c. In Appendix E of the Ground Water Baseline Report, we noted some sampling parameters are different than those specified in the baseline sampling plan for the following sites:

Nevada Gulch well - Sampled for total barium, copper, beryllium, and lead instead of dissolved on July 2010;
Foley Shaft - Sampled for total metals only in November 2009 rather than dissolved; and
Terry Peak well - Sampled for total metals rather than dissolved during November 2009 sampling event and sampled for total iron during July and August 2010 sampling events rather than dissolved.

We also noted some sampling parameters specified in the baseline sampling plan are missing for the following sites:

Nevada Gulch well - Sulfate and total mercury results missing for July, August, and September 2010;
Terry Peak well - Magnesium and nitrate results missing for July and August 2010; and
Railroad well - Mercury results missing for November 2009 sampling event and missing anion-cation balance for March 2010.

We did note that the sample results for these sites were reported as dissolved and not total metals and the missing parameters were included in the additional ground water data at the end of report. Please verify that the data at the end of the report is correct. If the samples were analyzed for total metals rather than dissolved, please provide an explanation for the deviation from the baseline sampling plan.

All baseline groundwater quality samples collected after November 2009 were analyzed for dissolved metal concentrations. The data included in the original Groundwater Report was mislabeled though the tables at the end of the appendix were correct. The data tables in the Groundwater Report have been revised to show the correct data. Additionally, original lab data sheets are included on disc in the revised baseline groundwater report.

d. In Section 3.4.2, page 40, the text defines 11 baseline surface sampling sites. However, baseline sampling did not address water quality associated with Long Valley. During the September 30, 2010 inspection at Wharf mine, the topic of baseline water quality in Long Valley was raised. At that time Wharf explained that the new expansion area depicted on the maps to the north of the heap leach pads was for a possible new heap leach pad. Wharf indicated there would be no disturbance to the north of the ridgeline that would impact the Long Valley drainage. Exhibit 2 indicates that the

planned disturbance does cross into the Long Valley drainage. At the September 30, 2010 meeting DENR advised that surface water baseline sampling needs to be conducted in Long Valley if the expansion crosses the ridge into that drainage, but would not need to be done if the expansion stayed in the McKinley Gulch drainage. Please clarify the extent of the planned disturbance in this area. If the disturbance will cross the ridge, please submit a baseline sampling plan and schedule for this drainage.

At this time, there is no planned mining disturbance across the ridgeline into the Long Valley drainage. Current plans for the area include parking lot expansion, plant warehouse, and utility reroutes. As a permit condition, a baseline sampling plan and 12 months of data will be submitted to the DENR for review before any mining disturbance occurs within the Expansion Project in the Long Valley drainage basin.

(2) In Exhibits 5, 6, and 7, there should be two more cross sections each for both the Green Mountain and Golden Reward Pits. It was noted on the Green Mountain Pit cross sections there are three trending north-south across the pit and only one east-west trending cross section across the southern edge of the pit. Please include two more east-west cross sections across the middle and north end of the pit. Likewise, with the Liberty and Harmony Pits there are three east-west trending cross sections, but only one north-south trending cross section across the eastern edge of the pit. Please include two more north-south cross sections across the center and western edge of the pits.

It was also noted in the report and Exhibit 4 (Wharf and Golden Reward Geologic Map) the porphyry deposits are separated into monzonite and phonolite porphyry deposits. Please modify the cross sections to indicate the location of the monzonite and phonolite porphyries.

Complete.

(3) Since the surface water inventory map in the Surface Water Baseline Report is too small to read, it needs to be revised. We suggest the map be constructed on a topographic base map similar to the size of the exhibits showing all streams, seeps, springs, lakes, ponds, wetlands, and dams for the entire mine site. There is also a reference to several unnamed minor springs from historic surveys located in the drainages of False Bottom Creek, Deadwood Creek, Nevada Gulch, Fantail Creek, and Stewart Gulch, which should be identified on the map.

A smaller-scale surface water inventory map inclusive of the items mentioned is included in the revised baseline surface water report.

(4) Please add the permit expansion boundary to the well inventory map in the Ground Water Baseline Report.

The map has been revised per instructions.

(7) It appears RESPEC used the parameter lists approved under the current mine permits for the ground and surface water baseline sampling at Golden Reward and Wharf. For the operational ground and surface water monitoring plan, Wharf should use one parameter list for all ground water sampling sites and one parameter list for all surface water sampling sites. Also, based on recent discussions with Wharf and a review of the additional surface water data tables provided with the report, it appears at least one of the parameter lists on this table is incorrect. Please verify that all the parameter lists are accurate.

The Wharf Minining parameter list will be used and not the Golden Reward Surface Water Discharge Parameter List. Reference copy is included in Appendix 6 of the permit application.

(10) Please submit a spill contingency plan. A copy of the current spill contingency plan for Mine Permits 356, 434, 435, and 464 may be submitted if the expansion will not require changes to the plan.

A copy of the current spill contingency plan is now included in Appendix 17 of the permit application. Now changes from the current plan are proposed for the Expansion Project.

11. SDCL 45-6B-7(12), SDCL 45-6B-20, and ARSD 74:29:02:08: The methods used to calculate the bond numbers listed in table 6-5 in Section 6.10 of the application need to be described in detail. Please include material balances, haul distances, and equipment and operator costs used in the calculations and any assumptions used in the calculations. The detailed calculations can be marked confidential if they comply with the confidentiality requirements in SDCL 45-6B-19.

The bond calculation was created under the assumption that all the pits would be mined out completely and the waste facilities dumped to fill in completed pits, prior to any reclamation. The material volumes to recontour the slopes were estimated based on the height of the facility, and the horizontal distance to be recontoured (Table 6-6). These material volumes were used to estimate the number of hours required to perform the various stages of reclamation. Finally, a cost per hour was applied to the mining equipment and a cost per acre was applied to revegetation, to arrive at a final cost for each area. A detailed list of the material volumes and costs used in the calculations are presented in Tables 6-5 and 6-6 of the revised permit application report.

Does Wharf plan to submit additional bond for the expansion operation in phases to correspond with each phase of the mining operation? Also, does Table 6-5 include calculations for areas affected under Permits 356, 434, 435, and 464?

Wharf will maintain the same method for recalculating the bond as currently used. Wharf will continue to provide biennial updates to the bond, posting any additional amounts prior to any new disturbance. Table 6-5 does include calculations for areas affected under current Wharf Mine and Golden Reward Mine Permits.

12. SDCL 45-6B-8. Please identify any unreclaimed land disturbance on previously mined land in the expansion area which was incurred prior to July 1, 1971, if any.

Wharf will not be responsible for reclamation of underground mining that occurred prior to July 1, 1980 (per SDCL 45-6B-9). Underground workings displayed on Exhibit 30 are all included in this category. Additionally, historic mine sites within the Expansion Project are provided on Exhibit 31.

13. SDCL 45-6B-10(4), and ARSD 74:29:02:12. The department has the following comments on the exhibits in Appendix 2 of the mine permit application:

Exhibit 2 - Please separate Exhibit 2 into two separate maps. The first map should just show the existing facilities such as the leach pads, process area, office, shop and crusher facilities, denitrification pads, Ross Valley Spent Ore Facility, the Reliance, Trojan, and Land Application Waste Rock Facilities, and the Juno, Portland, Deep Portland, American Eagle, and Trojan Pits. Exhibit 2 can remain the same and could be labeled as Current Facilities and Expansion Area. Finally, please show the boundary of the Terry Peak Ski area.

Corrected. (Terry Peak Ski boundary will not be indicated).

Exhibit 2 shows Portland Ridge disturbance outside the permit boundary and proposed disturbance limit. The Green Mountain disturbance is also shown outside the proposed disturbance limit. Please correct the map and any other maps so that all disturbances are within the proposed disturbance limits and permit boundary.

Corrected.

Exhibit 4 – The geologic map does not show the extent of the existing permit boundary or the proposed expansion area. This map also does not extend far enough to the west to show the entire expansion area or permit area. Please revise this map to so that it identifies all of the existing permitted area and proposed expansion areas.

Corrected.

Exhibit 10 - The map needs to be divided into at least four separate maps (e.g., one map for Portland, one for Green Mountain, one for Liberty, and one for Harmony.) Each map needs to be large enough so all labels are clearly visible. The ABA sample sites should be labeled with Sample ID numbers and ANP/AGP ratios. The ANP/AGP labels should also differentiate between discrete stratigraphic horizons or rock types (i.e. color coding). The ABA sample site maps should include ANP/AGP values from all sample sites listed in Tables 1 – 11 of Appendix 4 since it appears that many of the sample sites listed under the tables associated with "historic" sampling are not depicted on the map. Also, the potential special handling areas indicated on this map are extremely difficult to see. Please mark these areas more clearly.

Exhibit 10 has been revised and additional exhibits (listed below) provide zoomed in views of the Expansion Project. Each sample is labeled with a Hole ID, though ANP/AGP ratios are provided in tables in Appendix 4 to prevent overcrowding on the maps.

Exhibit 10 – Refers to all ABA locations
Exhibit 10.1 – Refers to Portland ABA locations
Exhibit 10.2 – Refers to Green Mountain ABA locations
Exhibit 10.3 – Golden Reward ABA locations

Exhibit 15 – The map needs the applicant's name, signature of preparer, and date prepared.

Corrected.

Exhibit 19 – The map needs the applicant's name, signature of preparer, date prepared, legend, and scale.

Corrected.

Exhibit 21 - Please show the boundary of the Terry Peak Ski area.

The Terry Peak Ski boundary will not be indicated as per conversations with the SD DENR.

14. SDCL 45-6B-12 and SDCL 45-6B-44, and ARASD 74:29:06:01. SDCL 45-6B-44 and ARSD 74:29:06:01 require that the reclamation plan be developed by Wharf, the department and the landowners. To date, the Bureau of Land Management (BLM) has not

yet formally agreed to the four postmining land uses since in Appendix 16 there is a "Pre-submission Conference to Determine Post-Mining Land Use" letter that has not been signed by the BLM. Please submit a signed copy of the letter to show the BLM is in agreement with the four postmine land uses. In addition, even though Tom Marsing of the Black Hills Chairlift Company was at the December 15, 2010 meeting where we discussed the postmining land uses, a letter from Mr. Marsing documenting that the Black Hills Chairlift Company is in agreement with the four postmine land uses should be submitted.

Buffer waiver letters from both the BLM and the Black Hills Chairlift Co. are now included in Appendix 3. The BLM has given approval to reclaim disturbed BLM land to recreation or rangeland; as such, all BLM parcels will be reclaimed to either of these two land use types. If these BLM parcels are purchased by Wharf Resources before final reclamation, those parcels will be reclaimed to the land use type of surrounding lands as indicated on Exhibit 23. The Black Hills Chairlift Company is in agreement with all planned land use types.

Please submit an instrument of consultation with the BLM and the Black Hills Chairlift Company who are surface owners in the expansion area. Since the right-of-way for State Highway 473 is located in the proposed expansion area, Wharf also needs to obtain an instrument of consultation from the South Dakota Department of Transportation. This instrument of consultation must show that Wharf has permission to enter and commence operations. The instrument of consultation should also contain written confirmation of receipt of the operating and reclamation plans by each landowner.

