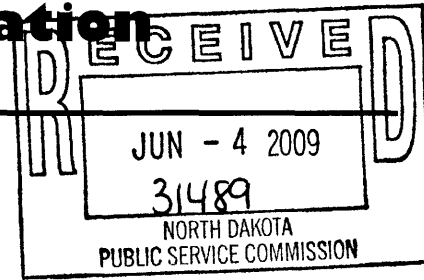


# Dakota Westmoreland Corporation



Beulah Mine – P.O. Box 39, Beulah, North Dakota 58523-0039  
Phone: (701) 873-4333 • Fax: (701) 873-7784

FROM DIRECTOR - RECLAMATION DIV.

Date: \_\_\_\_\_

Action: \_\_\_\_\_

Info. Only: \_\_\_\_\_

Info & File: \_\_\_\_\_

June 3, 2009

Mr. James R. Deutsch  
Director, Reclamation Division  
Public Service Commission  
600 E Boulevard Ave, Dept. 408  
Bismarck ND 58505-0480

Dear Mr. Deutsch:

Re: Revision No. 22  
KRSB-8603

The following information is submitted in response to the technical questions dated April 30, 2009. Individual comments are set forth below followed by Dakota Westmoreland's responses and a listing of revised information. Three CDs containing the revised information are enclosed.

A security warning message has been popping up with the links in the table of contents. We believe this is a software glitch with Adobe Acrobat 9. We have talked to technical support at Adobe and they don't know how to fix it either. The way to get around this message is to just press the "Allow" icon, when it asks if you trust this site, and it will take you to the correct exhibit. We also added an additional Table of Contents in the form of a word document. All the links work in the word document without the security message popping up. The disadvantage of the word document is that you lose the ability to easily move forward and backward when checking exhibits.

## Section 1.4 – Business Entity Information

1. Landowner(s) Voigt is incorrectly spelled in Exhibit 1.4.2, as well as throughout other areas of the revision application. Please revise. (BEB)
  - The second page to Exhibit 1.4.2 has been corrected. Several other misspellings were corrected throughout the narrative.
2. Please update information presented in Item A of Section 1.4 concerning Identification of Interests under the Business Entity Information section. As of January 27, 2009 Westmoreland Coal Co. President and Chief Executive Officer Delbert Lobb has resigned and has been replaced with former President and CEO Keith Alessi. Please revise the

Officers and Shareholders, Managers, Directors and all other relevant subsections to reflect this change in company officers and directors pursuant to NDAC 69-05.2-06-01(e). (BEB)

- Per your recommendation, Item A of Section 1.4 has been updated in its entirety.
3. Please check on the land ownership records for the NE $\frac{1}{4}$  of Section 22, T143N, R88W. Recent personal communication with Terence Schmidt indicates that Tammy Schmidt should no longer be listed as a surface owner of record for the NE $\frac{1}{4}$  of Section 22. If indeed this is the case, please eliminate any reference to Tammy Schmidt in the Land Use narrative of Section 2.7, the Surface and Mineral Ownership Map of Exhibit 1.4.1, and any other sections of the permit in which her name is associated with the NE $\frac{1}{4}$  of Section 22. (BEB)
    - The Schmidt's did not notify DWC of any surface ownership deed sales, and have been splitting the surface ownership royalties to date. Likewise, the county plat books indicate that both Tammy and Terence own the property in question. Given this history, DWC assumed that both Tammy and Terence were surface owners of the property in question. After a records check at the courthouse, Tammy did in fact sell the land to Terence in 2006. Thus, Section 2.7, Exhibit 1.4.1, and Exhibit 1.4.2 have been updated to show Terence as the sole landowner.
  4. The Surface and Mineral Ownership Map of Exhibit 1.4.1 lists Unruh as the sole surface owner in the SW $\frac{1}{4}$  of Section 14, T143N, R88W, while the Apparent Surface and Coal Owners of Record – Adjacent Area, under Item B – Property Interests of Section 1.4 of the Business Entity Information lists Terence and Tammy Schmidt in addition to Kenny and Kim Unruh. Please correct this conflicting information. (BEB)
    - After review, the two owners of the SW $\frac{1}{4}$  of Section 14 are Kenny Unruh and Terence Schmidt. Terence Schmidt owns a small 3 acre parcel of the section located in the southwest corner. Exhibit 1.4.1 and the narrative for Section 1.4 have been updated to correctly represent this information.
  5. Page 2 of Exhibit 1.4.2 indicates that the federal coal lease for the NE $\frac{1}{4}$ NE $\frac{1}{4}$  and the S $\frac{1}{2}$ NE $\frac{1}{4}$  of Section 20 is pending. According to the information on Federal Coal Lease NDM 041765 on page 230, these areas are already leased. Please correct as needed. (SAS)
    - The portion of Page 2, Exhibit 1.4.2 in question is shown below. It appears as though the NE $\frac{1}{4}$ NE $\frac{1}{4}$  and S $\frac{1}{2}$ NE $\frac{1}{4}$  are properly designated on the summary below and on page 237 of Exhibit 1.4.2.

