



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

December 14, 2012

Richard Blubaugh
Powertech (USA) Inc.
5575 DTC Parkway, Suite #140
Greenwood Village, CO 80111

Dear Mr. Blubaugh:

The department has completed its review of the supplemental information for Powertech's large scale mine permit application submitted on December 4, 2012. Based on our review, we developed the following list of items that are needed to complete the application.

Procedural Completeness Items

1. SDCL 45-6B-6(4): On several of the mineral leases, Kelsey Boltz and Rocky Mountain Services are listed as lessees. However, there is nothing in Attachment A which shows that either these leases have been transferred to Powertech or it has authority to mine under these leases. Please submit proof that Powertech has the legal authority to mine under these leases.

Also, in the supplement, Powertech states the mineral rights were reserved within the railroad right of way when it was constructed. Who currently holds the mineral rights within the right of way? In addition, Kathleen Klausen was not updated to Kathleen Stritar in the table on page 2.2-A-2, in Appendix 2.2-A.

2. SDCL 45-6B-7(5), SDCL 45-6B-33(3), and ARSD 74:29:02:06: Please submit a map showing the 18 sites either on or eligible for inclusion on the National Register of Historic Places and the proposed affected areas. The map should be marked confidential.
3. SDCL 45-6B-12 and ARSD 74:29:06:01: Please submit approval of the reclamation seed mix and the postmining land uses from Custer and Fall River County.
4. SDCL 45-6B-37 and ARSD 74:29:07:04(2): In the grading plan in Section 6.4.3.1 in Volume 1 of the mine permit application, please address how areas outside the affected graded areas will be protected from slides during grading activities.
5. SDCL 45-6B-46: Please show on a map the "alkaline area" referred to in the response for this statute.

6. ARSD 74:29:02:11(10 and 13): Please submit a conceptual spill contingency plan that addresses the procedures Powertech will use to report spills of plant reagents, fuel, and other chemicals to all state and federal agencies and the personnel responsible for reporting the spills. Also, please provide conceptual plans and specifications for the land application diversions, berms, and catchment areas.
7. ARSD 74:29:05:16(2), (3), and(8): Under site geology and surface and ground water, please address the potential for land applied water to flow through the alluvium and into Beaver and Pass Creeks as shown in Plates 3.2-3 and 3.2-25. Also, under adjacent land use, please address effects from land application solution on cropland in and around the land application area.
8. ARSD 74:29:07:07(2, 3, and 5): Please clarify the topsoil estimates in the December 4 submittal. We used the estimated topsoil salvage depths and acreages in the December 4 submittal and calculated topsoil salvage amounts of 77,440 to 174,240 cy for the Burdock process and pond area and 38,720 to 103,253 cy for the Dewey process and pond area. These volumes are different than those Powertech mentions in the December 4 submittal.

Also, the department wants Powertech to address whether the topsoil to be salvaged and used in reclamation will need fertilizer or other amendments to establish a vegetative cover on reclaimed areas. This does not include the “alkaline” area or the Darrow Mine area. The department is concerned that the poor vegetation noted on drill sites under Powertech’s exploration permit, which were located in portions of the proposed affected area, may be attributed to lack of soil nutrients.

In addition, please address whether Powertech plans to temporarily distribute a portion of the topsoil. If so, please address section 2 of this regulation. Finally, on page 1-14a in Table 1.1-2, please change ARSD 74:29:07:06(3) to 74:29:07:07(3).

9. ARSD 74:29:07:08(2): Section 3.5.4.1.1 referred to in Table 1.1-2 for this regulation does not address compliance with South Dakota surface water quality standards for surface water sites and ground water quality standards in the land application area during and after the mining operation and during reclamation. Please address compliance with these standards both during and after the mining operation and during reclamation.
10. ARSD 74:29:07:09(6): Although some of the ponds in the two process areas hold only treated water, they are considered part of the process area. Therefore, the diversions for these ponds should also be designed for the 6-hour PMP event.
11. ARSD 74:29:07:12(6): In the December 4 response, Powertech states it wants to continue using the existing low water crossing in Pass Creek within the cottonwood galley riparian zone instead of constructing a culvert or bridge at the crossing. Since the road in this area will be upgraded to a secondary road to transport personnel and equipment, and since Pass Creek is a prominent drainage in this area, Powertech is required to install a culvert or bridge at this crossing. Please submit conceptual designs for the culvert or bridge crossing and address subsection 6 of this regulation.

Also, we did not receive revised Plate 5.3-5 that is mentioned in the December 4 response letter. Please submit the revised plate that shows the location of the culvert crossing over Pass Creek.

12. ARSD 74:29:07:21(1): Please clarify if Powertech plans to document targeted alfalfa production potential based on pre-mining data, a reference area, or alfalfa production in nearby surrounding areas. Powertech should provide data from pre-mining areas or current alfalfa production in the surrounding area if those options are chosen. If Powertech plans to use reference area data, please address how the data will be collected and used to compare to alfalfa production in the reclaimed areas.

Technical Comments

1. SDCL 45-6B-33(5) and SDCL 45-6B-92(1): As Powertech knows, a couple of meetings are scheduled with the Department of Game, Fish, and Parks and the US Fish and Wildlife Service to discuss contents of a bald eagle mitigation plan. Once the plan is completed and approved by these agencies, it will become part of the large scale mine permit and will comply with SDCL 34A-8-8. Under this statute, please be aware that it authorizes a taking of a bald eagle's nest for very limited circumstances. This statute may therefore determine plan contents as it appears federal permits are valid upon obtaining state authorizations

In the December 4 submittal, Powertech states it will establish buffer zones and seasonal restrictions to protect important bald eagle habitat. Currently the nest and "standard" 1/2 mile buffer encompass the Dewey processing plant, well fields, both proposed and standby land application pivots, monitor wells, process water wells, and overhead power lines. It is reasonable to assume there are developmental and operational challenges that will be discussed during the meeting to avoid jeopardizing bald eagles during all project phases.

2. ARSD 74:29:07:09(6): Will storm water diversions around the ponds in the land application option be necessary to keep storm water out of the ponds during storm events?
3. Appendix 6.4-D, Section 1.4: Powertech needs to include a discussion on complying with the vegetative cover and diversity and other requirements of SDCL 45-6B-39. In the discussion, Powertech should include a minimum live vegetative cover value that will be used to assess the success of final reclamation. For other mines in our state, we use a minimum value of 40 percent live vegetative cover.
4. Section 5.6.3.2: Regarding notice for excursions, the department will require through permit conditions that Powertech give notice to the department through email or phone within 48 hours of any excursions. Written notice with additional details on the excursion will be required within seven days after the excursion.

Should you have any questions concerning this letter, please do not hesitate to contact us. Please be aware the department is continuing its review of the application, and any additional comments or questions developed will be forwarded to you.

Sincerely,

\s/

Eric Holm
Natural Resources Engineer III
Minerals and Mining Program
Telephone: (605) 773-4201
FAX: (605) 773-5286
E-mail: eric.holm@state.sd.us

cc: Stan Michals, GFP

\s/

Michael Cepak, P.E.
Engineering Manager I
Minerals and Mining Program
Telephone: (605) 773-4201
FAX: (605) 773-5286
E-mail: mike.cepak@state.sd.us