The operating and reclamation plans were included in the large-scale mining permit application. This document was submitted in whole to the BLM and receipt is demonstrated by the certified mail receipt and "Proof of Submission" form. Letters from the SD DOT are included in Appendix 1 and 3.

In Section 2.2, page 15, please explain how Wharf has the legal right to mine the claims owned by the Golden Reward Mining Company, including the transfer of Mine Permit No.450 from Golden Reward to Wharf.

On November 18, 2010 the South Dakota Board of Minerals and Environment approved the transfer of Mine permit 450 from the Golden Reward Mining Company, LP to Wharf Resources (USA) Inc. The associated documentation is included in Appendix 3.

Proof of consultation with landowners adjacent to the proposed expansion permit boundary (John Dykes, Paul Akrop, Rose and Amber Determan, William and Katherine English, Randy and Juli Huber, and the BHCL, USFS, BLM Lead Volunteer Fire Department) must be submitted as required by SDCL 45-6B-44. This consultation was not identified in our review of Appendix 3. A signed statement from each adjacent landowner stating that they received a copy of the reclamation plan will suffice as proof of consultation.

The adjacent land owners are BHCLC, USFS, BLM, and Lead Fire Dept. only. Instruments of consultation are included in Appendix 1.

15. SDCL 45-6B-32. In Section 1, page 1, please address the following comments related to the sections of this statute identified below:

(4) Exhibit 2 - Several buildings shown along the Stewart Lodge Road are within 200 feet of the proposed permit boundary of the expansion area. Please describe how the stability of these buildings will be protected during mining.

As stated in Section 3.10.3, paragraph 4, Wharf will follow industry standards to assure that ground vibration does not impact structures. This will be managed through blast monitoring of shots and gathering data that can be used to manage shot size and loading parameters when structures are in concern.

The Lead Fire Department has a building used for volunteer firefighting equipment that is within a 500' buffer zone from the proposed permit boundary. Blasting will occur approximately 500' from this building and will take place so that the shock of the blast is pulled away from the area of the building so not to incur vibration or shock onto the structure. This is normal procedure and currently and historically Wharf has followed this procedure (which includes shot direction and lower powder factor) so that structures that fall within a close radius (usually less than 500') do not sustain structural damage. One other building is located on Wharf property and is within this buffer zone and it is planned to be moved prior to mining within close proximity of the structure.

(5) Wharf should acknowledge it needs to obtain a conditional use permit from the county and the county needs to approve the postmining land uses of industrial and home sites.

Wharf submitted an application to Lawrence County to obtain a conditional use permit (CUP) in March 2011. Wharf is also aware the county needs to approve the postmining land uses including industrial and home sites. Approval of the CUP was given June 14, 2011, documentation is included in Appendix 1. This information has been added to the large-scale mining permit application report.

(7) Wharf needs to discuss the wells in the process area that currently do not meet the ground water standards for nitrate.

Additional information has been added to item 7 in Section 1 and Section 3.3.2.2.

(8) Please include a narrative of the department's special, exceptional, critical, or unique lands determination in this section.

A discussion on the placement of Terry Cemetery on the state's Preliminary List of Special, Exceptional, Critical, or Unique Lands has been included in the report in Sections 2.3 and 3.9.1.

16. SDCL 45-6B-37 and ARSD 74:29:07:03. Please address subsections (1) through (6) of ARSD 74:29:07:03 to explain why backfilling is not feasible in the portions of the Liberty and Portland Ridgeline pits that will not be backfilled. Although Wharf plans to partially backfill both pits, Wharf must demonstrate that it is economically or physically unfeasible to backfill the pit completely and leave remaining highwalls.

The Liberty Pit backfill will now cover all exposed highwall. The Portland Ridgeline highwall exposure will be reduced to two sections, one of 400' in length by 30' in height, and 500' in length by 20' in height. The need to leave partial highwall exposed in these areas is due to lack of material to cover the remaining section and it is impractical and uneconomical to blast additional land that is undisturbed to reduce the highwall exposure. The remaining highwall in the Portland Ridgeline area will be of minimal height of 20'- 30' and will not pose any significant hazard. A security fence and signage will be constructed along the two highwall sections to warn and prevent access to the area.

Text in Sections 5.2 and 5.3.4 has been revised.

17. SDCL 45-6B-37 and ARSD 74:29:07:04. To address section 1 of ARSD 7429:07:04, please discuss the following for each postmine land use:

a. How the reclaimed slopes will be visually and functionally compatible with the surrounding area;

b. How the reclaimed slopes will be suitable for the particular postmine land use;

c. How the reclaimed slopes will be stable;

d. If the reclaimed slopes will exceed the angle of repose; and

e. How the landforms created by grading, backfilling, and topographic reconstruction blend in with and complement the visual continuity of the surrounding area.

Items have been addressed in Section 6.2.1. SDCL 45-6B-37 and ARSD 74:29:07:04 refers to Grading and Backfill requirements. The grading and backfilling will be done for

Rangeland no matter what type of post mine reclamation is proposed for the area so we have already addressed this requirement.

To address section 2 of ARSD 74:29:07:04, please explain if Wharf plans to create any erosion control features such as dozer basins during final grading to break up any long slopes to control long term erosion. Also, how does Wharf plan to protect areas outside the affected area from slides or other damage during grading activities?

Wharf's current practice of reclaiming the land for final reclamation has the majority of the slopes at a 3:1 grade; this has shown through past experience to minimize any adverse erosion on long grades. In addition the reclamation practice of creating undulations and rolling slopes have enhanced the reclamation and minimized erosion due to this sloping practice.

Along the perimeter of mining areas a retaining berm is constructed for safety and to inhibit erosion and run-off that could take place in the active mining area. The berms minimum size is built to half the height of the largest equipment on site, which results in a berm of five (5) feet tall by eight (8) feet wide. This size of berm has shown to be adequate in current and past practices at the site.

18. SDCL 45-6B-38 and ARSD 74:29:07:05. Please provide details regarding the removal and disposal of petroleum and other contaminated soils and hazardous materials such as cyanide and other processing chemicals in the refuse disposal plan.

Information has been added to text in Section 6.2.1.

19. SDCL 45-6B-39, ARSD 74:29:02:10 and ARSD 74:29:07:06(1). In addition to the local conservation district, the seed mix must also be developed in consultation with the other surface owners (BLM, Black Hills Chairlift Company, and DOT). Proof of this consultation must be submitted.

Proof of consultation with other surface owners regarding the seed mix is provided in Appendix 1. The BLM and DOT have been contacted regarding seed mixture approval and letters from each will be forwarded upon receipt.

The seeding time table should also indicate the time of year seeding will be conducted.

Information has been added to the text in Section 6.5.

20. SDCL 45-6B-40 and ARSD 74:29:07:07. It would be helpful if the discussion of topsoil replacement was confined to one clearly defined section in the reclamation plan. Certain aspects of topsoil replacement are discussed in both sections 6.2.1 and 6.3.

Section 6.4 focus on soil replacement and seedbed construction. Table 6.3 includes discussion of topsoil but only in the context of topsoil stockpiles being seeded if undisturbed for more than 2 years.

Do the topsoil salvage estimates in Section 5.3.3, page 82, also include any subsoil? Is it possible to salvage enough subsoil which could be amended to ensure a minimum 6 inch topsoil application depth for reclamation?

The soil salvage depths and volumes include both topsoil and subsoil. At Wharf, suitable subsoil is rare but was accounted for where present. The calculations is for a four (4) inch topsoil application, if during the final reclamation sequence of the mine site that it is calculated that additional topsoil/subsoil is available for greater thickness of application it will be applied. Also, topsoil calculations are verified and tracked yearly, and during this time if calculations show that excess topsoil is available, selected areas will have increased application thicknesses applied where and when appropriate.

Please provide information on the fertilizer currently used for final reclamation. Will the current topsoil need to be analyzed to ensure the current fertilizer is adequate for the expansion area?

The current reclamation plans do not include the use of fertilizer (see Section 6.4.2). Please see the letter from Cedar Creek associates included in Appendix 16.

Will the current Portland Topsoil Stockpile need to be moved to make room for the Portland Ridgeline Pit? If so, where would the new location for the stockpile be?

The topsoil stockpile along the Portland Ridgeline will not need to be moved for the mining of the Portland Ridgeline Pit, and will be used for the reclamation of this pit (Section 5.3.3). The Portland topsoil stockpile will be used for reclamation purposes before the Portland Ridgeline Pit is mined so it will not need to be moved, if plans change or there is excess topsoil it will be moved to one of the active topsoil piles.

21. SDCL 45-6B-41 and ARSD 74:29:07:08: SDCL 45-6B-41 requires that disturbance to the prevailing hydrologic balance be minimized in the affected and surrounding area during and after mining. In addition, SDCL 45-6B-7(6) requires that the application include a description of how Wharf's reclamation plan will be implemented to meet certain requirements, including how it will result in minimizing impacts to ground and surface water. The mine permit application includes a general discussion of sulfate in Nevada Gulch and nitrates in the process area. Sections 3.3.4 and 3.4.3 of the application also refer to a 2010 assessment of the current and potential future impacts of ore processing and spent ore and barren rock disposal on ground water and surface water quality prepared by ERM, Wharf's consultant. Wharf should either provide a detailed summary of this report or provide a copy of the report to address potential impacts to

ground water and surface water, especially from nitrates, arsenic, sulfates, and other metals.

The SD DENR has been provided a copy of this report.

In addition, please list Wharf's current water rights permits, any potential future permits that may be required, and dredge and fill law requirements for disturbed portions of upper Fantail and Nevada Gulch.

A list of Wharf's current water right permits is now included in Appendix J of the baseline groundwater report. Since activities are not occurring in any live streams, dredge and fill permits will not be required.

Finally, in Sections 3.3 and 3.4, please address the potential of water pooling in the bottom of the mine pits, the expected water quality of the water, and how it will be handled. This may become an issue if the Precambrian Ellison Formation is left exposed in portions of the final pit floors and has the potential to generate acid.

The following text has been added to Section 3.4.4.

Water pooling in the final pit floors could occur for a minimal time as pits come to final but due to the concurrent reclamation the time in which final pit floors are minimal and usually less than one month. In addition, final pit floors will not be mined to the point where large quantities of Precambrian rock are exposed for any long period (less than one month). All effort will be given to cover any exposed Precambrian rock immediately so that exposure to the elements (weather) is minimized to prevent ARD generation. Water pooling or drainage to pit bottoms is minimized by diversion methods (berms, water bars, drainages) so that water does not travel and accumulate at pit bottom. This is a necessity so that it does not hamper mining at the lower levels, result in undue wear of consumables (tires and wear iron), cost of transfer/pumping of water out to designated areas such as reclaimed areas, and chance of exposure of Precambrian rock to generate acid. The minimal occurrences of pooled water at pit bottoms is a result of meteoric events and is of good quality and if it does not soak into the ground disappearing it would be pumped out immediately if necessary or required.