|            |           |  |
|------------|-----------|--|
| Coal Lease | USA, #230 | N $\frac{1}{2}$ , §22, T.143N., R.88W.<br>NE $\frac{1}{4}$ NE $\frac{1}{4}$ ; S $\frac{1}{2}$ NE $\frac{1}{4}$ ; NE $\frac{1}{4}$ SE $\frac{1}{4}$ ;<br>§20, T.143N., R.88W. |
|------------|-----------|--|

|            |              |   |
|------------|--------------|---|
| Coal Lease | USA, pending | NW $\frac{1}{4}$ NW $\frac{1}{4}$ ; S $\frac{1}{2}$ NW $\frac{1}{4}$ ; N $\frac{1}{2}$ SW $\frac{1}{4}$ ;<br>NW $\frac{1}{4}$ SE $\frac{1}{4}$ , §20, T.143N., R.88W. |
|------------|--------------|---|

6. We are unable to locate an assignment of the lease for the NE¼ of Section 19 from North American Coal to Knife River Coal Corporation. This document is needed in addition to the Warranty Deed showing the sale of the coal to DWC. (SAS)
  - The lease covering the NE¼ of Section 19 is a sublease with the North American Coal Royalty Company. The recorded sublease assignment has been added to Exhibit 1.4.2.
7. The “modified” copy of NDM 041765 was signed on January 8, 2001 but there is no indication that it was ever recorded at the county auditor’s office. Please indicate if this was recorded or if there is any page or pages missing. It appears the modification to the permit may have been associated with the term of the lease. Please explain. (SAS)
  - No pages are missing from lease NDM 041765. The Coal Lease Readjustment portion of the lease was simply not recorded at the county auditor’s office. No modifications to the permit are associated with the term of the lease; rather, the Coal Lease Readjustment is a standard practice by BLM each 10 years to reflect any changes during the previous 10-year period. Exhibit 1.4.2 has been updated to include a recorded copy of the lease.
8. The federal coal lease for the N½ of Section 22 is not certified (recorded at the county office). Please provide a certified copy. (SAS)
  - The certified coal lease for the N½ of Section 22 has been included in Exhibit 1.4.2 (see response to question #7).
9. It appears there are 2 road closures for the N½ of Section 22 as listed for items #1 and #9 on page 1 of 18 of Exhibit 1.4.4. Also, it appears there is no road closure for the area between the NE¼ of Section 19 and NW¼ of Section 20 even though this section line will be mined through. Please include plans for obtaining the necessary section line closure for this area. (SAS)
  - There are, in fact, two road closures for the N1/2 of Section 22. Because the original road closure was planned for 1985 (and did not happen), DWC felt it prudent to apply for the section line closure again. The area between the NE¼ of Section 19 and NW¼ of Section 20 was inadvertently omitted in the original closure package. Approval is expected in June and will be incorporated into the permit at that time.
10. Subsection G of Section 1.4.4 indicates that all buildings within ½ mile of the proposed permit area have been identified and are located on Exhibit 3.3.1. The Schmidt and Pleasant Valley Farm farmsteads are not depicted on Exhibit 3.3.1 or any other exhibit. Please depict the locations of these farmsteads/buildings on the appropriate map and indicate if any occupied dwelling is located within 500 feet of the proposed mining operations pursuant to NDCC 38-14.1-07(5). (DKM)
  - The Schmidt and Pleasant Valley Farm farmsteads are depicted on Exhibit 3.3.1 as *Un-Occupied Farmsteads*. Subsection G has been updated to say that mining will not occur within 500 feet of any occupied dwelling.

11. Please consider changing the color scheme of the legend of the Preliminary County Road Relocation Plan Map in Exhibit 1.4.4. The colors of several of the line types (e.g. County Road Closure and Rev. 22 Boundary and the Existing County Road and Permit 8603 Boundary) are similar and only differ in line weight and in some cases appear to have been reversed from the legend to the map. (DKM)

- The color and line weighting schemes for the Preliminary County Road Relocation Plan Map in Exhibit 1.4.4 have been changed per your recommendation.

### **Section 1.5 – Compliance Information**

12. Please update the information for NOV-0804 to show the violation has been terminated and show the penalty amount that was assessed. NDAC 69-05.2-06-02(5). (MDB)

- Section 1.5 has been updated in its entirety, including the recommended changes to NOV-0804 listed above.

### **Section 1.6 – Relationship of Proposed Permit Area**

13. Please update Section 1.6 to clearly state whether or not mining is prohibited on the lands being added with Revision 22. NDCC 38-14.1-07. (GAW)

- Section 1.6 has been updated to specifically mention the permit updates and their relation to prohibited areas.

### **Section 2.1 – Geological Inventory**

14. Please change the font size of the numbers representing elevation and location stationing of Exhibit 2.1.5A so that they're legible. Currently, we're unable to view the numbers at any scale in the electronic format. A similar font as provided on Exhibit 2.1.5B is appropriate. (BEB)

- The font size has been changed so it legible in exhibit 2.1.5.a.

15. Unless there's a specific reason for it, please eliminate the cyan-colored line from Exhibit 2.1.7 that runs for a distance of approximately 3 miles from the SE¼ of Section 18 to the SE¼ of Section 20, T143N, R88W. (BEB)

- The cyan-colored line has been deleted.

16. Two different sets of borehole numbers are superimposed on each other in the N½ of Section 20 on the Geologic Cross Section and Drill Hole Location Map of Exhibit 2.1.7. Please separate the numbers so that they're legible. (BEB)

- Both sets of borehole numbers have been separated.

### **Section 2.2 – Surface Water Hydrology Inventory and Monitoring**

17. Revision No. 11 to Permit KRSB-8603 (May 18, 2001) approved annual sampling frequency for surface water sites. Although we believe that annual sampling is adequate for the remaining pond, spring, or intermittent stream sites within the permit area, we have reconsidered the adequacy of annual sampling for perennial streams such as Brush Creek and Coyote Creek that receive, or will receive, drainage from the permit area. With Revision No. 22 we have therefore determined that the following changes are necessary to the streams portion of the Surface Water Monitoring Plan to comply with NDAC 69-05.2-16-05(1)(a)(1) (please refer to attached Figure 1 for site locations): (1) Increase the sampling frequency to three times per year during ice-free conditions in the second, third, and fourth quarters for existing Sites 09ACC-W/ST (downstream) and 23BBB-W/ST (formerly upstream) located on Brush Creek. During the past five years, these sites have been sampled in November or December, and sometimes more than a month apart, thereby providing limited data for assessing mining impacts to water quality; (2) Add existing Site 25DCC-E/ST located on Brush Creek to the monitoring plan for sampling three times per year during ice-free conditions in the second, third, and fourth quarters. This site has been part of the Permit KRSB-8802 Surface Water Monitoring Plan, but with the additional acreage in Section 22 it will now become the upstream monitoring site for Brush Creek; (3) Establish upstream and downstream sampling sites on Coyote Creek because of the additional acreage in Sections 19 and 20 (**refer to attached Figure 1 at the end of the letter**). These sites should be sampled three times per year during ice-free conditions in the second, third, and fourth quarters; and, (4) Submit separate surface water monitoring reports on quarterly intervals. In recent years, the surface water monitoring report has been submitted annually as part of the fourth quarter NDPDES report. The quarterly reports should include copies of the laboratory analysis reports. (WTG)

- DWC agrees to sample the following sites during ice-free conditions in the second, third, and fourth quarters: 09ACC-W/ST, 23BBB-W/ST, 25 DCC-E/ST, 13CCC-W/ST, and 31DBD-W/ST. Sites 13CCC-W/ST and 31DBD-W-ST (the new Coyote Creek sampling locations) differ from your suggested locations on Figure 1, but are located in positions where a water sample can be taken relatively easy (next to bridges). Likewise, the surface water monitoring reports will be sent on quarterly intervals.

18. Please make the following changes to Exhibit 2.2.4 - Water Quality Data: (1) Sort the sampling date for the sites chronologically in ascending order. There are about five sites for which the dates are not in chronological order, thereby making it difficult to track water quality changes over time; and, (2) Add the sampling data for stream sampling Site 25DCC-E/ST to the table because this site will become the upstream stream sampling site on Brush Creek for Permit KRSB-8603 with the approval of Revision 22. (WTG)

- Based on an agreement with Bill G. via phone on May 12, 2009: DWC is in the process of completely revamping its ground and surface water databases. The current database does not allow DWC to chronologically order data on some well and surface sites. DWC expects the new database to become fully operational by the 2009 third quarter reporting period. At that point, all reported data will be chronologically

ordered. Also, Site 22DCC-E/ST has been added to Exhibit 2.2.4, and all of the data has been updated through the first quarter 2009.