22. SDCL 45-6B-42, ARSD 74:29:02:04(5) and ARSD 74:29:07:04(6). In accordance with ARSD 74:29:07:04(6), if highwall reduction or elimination is not proposed, the applicant must provide justification describing why the reduction or elimination is impossible, impractical, or aesthetically undesirable.

Refer to comment #16 above for explanation.

The application indicates Wharf will take steps to protect highwalls during mining by installing fencing and posting warning signs. However, Wharf does not discuss how the Portland Ridgeline or Liberty Pit highwalls will be protected during and after final reclamation. Please address the protection of these highwalls during and after final reclamation.

Refer to comment #16 above for explanation.

Please submit copies of the previous highwall stability reports for the Trojan Pit and Golden Reward Mine as referenced in the mine permit application. In addition, a stability analysis needs to be conducted for the pit shown on Exhibit 21 just to the southwest of the Terry Cemetery since there were concerns during previous operations that mining could affect the stability of the cemetery. The stability analysis is also important since the cemetery has been placed on the preliminary list of special, exceptional, critical, or unique lands and is eligible for inclusion on the National Register of Historic Places.

Reference material previously submitted to the department (SD DENR) does not need to be resubmitted as stated during Baseline Study meetings and phone conversation with Eric Holm on April 6th, 2011.

Stability of the Trojan, Portland, American Eagle, Harmony, and Liberty Pit highwalls have shown to be stable through the period of mining and reclamation period of these areas over the years. Current mine practices of mining and designing the highwalls for optimum stability has proven itself and the submitted stability studies verify this.

The highwall west of the Terry Cemetery and at the north end of the East Liberty Pit at Golden Reward has had several stability analysis conducted by RESPEC of Rapid City, SD. Following a period of instability in 1994, analyses were conducted to determine the extent of the problem and provide a solution so that no damage would occur in the cemetery [Blankenship, 1994. Backfill Design Recommendations for the East Liberty Pit]. It was determined that the wall would be buttressed with backfill material. The backfill was placed to the top edge of the Terry Cemetery highwall along the length of the highwall with 180-foot base width and 20-foot crest width. Since the backfill material was emplaced, no additional stability issues have been noted and displacement data indicate the highwall has stabilized [Nelson and Osnes, 2008, Stability Assessment of the Highwalls at the Golden Reward Mine].

Review of the proposed mine plan indicate that little to no backfill material that is supporting the Terry Cemetery Highwall will be moved as part of nearby expansion mining and no adverse effects are expected at the cemetery. If modifications to the mining and engineering plan are made, additional highwall stability analysis will be completed and submitted to the department (SD DENR) as required. Any changes in

stability will be verified through stability analysis so that mining can proceed and not adversely impact the Terry Cemetery.

23. SDCL-45-6B-46. Please address each section of this statute.

Issues of this statute are addressed in Section 6.5 (seeding) and 6.8 (timing of reclamation).

24. SDCL 45-6B-83.2. Please address this statute with regard to posting a reclamation surety and reclamation acreage credits. This statute was not specifically addressed in the mine permit application and is a procedural completeness item.

Law repealed.

25. SDCL 45-6B-92. In addition to the subsections of Section 3.0 on threatened and endangered species, please provide additional information for the following critical resources and how impacts to the resources will be mitigated. It would be helpful if you could provide a separate subsection in Section 3.0 to address each of these critical resources and how the impacts to the resources will be mitigated:

1. Wildlife – Species on the SDNHP list (including raptors) and critical deer winter range;
2. Aquatic Resources – Cold water fish life propagation water;
3. Vegetation – Wetland and riparian vegetation;
4. Water – direct or indirect sources of drinking water;
5. Visual Resources – Visual impacts to Barefoot Condominium and Lost Camp areas;
6. Soils – Soils with high erosion and low revegetation potential;
7. Cultural Resources – Summary of sites eligible for National Register of Historic Places;
8. Air Quality – Impacts to Terry Peak, Barefoot Condominium, and Lost Camp areas; and
9. Noise - Impacts to Terry Peak, Barefoot Condominium, and Lost Camp areas.

In addition to the information already in the permit application, a new subsection at the end of Chapter 3 addresses each of these items.

26. SDCL 45-6B-7(8)(a) and ARSD 74:29:02:04(2). In addition to the postmine land use map shown in Exhibit 23, please submit a separate postmine contour map. The shading used to depict the proposed land uses makes it is difficult to see the contour lines. The highwalls that will remain and those areas where landshaping or talus slope construction will take place should be clearly defined. The new map should also show, at least at the conceptual level, any modifications proposed for the Empress (Red) Chairlift and any ski

runs; and the potential locations of ski lifts, lodges, condominiums, and commercial facilities relating to the proposed outdoor recreational activities as well as home sites. In addition, potential tree and shrub planting areas should be shown.

Exhibit 23.1 displays the post mine land use contours.

No postmine conceptual drawings will be submitted indicating possible location and development of the area. Wharf Resources reclamation plan is to reclaim in a manner based on our postmine land use plan so that the land can be sold and developed based on the needs and desires that suit the developer. Tree and shrub planting is not required in Rangeland, and if added will be decided at time of planting once final topography is realized.

Finally, since the new permit application impacts the American Eagle Pit and the process area, the new map should show the postmine contours for the entire mine site.

Completed.

27. ARSD 74:29:01:17 and ARSD 74:29:02:09. Please submit a map showing the entire current permit boundary for the Wharf and Golden Reward Mines as well as the permit boundary for the expansion area.

Refer to Exhibit 2.1.

28. ARSD 74:29:02:04(4). Exhibit 21 should clearly identify the locations in each pit where spent ore or waste rock will be placed as backfill, including the spent ore disposal site in the American Eagle Pit. There are wide red and black lines around the pit areas, but these are not identified in the legend. We assume that the red lines are waste rock disposal areas and black lines are spent ore disposal areas. If these red and black lines are the extent of pit backfill, please identify this in the map legend.

Added Exhibit 21.1.

Is the spent ore re-handle repository shown just to the north of the exiting denitrification pads a new denitrification pad? If so, please address it in the mine permit application.

There is no new denitrification pad shown or identified.

Finally, please use darker labels for the topsoil stockpiles and darker and larger labels for the sulfidic zones in the lined backfill area shown on the map.

Completed.

29. ARSD 74:29:02:06. Wharf will need to consult the state archaeologist's office regarding historic and archaeologic significance of the proposed mine areas. A letter from the state archaeologist's office would serve as proof of compliance. Section 3.9.1 on page 58, should mention the Terry Cemetery is eligible for inclusion on the National Register of Historic Places.

The baseline archaeology reports as well as the entire permit application were submitted to the state archaeologist's office (see proof of submission receipt in Appendix 1). SARC has been contacted to provide guidance or recommendations based on the baseline studies; their response will be forwarded to the SD DENR upon receipt.

Section 3.9.1 has been updated for Terry Cemetery.

30. ARSD 74:29:06:02(4). Please address the following subsections of Section 4 of this regulation for each postmine land use:

a. How the postmine land use is obtainable according to data on expected need and market;

b. How the land use is supported by comments from the public; and

c. That Wharf has the financial capability to complete the requirements of the land use.

Wharf Resources postmine land use is based upon the speculation and growth needs for the area especially within the Terry Peak Ski area, and this is substantiated by the long term growth plan of Terry Peak Ski area (BHCLC). The current market for postmine land use plans (Recreation, Industrial, Residential, and Rangeland) and what is expected in the future, especially a decade or more from now is speculative, but growth of any region is dependent upon it. This locale (Terry Peak Ski Area) is a recreational region and destination, growth is anticipated and planned to enhance this area's economic future. Traffic control plans are dependent and determined on a development plan that will be based on the needs in the future with the developer at that time. Wharf Resources does not plan to develop this area but sell the land so that it can be used in the specific postmine land use.

Refer to permit application Sections 6.2 and 6.10 (bond calculations).

31. ARSD 74:29:07:01. Please provide more detail on how the reclamation plan rehabilitates land with respect to each postmine land use.

With the postmine land use of Recreation, Industrial, Residential Development and Rangeland, all the land is reclaimed as Rangeland until development of the areas proceeds forward. The Rangeland reclamation is suitable for all postmine land use in that it assures that the area is stabilized and in accordance with all pertinent SDCL's. This reclamation will allow the future postmine land use to develop and/or expand these areas for future needs as best realized at the time and speculated during current time.

The land will be reclaimed to Rangeland to assure stabilization of the area until areas are released for final postmine land use. In accordance with SDCL 45-6B-42 and ARSD 74:29:07:04, all reclaimed slopes will be visually and functionally compatible to the surrounding area. Slope combinations will be reclaimed to be suitable for the **primary** postmining land use of rangeland and be structurally stable. Fill slopes will not exceed the angle of repose unless otherwise stated. Topographic reconstruction will control erosion and sedimentation, protect areas outside the affected land from slides or other damage, and minimize the need for long-term maintenance. Erosion control measures will be implemented during all phases of construction, operation, reclamation, and closure. Refer to Exhibits 28 and 29 of Appendix 2 for details on erosion control measures. Backfilling and recontouring will be done concurrently with mining or as soon as practical as specified in the mining schedule described in Section 6.8. Highwalls will be reduced to the extent practical, but where it is impractical to do so, they will be stabilized and constructed to minimize negative visual impacts (ARSD 74:29:07:04(6)).

Refer to Section 6.2.

32. ARSD 74:29:07:02. Please address the following sections of this regulation:

(4) Discuss how impacts to surface water and ground water will be mitigated if spent ore from the leach pads is disposed of in the Portland Ridgeline Pit.

This is addressed in previously submitted and planned submittal of Hydrological Investigations (pathway and fate studies). The current studies and planned submittal of an additional Hydrological Investigation for the American Eagle Pit Area show that impact of spent ore within the stated POP zones do not affect the groundwater outside of the POP zones. Deposit of spent ore within the designated POP zones will abide by all off-load criteria for spent ore and will meet the necessary requirements so that the ground water and surface water is not adversely impacted.

(7) Discuss how the location of the waste rock and spent ore backfill areas will facilitate implementation of reclamation and minimize environmental impacts. Also discuss how the location of the topsoil stockpiles will facilitate reclamation.

The backfill of pits with discard rock and spent ore help aid reclamation through the means of concurrent reclamation. As areas of pits are mined to completion dump areas are begun in the finalized pit area to meet the reclamation plan. This minimizes the amount of area at any time being un-reclaimed and assures continued backfill and reclamation of the land. With this practice the environmental impact is reduced by returning the land to atheistically pleasing design that fits in with the surrounding undisturbed land.

Also refer to procedural comment #6.

Location of topsoil piles are in areas so that they will aid in the final reclamation of land so that they can be easily moved and applied to the re-contoured land that requires short hauls or immediate application across slopes.

33. ARSD 74:29:07:04(1)(b) and ARSD 74:29:07:20(2). Please identify which slopes will be less than 3(H):1(V) on a map.

No contoured slopes less than 3:1, except highwalls which are identified on Exhibit 23.