19. Please add the location of surface water sampling Site 25DCC-E/ST to Exhibit 2.2.7, the Surface Water Monitoring Plan. Also, please add the upstream and downstream Coyote Creek sampling locations that will be established with Revision 22. (WTG)

- Sites 25 DCC-E/ST, 13CCC-W/ST, and 31DBD-W/ST have been added to Exhibit 2.2.7.

### **Section 2.3 – Groundwater Hydrology**

20. Pursuant to NDAC 69-05.2-08-06 please provide a narrative discussion of Voigt Springs No. 1 and No. 2 in the *Known Uses of Water* subsection of Section 2.3, Groundwater Hydrology. Discuss the anticipated effects to the springs from proposed adjacent mining operations and water replacement if required. NDCC 38-14.1-14(1)(k). (BEB)

- The Voigt springs have been summarized in Section 3.2. No anticipated effects to the springs from adjacent mining are expected as summarized in Section 2.3.

21. Please convert the Beulah-Zap Coal Seam groundwater monitoring Well No. 2006 from active to inactive/destroyed on the Groundwater Monitoring Sites Map of Exhibit 2.3.1 and update the well completion summary page of Exhibit 2.3.2 to reflect the conversion. This well appears to have been destroyed by mining operations sometime after the 1<sup>st</sup> quarter 2007 measurement was obtained. Please check the two exhibits for any other updates or changes that need to be reflected. (BEB)

- Exhibits 2.3.1 and 2.3.2 have been updated. Also, the Well No. 2006 was removed from the groundwater sampling list in the narrative of Section 2.3.

22. Please eliminate from the map or explain the intended use of the black and white north-south trending gridlines in Exhibit 2.3.1. (BEB)

- The white north-south grid lines have been eliminated.

23. As an organizational formatting issue, please consider moving the Spaer Lignite Potentiometric Surface Map from its current location in Exhibit 2.3.10 to Exhibit 2.3.5, which would place it sequentially in order with the other potentiometric surface maps that are provided in the permit. (BEB)

- In DWC's opinion, the Spaer Lignite Potentiometric Exhibit should be left as Exhibit 2.3.10. If the Exhibits were changed, one might argue that Exhibit 2.3.5 is then organizationally out of place. In most cases (except for gaps in exhibits numbers), the newest information is placed in the next numbered exhibit. By looking at the Table of Contents, we can deduce that the latter exhibits were added to the original permit. One can then easily find the revision and subsequent answer as to why the exhibit was added. Also, because the permit is electronic, the numbering system is less relevant than in hard-copied permits.

24. Please correct the Listing of Revised Information describing updates to Section 2.3, in which Exhibit 2.3.1 is listed as being revised four times. Please replace the Exhibit numbers of the bottom three Exhibits with the corrected subsection numbers (it appears the revised Exhibits that should be listed are 2.3.6, 2.3.7, and 2.3.10). (BEB)
- Corrections to the Listing of Revised Information have been made per your recommendation. After review, the exhibits should have been 2.3.6, 2.3.7, and 2.3.10 as noted.
25. Please provide a linked listing of the name, number, and location of each well and spring certification of Exhibit 2.3.8. Scrolling through each certification document in an effort to locate information for a particular well or spring is time-consuming. At a minimum, please provide a Table of Contents at the beginning of the exhibit (similar to Exhibits 2.1.1 through 2.1.4 in the Geological Inventory) that lists the naming convention of the well or spring certification and show the page number or a range of page numbers for each certification. (BEB)
- The cover page to Exhibit 2.3.8 has been updated to include a Table of Contents as recommended above.
26. Information in Table 2.3.3 states that the Fetch No. 1 Well is probably screened in the Beulah-Zap Coal Seam and further narrative on page 2.3.12 states that all of the Fetch sites are located up-gradient of the permit area and are not anticipated to be affected by mining. At the location of the Fetch No. 1 Well in the NE $\frac{1}{4}$  of the SW $\frac{1}{4}$  of Section 21, the potentiometric surface map for the Beulah-Zap Lignite in Exhibit 2.3.4 seems to indicate the well to be in a location that is positioned hydraulically downgradient of proposed mining activities in the S $\frac{1}{2}$  of Section 17 due to an area of high potential (recharge area) in the SW $\frac{1}{4}$  of Section 17 and extending into the N $\frac{1}{2}$  of Section 20 with continuing reduction in hydraulic gradient extending east/southeast across Section 21. Please review your information and update the application as needed. (BEB)
- The narrative for Section 2.3 has been updated to address your concerns by summarizing the wells in more detail. Your potentiometric concerns above are correct and have been addressed in the narrative.
27. In the discussion of the PVF No. 1 and No. 2 Wells on page 2.3.12, the last sentence of the first paragraph states that mining will not impact the use of Wells No. 1 and No.2. Earlier narrative indicates the wells will be removed. Please eliminate the last ten or so words from the paragraph and replace with different narrative because of the fact that removal of the wells is an impact that will be realized because of proposed mining activities. (BEB)
- The narrative for Section 2.3 has been updated to address your concerns of the PVF wells. It did seem as though the statement contradicted itself.
28. Please provide a definitive statement as required in the Probable Hydrologic Consequences narrative of Section 2.3 that any water supply diminished, interrupted or