34. ARSD 74:29:07:05 and ARSD 74:29:07:14(3) and (4). The acid base accounting (ABA) analysis in Section 3.1.3.1 addresses acid generation and material handling in the expansion area in general terms. Wharf submitted an ARD Management Plan to the department on December 4, 2001, which included a detailed assessment of the acid generating potential of rock from the Trojan Pit. Please provide an analysis for each proposed pit in the expansion area at the same level of detail as was done for the Trojan Pit in the December 2001 report. This analysis should also include a detailed plan that addresses handling potentially acid producing waste rock and spent ore to include, blending, base amendment, and encapsulation for each mine phase. The analysis should also include a detailed explanation of Wharf's rationale for selecting the location, number of, and geologic units for ABA samples and how that compares with industry standards (for example, there are general recommendations available that suggest how many samples should be taken for a given tonnage of rock).

The ARD Management Plan for Wharf Resources will be applied to the Expansion Project. Additional text concerning analysis of each proposed pit and rational for selection of geochemical sampling locations is provided in Section 3.1.3.

35. ARSD 74:29:07:09(4). Please submit conceptual plans and cross-sections for the culverts to be used for diversion of surface runoff.

Exhibits 22, 29, 29.1, 32, 33, and 34 have the plans and cross sections. Also refer to Section 5.3.5.

36. SDCL 45-6B-7(10), ARSD 74:29:07:08(5), ARSD 74:29:07:09 and ARSD 74:29:07:04(5). Exhibit 21 appears to show that a portion of the upper Fantail drainage at the Golden Reward Mine will be removed during mining in the Liberty and Harmony Pits. This drainage was reconstructed during the reclamation of the mine and needs to be shown on the applicable exhibits. As a result, this portion of the drainage will need to be diverted during mining and reconstructed during final reclamation as it was when these pits were previously mined. Therefore, please address each section of ARSD 74:29:07:10 regarding the temporary or permanent diversion of intermittent and perennial streams.

There are no planned diversions of perennial or intermittent streams or channel and flood plain diversions that will affect these streams. Spoil topsoil or unconsolidated material will not be pushed or placed within 10 feet of any perennial or intermittent streams.

Upper Fantail Gulch within the proposed mine area does not contain any intermittent or perennial streams. Fantail Creek starts below the filtered sand dam outside the current permitted area of Golden Reward. The drainage structure constructed within the Liberty/Harmony highwall backfill area within the proposed mine area is built on top of a backfill area and does not carry any water throughout the year. Any meteoric events that occur in this area drain into the ground (backfill material) and do not have any flow path. When this area is mined and if any distinguishable water flow is encountered mitigation plans will be developed to assure proper drainage and flow direction. Once mining is completed and reclamation is being conducted the dry unused drainage pathway will be reconstructed where necessary. Refer to Exhibit 28 for proposed sediment and erosion control.

Conceptual drawings of the stream diversion (including plan view and cross-section drawings of the diversion) and conceptual plans for reconstruction of the drainage during final reclamation should also be submitted. The route of the reconstructed drainage needs to be shown in Exhibit 23. Finally, please address ARSD 74:29:07:04(5) describing how the original drainage will be preserved during final grading activities.

The reconstruction of the drainage within the Liberty/Harmony pit area is shown in Exhibit 28. There is no stream diversion with Fantail Creek or Nevada Gulch Creek since neither are in the area of disturbance.

Exhibits 21 and 29 do not show Nevada Gulch Creek along the new haul road. Is the creek going to be covered by the new haul road? Will the creek need to be temporarily or permanently diverted and reconstructed during final reclamation? Please show the location of Nevada Gulch Creek on these and other applicable exhibits. If the stream needs to be diverted, please address each section of ARSD 74:29:07:10 and submit conceptual plans and drawings.

The Nevada Gulch Creek will not be rerouted or covered with the new haul road or new mining, it currently is located below (east of the planned haul road, refer to Exhibit 29.1 for detail of the road and drainage. Additionally, there will be no need to temporarily or permanently divert Nevada Gulch Creek during final reclamation.

37. ARSD 74:29:07:12. If the new haul road will be constructed in the Nevada Gulch Creek riparian zone, please address the following sections of this regulation:

(1) The feasibility of constructing the haul road in the Nevada Gulch riparian zone;

There is no identified riparian zone in the Nevada Gulch area where the haul road will be located. Refer to the letter from BKS Environmental in Appendix 9.

(4) Whether the creek will be crossed at a right angle and if any fords will be constructed;

The haul road location is where the current Terry Cemetery Road is located which is directly west of the beginning of the Nevada Gulch Creek. Currently no fords are planned for the roadway but berms will be constructed on each side of the road to prevent drainage into the creek during meteoric events, and drainage will be directed to the west side of the road into a sediment pond area. Refer to 29 and 29.1.

(6) Details on culverts to be installed along the haul road, including cross sections, procedures to protect culverts from erosion, and a culvert maintenance plan;

Where culverts are placed they will be designed and sized to assure adequate drainage through the structure and to prevent erosion and minimize maintenance. The maintenance plan for culverts are to inspect yearly or more frequent when seen necessary. The maintenance plan will include visual assessment for damage, blockage, possible blockage, unexpected erosion within the area of the culvert, and then the necessary remediation necessary to correct the findings.

Wharf Resources experience in road building and maintenance over the last twenty-five years exhibit the required need and expertise to construct and design the haul road. Refer to Exhibit 29 and 29.1 for detail.

(9) Whether any other transport facilities or utilities will be located near any other riparian zones and how they will be constructed and maintained to control degradation of water quality and quantity; and

There are no riparian zones identified.

(10) In Section 5.3.4 on page 84, the application indicates the portion of the haul road from the Terry Peak Kussy Express entrance to the Golden Reward Mine will be left in place for future use by the ski area. This rule subdivision allows for a road to remain unreclaimed if the surface landowner or governmental agency requests it and agrees to be responsible for future maintenance. If that is what Wharf desires, a letter from the Black Hills Chairlift Company stating it wants this portion of the haul road left for its use and agreeing to future maintenance needs to be submitted.

However, we question whether leaving the entire haul road is warranted if it is going to be used for general access purposes. Therefore, a plan to reduce the width of the haul road in this area as well as a plan to reclaim the remaining portion of the haul road which was not addressed in the reclamation plan should be provided. The location of the portion of the haul road that will remain should also be depicted on the postmine contour map.

The portion of the haul road that is located along the same section of the current portion of the Terry Cemetery road will remain open and will require to be left intact for access to the cemetery. The roadway will be partial reclaimed to approximately 24' width, which will enhance the roadway to the cemetery so that two way traffic is possible. Currently the roadway is single lane and is not adequate for year round travel due to size and current condition, widening this section for future access to the cemetery will be an improvement. A letter from BHCLC stating they want the portion of the haul road to remain in place and are willing to provide maintenance once the road is reclaimed is provided in Appendix 1.

Conceptual plans for the haul road bridge or tunnel crossing should be submitted.

Refer to Exhibits 32, 33, and 34.

38. ARSD 74:29:07:14(1) and (2). Exhibits 21 and 28 do not identify spent ore and waste rock disposal locations. Additionally, Section 5.2 only discusses pit highwall stability and should also address stability of spent ore and waste rock disposal areas.

Refer to Exhibits 2.1, 21.1 and 28 for spent ore and waste disposal locations. There has been no impact on stability issues with the current spent ore and waste rock disposal areas at the mine, and the amount of material disposed within the disposal area is insignificant to cause any stability issues (Section 5.2). Wharf Resources has over twenty-five (25) years of experience in mine design, reclamation, and pit backfill with the above noted types of material and has proven to be successful in maintaining adequate and desired stability. Stability is realized through design and construction of dumps by maintaining pit backfill during construction that allows adequate settling and compaction through the

construction. In addition, maintaining majority of the slopes at a 3:1 slope has proven to be adequately stable for these materials and have not shown any signs of instability.

39. ARSD 74:29:07:15. A detailed noxious weed control plan is required to be part of the reclamation plan which should address such things as herbicides used, spraying timetables, weed sprayer certification, and the current weed spraying contractor. Since Wharf indicated the current weed control plan will be used in the expansion area, a copy of that plan and proof that the plan has been approved by the Lawrence County Invasive Species Supervisor will suffice to meet this requirement. Even though you obtained approval of the plan from the Lawrence Conservation District, we want to make sure the Invasive Species Supervisor has had input into the plan.

Copies of the weed control plan for Wharf and Golden Reward are included in Appendix 16 of the revised permit application report. Emails and a letter indicating the approval of the weed management plan by Mr. David Heck (Invasive Species Supervisor, Lawrence Conservation District) and Ms. Zindy Meyers (District Manager, Lawrence Conservation District) are also provided in Appendix 16 of the revised permit application.

40. ARSD 74:29:07:18. Please list the individuals involved in developing the reclamation plan and their past experience in developing reclamation plans.

The reclamation plan was developed by Wharf personnel including Mr. Ron Waterland, Mr. Ken Nelson, Mr. Garth Evers, and Mr. Tony Auld. These individuals are competent and have experience managing and planning for reclamation at Wharf's current mining operations (ARSD 74:29:07:18). Resumes for Mr. Waterland, Mr. Nelson, Mr. Evers, and Mr. Auld are included in Appendix 16.

41. ARSD 74:29:07:24. For the postmine land use of industrial use, please address the comments identified below for the following lettered subsections of section 1 of this regulation:

(a) Supply data or other information showing that there is a current and future market for the industrial land use;

(c) Explain how traffic will be controlled in the industrial use areas;

Wharf Resources postmine land use is based upon the speculation and growth needs for the area especially within the Terry Peak Ski area, and this is substantiated by the long term growth plan of Terry Peak Ski area (BHCL). The current market for postmine land use plans (Recreation, Industrial, Residential, and Rangeland) and what is expected in the future, especially a decade or more is speculative, but growth of any region is dependent upon it. This locale (Terry Peak Ski Area) is a recreational region and destination, growth is anticipated and

planned to enhance this area's economic future. Traffic control plans are dependent and determined on a development plan that will be based on the needs in the future with the developer at that time. Wharf Resources does not plan to develop this area but sell the land so that it can be used in the specific postmine land use.

(d) Address the source, suitability, and quantity of water available for industrial and potable uses; and

The main sources of water supply in the Expansion Area are the Deadwood and Precambrian aquifers, though nearby wells in the Madison Aquifer may also serve as water supply sources. Existing Wharf and Golden Reward water rights (see Appendix J of the baseline groundwater report) and other production wells (PW-1, PW-2 and HDH8-A at Wharf, and the Bonanza, PW-1, and PW-2 at Golden Reward) demonstrate that suitable water quality is present and available.

(e) Address the industry's legal right to inhabit the land.

Black Hills Chairlift Co. has the legal right to inhabit the land as they are the surface owner of several parcels of land within the Expansion Project. Wharf Resources also plans to sell the land to developers after final reclamation has been approved.

It would be helpful to move the alternative land use timetable in Section 6.2.1 to Section 6.2.2.3 (Industrial Use).

42. ARSD 74:29:07:25. For the postmine land use of home sites, please address the comments identified below for the following lettered subsections of section 1 of this regulation:

(a) Supply data or other information showing that there is a current and future market for home sites in this area;

(c) Explain how traffic will be controlled in the home site areas; and

(d) Address the source, suitability, and quantity of water available for domestic use.

It would be helpful to move the alternative land use timetable in Section 6.2.1 to Section 6.2.2.4 (Home Sites).

Wharf Resources postmine land use is based upon the speculation and growth needs for the area especially within the Terry Peak Ski area, and this is substantiated by the long term growth plan of Terry Peak Ski area (BHCL). The current market for postmine land use plans (Recreation, Industrial, Residential, and Rangeland) and what is expected in the future, especially a decade or more is speculative, but growth of any region is dependent

upon it. This locale (Terry Peak Ski Area) is a recreational region and destination, growth is anticipated and planned to enhance this area's economic future. Traffic control plans are dependent and determined on a development plan that will be based on the needs in the future with the developer at that time. Wharf Resources does not plan to develop this area but sell the land so that it can be used in the specific postmine land use.

The main sources of water supply in the Expansion Area are the Deadwood and Precambrian aquifers, though nearby wells in the Madison Aquifer may also serve as water supply sources. Existing Wharf and Golden Reward water rights (see Appendix J of the baseline groundwater report) and other production wells (PW-1, PW-2 and HDH8-A at Wharf, and the Bonanza, PW-1, and PW-2 at Golden Reward) demonstrate that suitable water quality is present and available.

43. ARSD 74:29:08:01 and 02. Please provide more details on the annual interim and concurrent reclamation activities to be conducted for the Harmony and Liberty Pits at the Golden Reward Mine after the end of seasonal mining and before the beginning of ski season. Such things as pit backfilling plans for the end of each mining season, seeding timetables, and measures to secure the mining area during ski season should be addressed.

The following text has been added to Section 5.3.4

The first year (projected 2014) of mining at Golden Reward is anticipated to begin with the Harmony Highwall area due to its low ore to waste ratio and is planned to be mined to completion during the first year of mining at Golden Reward. The highwall once mined down will be sloped to near final reclamation with remaining discard material and partial strip material from the beginning of mining of the Liberty Highwall pushback. This will result in minimizing any hazard for skiers or the public around this area, and greatly reducing the current highwall hazard. The second year (2015) of mining at the Golden Reward area will begin with the Liberty Pit highwall pushback and will be mined to completion. Concurrently the small pit east of the Harmony and Liberty Highwalls will also be mined to completion the second year of mining at Golden Reward. Reclamation of both the Liberty Highwall and eastern pit will be completed concurrently as areas from both mining sites come to final. Final reclamation of Golden Reward will take place during the third year (2016) with the spreading of topsoil and seeding of the area.

As stated in Section 3.11 a security fence will be constructed prior to mining along with adequate signage to inform the public of the mining activity taking place. The fence will run along the perimeter of the mine disturbance boundary and will remain in place during mining activities.

44. Table 1-1, pages 3 through 10. The following corrections need to be made to Table 1-1 which address procedural completeness items in the mine permit application:

a. SDCL 45-6B-9 is a completeness item and needs to be included in the table;
b. SDCL-45-6B-46 is a completeness item and needs to be included in the table;
c. SDCL45-6B-16 and 17 are not completeness items and need to be removed from the table. These are statutes that need to be addressed after the application is considered filed;
d. SDCL 45-6B-54 (1 through 10) need to removed from the table. These statutes only apply to small scale mine permits;
e. The reference for ARSD 74:29:02:11(3), Surface Water Inventory Map, should be Figure 2-1 in Appendix 7 in addition to Figure 3-2 in Appendix 6;
f. The reference for ARSD 74:29:07:02(9) should be Section 6.2 instead of Section 6.7;
g. The reference for ARSD 74:29:07:04(3) should be Section 6.2.1 in addition to Table 6-4;
h. The reference for ARSD 74:29:07:04(7) does not address land shaping;

During reclamation of the pits, dumps, ect land shaping will occur that will enhance the reclamation so that the land ties in with the current surrounding. The land that requires reclaiming will include undulation and shaping so to break up the contour of the land to blend it with the surrounding area.

i. ARSD 74:29:07:10 and 11 are completeness items that need to be included in the table;
j. Section 1 of ARSD 74:29:07:14 needs to include Section 6.2.1 in the reference column. Also, Sections 3 and 4 of this regulation also need to reference Section 3.4.3;
k. ARSD 74:29:07:18 is a completeness item that needs to be included in the table; and
l. ARSD 74:29:07:27 is a completeness item that needs to be included in the table.

Table 1-1 has been corrected to address DENR comments listed above. Reclamation and postmining land use plans do not include permanent surface impoundments at the Wharf Expansion Project, therefore ARSD 74:29:07:27 does not apply to this application.

Part II -- General Regulatory Comments

Wharf should also be aware of the following general comments and questions concerning the permit application:

1. ARSD 74:29:01:07. Regarding the determination of procedural completeness, upon submission of a response to the completeness items listed above, the department will make a determination on the adequacy of the applicant's response. Within seven days of the submission of the response, the department will notify Wharf in writing of the

determination. If the response is adequate, the application will be considered filed. If the response is determined to be inadequate, Wharf has the following options:

a. Submit additional information necessary to complete the application;
b. Request in writing that the application be considered filed; or
c. Withdraw the application.

2. ARSD 74:29:01:04. For any additional information submitted in response to this letter, please remember that this supplemental information must also be filed with the Register of Deeds office and proof of filing is required to be submitted.

A copy of this letter and supplemental material, along with revisions to the permit application report will be filed with the Lawrence County Register of Deeds; proof of filing will be submitted upon receipt.

3. ARSD 74:29:01:10. The department will begin drafting a summary document for the permit application. We will provide the summary document to you for review and comment at a later date.

4. ARSD 74:29:03:16. Please develop a list of technical revision categories Wharf would like to have covered under this permit application as allowed by this rule. Technical revision categories will be specified in a permit condition attached to the permit.

The list of proposed technical revisions from the Clinton Permit is submitted as requested technical revision categories Wharf would like to have considered for the Expansion Project. The list is attached and also included in Appendix 17 of the revised permit application.

Part III -- Technical Review Comments

The staff developed the following preliminary technical comments on the application. These comments are not completeness issues and are provided as our early thoughts on the technical adequacy of the submittal. Additional technical comments will be forthcoming pending the completion of our detailed technical review of the application and your responses to our completeness review.

1. Section 1.0, page 1. Item number one on this page indicates the required surety will be posted upon the issuance of the mine permit. Please note in accordance with SDCL 45-6B-20, the surety is required to be submitted before the issuance of the mine permit. If necessary, this issue can be resolved through a permit condition indicating the permit will not be issued until the surety is posted.

The surety will be posted upon acceptance of the permit application but before the actual mine permit is issued.

2. Section 1.0, page 2. This section states there will be 279 acres of mining areas, 17 acres for topsoil stockpiles, and 8 acres of roads. However, Section 2.0, page 15, states there will be 254 mine acres, 17 acres for topsoil stockpiles, and 8 acres for roads. Please revise the application to clarify the correct acreage.

The Expansion Project consists of 528 total acres within the new mine permit area, comprised of 298 acres of total mining disturbance (249 surface mine acres, 30 acres of topsoil stockpiles, and 19 acres of roads). The text has been corrected to clarify the new acreage.

3. Section 1.2, page 11. This section lists the permits that provide Wharf with the legal right to dispose of spent ore. GWD 2-90 was terminated in 1998 and was used for land application, not spent ore disposal. Please clarify the status of this permit.

GWD 2-90 has been deleted from the list.

4. Section 1.4, page 12. Regarding the expansion limitations of SDCL 45-6B-96, only surface mining disturbed acres count toward the 200 acre limit mentioned in this section. The Portland Ridgeline Pit, the Green Mountain Pit, the Bald Mountain Pit, and the Liberty and Harmony Pits at the Golden Reward Mine would be considered surface mining disturbed land. The haul road, other roads, and the topsoil stockpiles would not be considered surface mining disturbed lands. Lands that will be redisturbed during the expansion project cannot be counted for reclamation credit. Therefore, please revise Section 1.4.

Section 1.4 has been revised to account for reclaimed acreage that will be redisturbed.

5. Table 1-3, page 14. The September 2007 American Eagle Permit Amendment which added 40 acres to the American Eagle Pit is not included. Please include this in the table.

The September 17, 2007 Permit 464 Amendment for the American Eagle Expansion has been added to the table.

6. Section 2.3, page 16. Please remove the last sentence in the second paragraph which states the department's scenic and unique determination is pending since the next paragraph discusses the department's determination. You should also discuss the Board of Mineral's determination on the cemetery made on March 17, 2011.

The sentence was removed and the Board of Mineral's determination is discussed in Section 2.3.

7. Section 3.1, page 18. The text states, "The sills are typically less than 20 feet thick". This description of intrusive geology is included in the Groundwater Characterization Study of the Wharf Expansion Project Area" as well. Exhibits 5, 6, and 7 indicate that a 20 foot thick sill is the exception rather than the norm. Please correct the application or explain this apparent inconsistency.

Corrected to read "typically more than 20 feet".

8. Section 3.1.3.1, page 21. The narrative states, "Test results indicate that portions of the Precambrian rock units may be amenable to acid generation, although no Precambrian rock is scheduled or planned to be mined." However, the cross sections presented in Exhibit 6 and 7 indicate Wharf plans to disturb a substantial amount of Precambrian material, especially in the saddle between Green Mountain and Bald Mountain. This inconsistency needs to be addressed.

Exhibits have been corrected to reflect that no insitu Precambrian rock will be disturbed. No Precambrian rock will be used for blend material for use to mitigate (if any) acid generation material.

9. Table 3-2, page 28. This table indicates all Precambrian samples are outside of pit limits. However, cross sections in Exhibits 6 and 7 show large areas of Precambrian being impacted by mining. Were Precambrian ABA samples done in these areas?

Exhibits have been corrected to reflect that no insitu Precambrian rock will be disturbed or is planned for mining. Geochemical tables were also updated and are provided in Appendix 4 of the permit application report.

10. Section 3.1.3.1.3, pages 24 and 25. Why is the intermediate unit of the Deadwood Formation the only formation identified as having the potential for special handling units when a Tables 1 through 6 in Appendix 4 indicate other stratigraphic horizons may contain acid generating material?

This comment pertains to Deadwood lower contact not Deadwood intermediate. The Deadwood lower contact is the main stratigraphic unit of the current mine areas and expansion area that indicates a possibility for acid generation. This has been identified as a result of mainly being in contact with the Precambrian rock units which have known ARD potential and so the Deadwood lower contact is the main focus concerning acid generating potential. The other rock units (Deadwood sediments and porphyry units) within very few samples have shown to have very small potential for acid generation potential. But within the Deadwood sediments (intermediate and upper units) the neutralizing potential is very large compared to the acid potential. The few porphyry samples that have indicated a potential for ARD have been verified through Humidity cell

tests not to generate acid, which has been determined to be due to the high silica content encapsulating the sulfides. In addition, the select few samples that show a potential for ARD are out weighted by adjacent neutralizing potential material. Plus the ARD mitigation plan at Wharf Resources is a proactive procedure/system that delineates the mining bodies in advance of mining and this process is successful and has not shown any ARD potential in the other rock units to be mined. Also see Section 3.1.3 for additional ARD review.

11. Sections 3.1.3.1.4 and 3.1.3.1.5, page 25, Please describe the source of neutralization potential for the monzonite and phonolite porphyries.

It is not certain that the monzonite or phonolite porphyries have neutralization potential, though Wharf is looking into the possibility they might.

12. Section 3.1.3.3, page 27. It is noted in this section there were elevated levels of arsenic found in one sample of the lower Deadwood contact. This section also indicates while the sample was consistent with whole rock data from the Trojan Project, it showed the lower contact unit was elevated in arsenic. How can this assessment be made accurately when according to Table 22 in Appendix 4, only two samples were tested in MWMT for the lower contact unit of the Deadwood Formation? Why were only two samples taken for this unit when according to Section 3.1 of the report (page 17) this is one of the primary ore bodies?

Additional MWMT testing was completed on this unit and is included in the updated tables in Appendix 4 of the permit application report.

13. Section 3.3.2, page 35. Which three wells had cyanide levels above the detection limit? Please provide an explanation for the detection of cyanide in these wells.

The three samples are all from well MW-40 and were collected in 2007. The sample on 5/30/2007 had detectable total cyanide (0.02 mg/L) and WAD cyanide (0.011 mg/L). The sample collected on 6/27/2007 had detectable total cyanide (0.011 mg/L). These results were barely above the minimum detection level of 0.01 mg/L and are considered an anomaly.

14. Section 3.3.2.2, page 36. In the second paragraph, Wharf may want to acknowledge spills and leakage from leach pads, process ponds, piping, and ditches as a likely source of nitrate instead of a potential source.

The text in this section was not changed as this is the same as what is stated in the Process Area Hydrology report.

15. Section 3.3.3, page 38. In the fourth paragraph of this section, it states, "This spring within the proposed disturbance area is a minor source of contributing water to Nevada Gulch, with the majority of flow in Nevada Gulch resulting from surface runoff." If this spring is not the only source of water for Nevada Gulch, why does the stream flow year round next to well SM01A just below the Terry Peak Blue Chair parking lot?

See changes to text in Section 3.3.3.

16. Section 3.4, page 40. In the second paragraph on this page, Wharf states no surface disturbances will overlie any streams. However, as mentioned earlier in this letter, upper Fantail Creek will be impacted by mining pits and Nevada Gulch Creek will be impacted by construction of the haul road. Please revise this statement so that impacts to Upper Fantail and Nevada Gulch Creeks are addressed.

The two streams referenced will not have adverse impacts due to mining. The upper Fantail Creek where mining will take place is a dry drainage. There has been no record of permanent or intermittent water flow since reclamation. Where water has been recorded for Fantail Creek within the Golden Reward property, flow is on the eastern edge immediately above and below the sand dam (near the eastern gate to Golden Reward). The flow on this section is only seasonal during large meteoric events. This section of stream will not be impacted by future mining.

The Nevada Gulch Creek will have the haul road to and from Golden Reward constructed immediately west of the where the creek runs parallel to the Terry Cemetery access road. The haul road will not cross the creek at this point but will follow the current Terry Cemetery Road into Golden Reward. A culvert will be placed at the location the haul road enters the Ski Area parking lot to route surface drainage flowing along the south side of the Ski Area parking lot under the haul road. Refer to Exhibit 29.1.

17. Section 5.3.4, page 84. In the first paragraph, is the term "15-8 percent grade" the correct term?

The sentence has been corrected to read "fifteen to eight percent grade (down-slope)".

18. Section 5.3.5, page 87. In the second paragraph, Wharf may want to also refer to Exhibit 21 which includes erosion control features during mining.

Corrected.

19. Section 5.3.6, page 87. Wharf may need to obtain a rubble permit from the Solid Waste Program before disposing of rubble. The impact of disposing of rubble on the stability of waste rock disposal facilities should be addressed.

Wharf Resources will continue to use their current rubble permit for disposal of rubble. There has been no impact on stability issues with the current rubble permit at the site of disposal, and the amount of material disposed within the disposal area is insignificant to cause any stability issues.

20. Section 6.2.1, page 95. In the second paragraph, it states the seed mix listed in Section 6.5 is the same mix currently used at the Wharf Mine. Since 6.5.2 states the seed mix has been modified, this statement needs to be corrected.

Corrected.

It would also be helpful if the discussion of surface runoff diversions was combined with the surface runoff discussions in Sections 3.4.4 and 5.3.5 so there is one section that addresses all aspects of surface runoff.

The discussion of surface runoff diversions has been moved entirely to Section 5.3.5.

21. Exhibit 21. Please explain how mine operations will avoid impacts to the lined backfill area in the West Liberty Pit. This lined area is adjacent to the current highwall which will be mined during the expansion project. If there are any planned modifications to the lined area, the postmine contour map should reflect them.

The current mine plan for the Liberty highwall is to begin the mining at the highwall toe and mine the highwall pushback to the west. Currently there is no plan to re-mine the lined area but to leave it in place, if future remediation or mitigation requires disturbance of the lined area a plan will be outlined and submitted to the DENR.

22. Appendix E, Ground Water Baseline Report. To allow us to confirm the accuracy of the data provided in this report, please submit the lab data sheets not previously submitted through annual ground water monitoring reports for Wharf or Golden Reward which were used to develop the tables in Appendix E of the Ground Water Baseline Report.

Lab data sheets are provided on disc at the end of the Groundwater Baseline Report.

23. Geochemical Testing Report, Tables 1 through 24. There is a column in several of these tables indicating a number that corresponds to a rock type. Please provide a reference table that defines what each rock type is for the indicated number present in the column.

The rock type legend has been included with the updated geochemistry tables in Appendix 4.

Several samples are marked as being out of pit in Tables 1 through 6, but Exhibit 10 shows the samples located primarily in pit disturbance areas. For instance, Exhibit 10

identifies several samples located within the Bald Mountain Pit special handling area, but the tables indicate they are located outside of the pit limits. Please make any corrections to the sample locations and tables as necessary.

Exhibits and geochemistry tables have been corrected.

The discussion on ABA analysis relied heavily on the ANP:AGP ratio, but this ratio was not included in Tables 1 through 11. It would be helpful to modify the tables to include the ANP:AGP ratio.

The revised tables now include a "ratio" column which is the ANP:AGP ratio.

The samples in Table 24 are supposed to correlate with locations on Exhibit 8. However, we noted Table 24 shows Sample_ID numbers while Exhibit 8 shows hole numbers. Please use either hole numbers or Sample_ID numbers in both the tables and Exhibit 8.

Exhibit 8 displays meteoric water mobility test sample sites while Table 24 includes humidity cell results. Table 22 contains the results of the meteoric water mobility tests and the revised geochemistry tables provided in Appendix 4 include the hole numbers and Sample_ID numbers.

24. Ground Water Baseline Report. There are a couple of corrections that should be made within the text of this document:

    a. Section 1.0, page 1. In item number 1, please change SDCL 45-6B-7 (9) (a-o) to (9) (a-mm); and
    b. Section 2.4.1. page 14. This section contains a reference to well SS-09 in Nevada Gulch. The well should be referred to as SM-09.

    Corrected.

25. Ground Water Baseline Report, Section 2.6.2, page 19. This section describes how Wharf field checked existing wells within close proximity of the Expansion Area to verify their presence/location. Wharf's baseline report states, "In several instances, wells listed in the SD DENR database as being located within or near the project area were misreported on the well completion form; wells listed in the SD DENR database that have an improper location or are abandoned are not represented on the map." Please submit a list of these "misreported" or abandoned wells. Please indicate the status of each well (abandoned vs. active), information about the location of each well, and any other information germane to each well (well logs, date of drilling, owner, driller).

    A list of wells and their status is included with this response letter.

26. Ground Water Baseline Report, Section 3.4 and 3.5. The statistical analysis included within the report does not adequately describe the ground water quality data collected during baseline sampling. Please present baseline data graphically to facilitate our review of seasonal trends and water chemistry changes possibly related to historic mining or recent large scale mining. At a minimum, the report should include graphs outlining key water quality parameters for each baseline well. Please provide a brief narrative description of each water quality graph. These narratives should include your rationale for choosing key parameters, and an interpretation of any trends or issues associated with water quality at each respective sampling site.

Timeseries graphs, of water quality parameters sampled through April 2011, are included in Appendix H of the revised groundwater report. Narratives are included in Section 3.5 of the groundwater report.

In addition, Wharf does not discuss parameters that are elevated in some wells. For instance, in the Railroad monitoring well it is noted that the arsenic concentrations range from 0.198 mg/L to 0.238 mg/L which is well above the ground water standard. This well is located upgradient of the proposed expansion area. If the source of this water is intercepted during mining, there is a potential it could impact water quality in the Golden Reward area. Incidentally, if this were to occur how would this impact water resources at Golden Reward and how would it be mitigated?

The Railroad monitoring well was drilled to a depth of 510 feet into the Precambrian formation. Precambrian was encountered at 370 feet. The well screen was installed in the lower 80 feet. The source of the arsenic is the graphitic schist located in the bottom of this well. Wharf is not proposing to mine these formations so it is unlikely that the source of this water will be intercepted during mining.

There are also other parameters that exceed South Dakota ground water standards, such as antimony, beryllium, and copper. Each such occurrence should be analyzed and discussed in terms of impacts to ground water quality within the mining area and how Wharf will address these impacts if they are detected in the expansion area during mining.

Water quality parameters that exceed groundwater standards have been highlighted in the results tables in Appendix E of the groundwater baseline report. Additional narratives are provided in Section 3.5 of the text. Values that exceed groundwater standards are considered baseline in and around the expansion area and are not anticipated to additionally impact groundwater quality during mining.

27. Ground Water Baseline Report, Section 3.5, page 37. The report states the Horseshoe Well may not have been grouted properly which in turn may be causing excessively high pH levels within this well. If this well was not grouted properly how can the baseline

values for this well be accepted as true baseline? What would the impact of the excessively high pHs have on general water quality?

This section in the Groundwater baseline report has been rewritten to delete the discussion on grout. We do not know that this well was grouted improperly so therefore cannot say for certain why the pH is high.

28. Ground Water Baseline Report, Section 5.0, Page 41. Throughout the report, references were made to the other reports used to develop the discussion in this section. In most cases, only the final conclusions of these studies are included. This is acceptable for the more general studies referred to such as Downey, 1984 and Driscoll et al., 2002. However, the more specialized studies prepared specifically for Wharf and Golden Reward should either be provided in their entirety or a more detailed discussion of them should be included in the text of the report. This is necessary to allow for an adequate review of the methodology and reasoning behind the assessments and assumptions made during those studies.

Effort has been made to explain and better clarify some of the references cited, and the available specialized references have been provided on disc in the groundwater baseline report. If the SD DENR requires the complete document for a specific reference that was not included, Wharf will provide it upon request if it is available.

29. Ground Water Baseline Report, Appendix C. This section is missing well completion reports for Nevada Gulch Well or MW-59. The last well completion report in this section is not labeled. Is this report for well MW-59 or the Nevada Gulch well? Please provide the well completion report for the missing well.

The unlabeled completion report has now been labeled as MW-59. No completion report is available for the Nevada Gulch well and the owner does not have one. The depth of the Nevada Gulch well is known to be 145 feet deep.

30. Ground Water Baseline Report, Appendix E. We have the following comments on the tables in Appendix E:

Table E-8: The results for July and August do not appear to correlate to the results for the previous 6 months on Table E-8. Please verify that all of these numbers are correct.

The data had been incorrectly shifted but has been corrected.

Table E-21: The results for the November 2005 sampling event do not seem to correlate to the results of the other sampling events shown on this table. Please verify that these numbers are correct.

Values are correct.

Table E-23: What does the 'V' indicate for the November 2008 Field pH result?

The "V" was a typo. No field pH value was recorded and the table has been corrected.

Tables E-44, E-45, E-49, E-50, E-53, E-54, E-55, E-58, E-59, E-60, E-63, E-64, E-65, E-66, E-69, E-74, E-75, E-76, and Table E-77: These tables had values that contained a higher level of accuracy (contained more significant digits after the decimal) than those found on some correlating lab sheets from annual water quality reports . Please verify the data accuracy in these tables. If it is determined the data is accurate, please submit the correct lab sheets.

Significant digits have been corrected.

31. Ground Water Baseline Report, Appendix E. There is no well SM04A at either Wharf or Golden Reward. This section probably refers to well MM04A. Please verify that this is correct and make the necessary change. Also, is well PM-2 supposed to be well PW-2?

The table titles in Appendix E were corrected.

32. Surface Water Baseline Report, Table 2-1, page 7. Per ARSD 74:51:03:01, all streams listed in the table should include the beneficial use of 9 (fish wildlife propagation, recreation, and stock-watering waters) and 10 (irrigation waters). These uses apply to all streams in South Dakota.

Table 2-1 in the surface water baseline report has been corrected.

33. Surface Water Baseline Report, Table 2-3, page 9. The title for this table should acknowledge that the surface water monitoring sites listed are for both the Golden Reward Mine and the Wharf Mine.

This table has been renumbered as Table 3-1 and the title changed to reflect that listed sites are for both Golden Reward and Wharf Mines.

34. Surface Water Baseline Report, Section 2.4, page 18. The report states, 'Sampling will begin at one site on October 2010.' Please specify which sample site you are referring to.

The site this statement referred to is SS-05. The report has been edited to note this.

35. Surface Water Baseline Report, Section 3.0. This section addresses concerns with erosion and sediment control from mining sites. Please expand on this to address other surface

water quality concerns associated with runoff from mining activities and rock depositories such as the nitrate spikes at surface water quality monitoring sites BMT-1 and DWD-1 and selenium or nitrate concerns at compliance point 001 on Annie Creek below the Reliance Waste Rock Depository.

This is discussed in Section 3.4.3 of the large-scale mine permit application and the surface water characterization report (Appendix 7). Wharf prefers not to speculate about trends in surface water quality that do not exceed the standards.

36. Vegetation Survey Report. There is no mention of riparian or wetland vegetation in the Vegetation Survey, especially along Nevada Gulch and Upper Fantail Creeks. Were any riparian or wetland species or communities noted during the field work?

No riparian or wetland vegetation species or communities were documented within the Expansion Project, included areas along Upper Nevada Gulch and Upper Fantail Creeks. A letter from BKS Environmental Associates stating such is now provided at the end of Appendix 9.

GOLDCORP

WHARF RESOURCES (USA) INC.

Response to letter from the SD DENR dated May 25, 2011

Procedural Completeness Issues

1. SDCL 45-6B-6(2) and (3), SDCL 45-6B-10(2) and ARSD 74:29:02:03. The following are additional comments on the Impacted Land Map in Exhibit 3 and in the land ownership tables in Appendix 3:

   a. The following claims shown in Table 1 of Appendix 3 are not shown on Exhibit 3:

   Elk Mountain Group Nos. 1, 2, and 3 (MS #1107, page 11);
   Coxey Fraction, Hamden, Walton, and Harvey Fraction (MS #1229, page 14);
   Imperial (MS #1979, page 14);
   Buffalo, Link, May, and Deadwood (MS #1283, page 14);
   Snorter (MS #1643 page 15);
   Lloyd (MS #1468, page 15);
   Government Lots 7, 8, 9, and 10 (page 15);
   Mohawk and Lots 1 through 5, Oxford Subd. (MS #1065, page 15); and
   Lone Jack and Lone Point (MS #1073, page 16).

   Exhibit has been corrected.

   b. The following claims shown in Table 2 of Appendix 3 are not shown on Exhibit 3:
   Tract 1 of South Lyon (MS #935, page 2);
   Margurite No. 2 (MS #2006, page 9);
   Lot 5, Oxford Sub. (MS #1065, page 10);
   Little Eagle, Perry, and Long Valley 1 and 2 (MS #1378, page 10);
   Dolphin (MS #1453 page 11);
   Frost (MS #1567, page 11); and
   Govt. Lot 5, Section 6; T4N-R3E (page 11).

   Exhibit has been corrected.

   c. There is a claim between the Mogul, Peabody, Daisy Fraction, Little Bird, Minnie, and Garland claims, in NE1/4 Section 12; T4N-R2E, that is not labeled on the map. I have enclosed the portion of the map showing the missing claim name. Please submit a revised map showing the claim name.

   Exhibit has been corrected.

   d. Regarding MS #898 on page 11 in Table 1, the claim "Tract B, Hardscrabble, Vulgar" is shown as "Tract B, Hardscrabble, Vulgar Fraction" in Exhibit 3. Which claim name is correct?

"Tract B, Hardscrabble Vulgar" is the correct name.

e. Regarding MS #1404 on page 2 in Table 2, the claim "Lot 1 of Vulcan MS 1404" should be changed to "Vulcan MS 1404" since Lot 1 is inside the inside the proposed permit boundary.

Corrected.

f. Please submit copies of surface and/or mineral leases for claims Wharf controls, but does not own.

All claims within the proposed permit boundary Wharf owns or controls. The owners of the mineral or surface is correctly stated in the tables, and where Wharf Resources or Golden Reward are not owners, Wharf controls them.

g. It would be helpful if the owner address lists for Tables 1 and 2 would be separated into surface and mineral owners for each table.

Address lists have been separated into surface and mineral owners. Owners of both surface and mineral rights are listed under both sections.

2. SDCL 45-6B-7(9) and ARSD 74:29:02:11. In Section 3.3.2.1, Wharf needs to address any elevated parameters in the three additional wells drilled (SM-11, SM-12, and SM-13) that are discussed in this section. Also, Wharf needs to discuss the source of elevated sulfates identified in the final dye test report for the Golden Reward Mine and the mitigation plan for the elevated sulfates.

The three wells drilled (SM-11, SM-12, and SM-13) were drilled to provide information for the West Liberty Hydrology report. They were not included as baseline wells in the application. Therefore, they are not discussed in Section 3.3.2.1. However, sulfates were discussed, and Section 3.3.2.1 of the report has been revised since the completion of the West Liberty Hydrology report (Environmental Resource Management Consultants, *Evaluation of Hydrogeology and Geochemistry of Sulfate-Impacted Groundwater in the West Liberty Pit Area*) was submitted to the SD DENR in March 2011.

3. SDCL 45-6B-32. In Section 1, Item 4, page 1, please address whether the proposed operation will affect the stability of the Terry Cemetery and buildings in the path of the new haul road since these facilities are within 200 feet of the affected land.
This mining operation including the temporary haul road from Golden Reward to Wharf Resources will not adversely affect the stability of any significant, valuable, and permanent, man-made structures located within 200 feet of the affected land including the Terry

Cemetery. Wharf currently has traffic within 200 feet of structures and no adverse effects to the structures have arisen (examples: Trojan fuel station, RV Bug Plant).

4. SDCL 45-6B-40 and ARSD 74:29:07:07. Was the topsoil on reclaimed areas to be redisturbed at the Golden Reward and Wharf Mines included in the topsoil salvage estimates? If not, please submit a revised topsoil salvage estimate which includes the redisturbed reclaimed areas. Also, the soils map in Exhibit 13 should be mentioned in Section 3.2.1.

The topsoil on reclaimed areas to be redisturbed was included in the topsoil salvage estimates. Reference to the exhibit has been included.

5. ARSD 74:29:07:05 and ARSD 74:29:07:14 (3) and (4): In Section 3.1.3.6, pages 29 and 30, Wharf needs to submit results from the following tests mentioned in this section once they are completed:

100 additional ABA samples within the four potential special handling areas;
Two additional humidity cell tests in the Deadwood lower contact;
30 additional whole rock samples and updated sample locations at the Golden Reward Mine;
13 additional MWMT samples in Deadwood lower contact at Wharf and Golden Reward Mines including sample location map; and
Additional geochemical sample locations and results for 3 areas within in the proposed disturbance boundary.

Updated geochemical results tables are provided in Appendix 4 and exhibits were updated to include the additional samples.

Technical Review Comments

1. Terry Cemetery. Please show on a map the proposed access routes to the Terry Cemetery both during mining activities and after final reclamation. Also, please submit a stability analysis of the current highwall just to the west of the cemetery and address whether it will need to be buttressed with backfill to provide long term stability for the cemetery. Finally, please address the impacts to the cemetery from blasting during mining activities.

Exhibit 22 is updated with current access to Terry Cemetery, and Exhibit 23 shows the post mining access road.

As stated in response to Technical Review comment #22 from the March 21, 2011 letter, a summary of past stability analysis of the Terry Cemetery highwalls has now been included in Section 5.2 of the revised application.

Concerning the blasting near the Terry Cemetery it is not expected that any detrimental effects will occur from the mining or blasting. This is based on the last mining period at Golden Reward when mining approached the southwest boundary of the cemetery and no problems due to blasting arose. The proposed mining will approach the cemetery near the same southwest location of previous mining and once complete the pit will be backfilled along with the current southwest exposed highwall. The backfill will help in the stabilization of the area and improve the reclamation reducing highwall exposure.

2. SDCL 45-6B-10(4), and ARSD 74:29:02:12. The department has the following additional comments on the exhibits in Appendix 2 of the mine permit application:

Exhibits 2, 8, 9, 10, 11, 12, 21, 22, 23, and 28 – Should the elevation of the Bald Mountain Peak be 6600 feet instead of 6300 feet? USGS quadrangle maps show the elevation as 6600 feet.

Elevations were corrected to 6,600 feet.

Exhibit 2 - This map shows both the expansion area shaded in green and the proposed disturbed area outlined in dark purple. Is the green shaded area or the purple outlined area the proposed permitted affected area? Ideally, the green shaded area and the purple outlined area should be the same. It would be helpful if Wharf submitted a map showing the current and proposed permitted affected area for both the Golden Reward and Wharf Mines.

Concerning Exhibit 2, the green hatch just identifies what is being called the Expansion Area; this is not the new disturbance zone. As the legend states the magenta color is the Permit Boundary, the purple is the disturbance boundary. An additional Exhibit (2-1) is submitted indicating new and proposed permit boundaries.

The total expansion area acreage in the green shaded areas is 398.73 acres. This is more than 279 acres Wharf states it will affect in Section 2.0 on page 15 of the mien permit application. Why are there more expansion area acres shown in Exhibit 2 than will be affected? These numbers should be the same.

Concerning the acres, as the map legend indicates the green hatch is to show the areas and their respected names and approximate location in which they encompass. The green hatch is the area which we are calling Expansion Area. The two numbers should not equal the same.

Since the original submission, the Expansion Project permit and disturbance boundaries have been slightly modified. Total Permit Area equals 528 acres.

Total Mining Disturbance equals 298 acres comprising of 249 acres of pit disturbance, 30 acres of topsoil stockpiles, and 19 acres of roads and mine facilities.

It appears the proposed permit boundary overlaps the current permit boundary for the Wharf Mine. Are the two permit boundaries supposed to overlap?

The new proposed permit boundary does overlap the current Wharf Mine permit area, this is required to assure the area between the current disturbance boundary and current permit boundary is included in the new permit area.

Exhibit 21 – The pit areas outlined on the map do not match the green shaded expansion areas shown in Exhibit 2. The maps submitted with the mine permit boundary need to consistently show the same affected, reclaimed, permitted affected, and permit boundary acreage. Please submit a revised map showing the correct pit and permitted affected acreage.

Concerning Exhibit 21, as stated the green hatch is used to describe and show the Expansion Area and the names of the areas within the Expansion Area. The hatch does not indicate solely the disturbance area of pits, haul roads, stockpiles but is included in the area.

To the east of the Golden Reward pits, there is a large section of the proposed disturbed area where only a small topsoil stockpile is shown. No other mine related facilities are shown. Also, there is a large section of the haul road corridor where no mine facilities are shown to the north of the haul road. Finally, the map does not show any mine facilities for the expansion area to the north of the process area. Wharf needs to submit a revised map showing additional mine facilities that will be needed during the mining operation or reducing the proposed disturbance limit boundary.

Concerning the disturbance boundary at Golden Reward, the area east of the pits include topsoil piles and will be indicated on the appropriate maps. The disturbance of this area has been reduced by 15 acres directly east of the cemetery, acreage will be adjusted accordingly, and the disturbance line updated to reflect change.

The disturbance area east of the haul road between Golden Reward and Wharf has been reduced taking out land that is not planned to be disturbed.

The disturbance area north of the process area will include expansion of the employee parking lot, plant access road reroute, and an additional plant warehouse building. These updates are included on appropriate maps.

There is an area outlined in tan just to the southwest of the Green Mountain Pit that has mine pit disturbance, but it is not labeled. Is this a part of the Green Mountain or Portland Ridgeline Pits? If not, what is the name of this pit?

The section southwest of Green Mountain in question is part of Green Mountain; this is also stated in Section 5.1 concerning mining phases.

Finally, there is a portion of the topsoil stockpile shown inside the pit boundary for the Liberty and Harmony pits. Should this stockpile be shown outside the pit boundary?

The topsoil pile location has been corrected on the maps.

Exhibit 22 – The yellow line indicating existing gas lines in the map legend is not shown on the map. Please submit a revised map showing the gas line

Exhibit 22 has been updated.

Exhibit 23 – The total post mine land use acreage shown on the map is 485.10 acres. This is more than 279 acres Wharf states it will affect in Section 2.0 on page 15 of the mine permit application. Why are there more post mine land use acres shown in Exhibit 23 than will be affected? These numbers should be the same.

The two numbers should not be the same. The total permit area equals 528 acres. The total mining disturbance equals 298 acres comprised of 249 acres of pit disturbance, 30 acres of topsoil stockpiles, and 19 acres of roads and mine facilities.

Also, this map does not show the overlapped permit boundary between the proposed expansion area and the Wharf Mine.

The area that is included in the new permit lies between the current Wharf Mine disturbance boundary and permit boundary has been changed to reflect the proposed post mine land use.

3. Section 1.2, page 11. In paragraph 3 on this page, Wharf states no spent ore is scheduled to be deposited within the new expansion area. However, in Section 5.3.4, Wharf states final spent ore from the leach pads will be placed into the Portland Ridgeline Pit. Since it appears spent ore will be placed within the new expansion area, the statement on page 11 needs to be revised.

Concerning the deposit of spent ore in the new Expansion Area, it is planned that the final pads will be off-loaded in the Portland area within current POP zones or planned future POP zones (American Eagle Area). The area will be within the current Wharf Mine permitted area and not in the newly permitted Expansion area outside of the current permit boundary. Any pad that is off-loaded to any area will meet the necessary off-loaded criteria set by the state.

4. Table 1-3, page 14. In this table, please change mine license #90 to #400 to #90-400. Also, Wharf needs to change the date on the permit amendment adding 18 acres for the American Eagle pushback from 1/26/09 to 4/6/10.

   Corrected.

5. Section 3.1.3.1, page 21. In paragraph 2 of this section, Wharf states no Precambrian rock is scheduled or planned to be mined. However, the cross section in Exhibit 6 shows portions of the Green Mountain Pit extending up to 50 feet into the Precambrian formation which suggests Wharf will be mining Precambrian rock. Please clarify whether Wharf plans to mine any Precambrian rock.

   No Precambrian rock is planned to be mined; cross-sections have been corrected to indicate this.

6. Table 3-1, page 22. The table shows 2 million tons of waste rock will be placed in the Spent Ore Rehandle area. Please clarify if the Spent Ore Rehandle area is going to be used for waste rock, spent ore, or rehandled spent ore. If the area will be used for spent ore and waste rock, please indicate the source and amount of spent ore and waste rock to be placed in the rehandle area.

   Table 3-1 states that 2 MT of Spent Ore Rehandle will be mined and discarded; this material is planned to be relocated within the Spent Ore Rehandle Area within the same POP zone.

7. Section 3.6, page 46. Please submit a summary of the major grass, tree and shrub species and the vegetative cover at the reclaimed Golden Reward Mine from the Cedar Creek report that was part of the release petition.

   Summary tables of the observed plants (including species, total plants, acres) at Golden Reward that were part of the Cedar Creek Associates report are now included at the end of Appendix 9 and are included with this submission.

8. Section 5.3.4, page 85. In the first paragraph on this page, Wharf states the southwest portion of the Portland Ridgeline Pit will be mined to the 6,300 foot elevation and the 6,000 foot elevation everywhere else in the pit. However, cross-section A-A' in Exhibit 5

shows the depth of the southwestern portion at 6,200 feet and the remaining portions at a depth of 5,900 feet. What are the correct depths of the Portland Ridgeline Pit?

Cross section A-A' elevation labeling was incorrect and has been corrected. Mining is from the 6300' to the 6000' elevation.

Also, in the same paragraph, Wharf state there will be a maximum 40 foot highwall remaining after final reclamation of the Portland Ridgeline Pit. However, in the next paragraph, Wharf states the height of the remaining highwall will be 200 feet. Please clarify the correct final height of the remaining highwall after final reclamation for the Portland Ridgeline Pit.

This was addressed and corrected in the comment letter dated 3/21/11 procedural completeness issue #16. All of Golden Rewards highwalls will be reclaimed so that no highwalls will be exposed. Along the Portland Ridgeline two (2) sections of highwall will remain exposed, one 400' in length by 30' in height, one 500' in length by 30' in height. All of Green Mountain will be reclaimed so no highwalls will be exposed.

Finally, in the second paragraph, Wharf states mining along the Portland Ridgeline Pit will encounter previously deposited spent ore which will be required to be rehandled. It is our understanding that the previous Portland Pit was backfilled with waste rock and not spent ore. Where is this spent ore located? Does Wharf plan to remove any of the spent ore on the lined denitrification pad area during mining?

Concerning previously deposited spent ore, the Portland Pit had approximately 2 MT of spent ore deposited throughout the eastern part of the pit within the POP zone, this material as stated in Technical Review Question #3 above will be rehandled and deposited within the current POP zone.

9. Section 5.5, page 90. In this section, Wharf needs to acknowledge the potential for an additional leach pad in the expansion area to the north of the process area

It is not anticipated that Wharf Resources will construct another heap leach pad at this time. The area is now planned for use as road, parking lot, utility reroutes, and an additional warehouse type building.

10. Section 6.5.3, page 103. Since Wharf is proposing four postmine land uses, the statement that rangeland/woodland grazing is the primary and secondary land use needs to be corrected. Also, Wharf needs to address the establishment of woody species for each proposed postmine land use.

Corrected.

11. Section 6.9.1, page 108. In this section, Wharf needs to also address the requirements for a 40 percent live vegetative cover and a diverse and self-sustaining vegetative cover.

The following statement was added to the end of Section 6.9.1: "In addition to the above proposed monitoring, the revegetated areas will be surveyed to insure that they contain an overall 40 percent live and self-sustaining vegetative cover."

12. Section 6.10.2.1, page 117. In the third paragraph of this section, Wharf states per SDCL 45-6B-91, a postclosure monitoring plan will be submitted to the department before closure. This statement is not correct as SDCL 45-6B-91 is a completeness item and a postclosure plan is required as part of the mine permit application.

The statement was removed as the post closure plan is described in Section 6.10.2.1.

13. Section 6.10.3, page 125. Wharf should also include in this section the cyanide spill bond is updated annually for inflation.

Corrected.

14. Appendix 5, Soils, page 7. In Table 2, should the units for Total Volume of Topsoil be acre-feet instead of feet?

Yes, the unit should be acre-feet. A revised copy of that page is included.

15. Appendix.7, Surface Water, page C-1. In Appendix C, there is only a title page with no information of surface water sampling methods. Please submit the surface water sampling methods information.

The sampling methods, including Wharf's updated SOP, are included in the revised baseline surface water report.

16. Appendix 9, Vegetation, Addendum A. It would be helpful if the description of each vegetative community abbreviation was included in the vegetative communities map legend.

Map abbreviations are provided in Table 1 of the baseline vegetation report. Additionally, the abbreviation and description is included on the revised map included with this submission.

17. Appendix 10, Wildlife, page A1-1 to A1-11. It would be helpful if the applicable species in the table were also identified as federally-listed threatened, federally-listed endangered, state –listed threatened, or state-listed endangered as shown in the table key on page A1-11.

The table has been revised to indicate applicable federal and state listed species and is included in Appendix 10 of the revised application report.

18. Appendix 13, Sound Level Study, page 2. On page 2, it states Figure 1 goes here, but there is no Figure 1 on the page. Is there supposed to be a Figure 1 on this page?

Figure 1 as referred to on page 2 of the sound level study is the sound monitoring location map (same as original Exhibit 19). A revised Exhibit 19 is included with this submittal.