quality-affected will be replaced with a water source of equal or better quantity and quality. NDAC 69-05.2-01-02(90). (BEB)

- A statement has been made per your recommendation consistent with NDAC 69-05.2-01-02(90) and NDCC 38-14.1-14 (2)(j).
29. In reference to original completeness item #13, please add to the Beulah-Zap Bed narrative in Section 2.3 by specifically naming the sandstone aquifer over the Beulah-Zap Bed as the *Beulah-Zap Sand*, because this specific hydrostratigraphic reference is used in Table 2.3.3, and perhaps within other narrative sections of the permit. (BEB)
- Per your recommendation, the specific reference to the *Beulah-Zap Sand* has been included within the Beulah-Zap Bed narrative.
30. In addition to the geological, elevation, and other informational narrative provided for spoils monitoring Well No. 2029 in the Groundwater Hydrology Section on page 2.3.10, please provide the location of monitoring Well No. 2029 that has replaced pre-mine Well No. 1373 in the narrative. (BEB)
- The location of monitoring well 2029 has been added to the narrative per your recommendation.
31. Please update the Groundwater Monitoring Sites Map (Exhibit 2.3.1) by depicting and labeling the locations of the 9 new groundwater monitoring wells and the spoils well that were installed in October, 2008 (Well No.'s 2020-2029). (BEB)
- Groundwater wells 2020 through 2029 are summarized on Exhibit 2.3.1, but the annotation text for the wells was difficult to read. Exhibit 2.3.1 has been updated to correct this condition.
32. Please revise the narrative in the Groundwater Hydrology Section on page 2.3.10 that discusses spoils Well No. 2029 to state that the well was screened in the spoil, as opposed to saying that it was screened in the overburden. (BEB)
- The reference to overburden for monitoring well 2029 has been changed to spoil per your recommendation.
33. As a matter of current professional practice in determination of information related to groundwater PHC predictive documentation and hydrologic protection performance standards (water level rebound and water quality data for the next lowest aquifer) most mines in North Dakota have been installing a nest or cluster of two post-mining reclamation wells on reclaimed lands – one well screened in the base of spoils and the other well screened in the next lowest significant aquifer below the base of spoils (in your case, the Spaer Bed). Please make a commitment to doing the same in the future by adding to the spoils narrative in the Groundwater Hydrology, Section 2.3, that this practice will be adopted by DWC for future post-mining monitoring well installations. (BEB)

- Per your recommendation, the commitment listed above has been added to the narrative on section 2.3. Also, a commitment of consultation with the PSC on such matters has been added. The consultation commitment has been added to address conditions in which an additional well may not provide useful comparative data (which would be agreed upon between DWC and the PSC). But, DWC agrees that a second well, in most cases, will provide useful comparative data and has updated the permit as such.

## Section 2.4 – Soils Inventory

34. The narrative above Table 2.4.1 on page 2 indicates that the “...sum of ownership acres may differ slightly from permit acres due to rounding.” The new total of acres in the permit (with the addition of this acreage) will be 2666.1 acres as indicated on the revision application form which is 84.5 acres more than the total listed in Table 2.4.1. This is not a slightly different number. Please correct this table to more fully account for the acres within the permit. (SAS)
  - Table 2.4.1 has been corrected.
35. Please indicate the approximate acreage of prime farmlands in the NE¼ of Section 22 that have been identified and will be treated as prime farmlands. This information should be included in the second paragraph on page 4 of Section 2.4. (SAS)
  - An acreage figure for the prime farmland has been added to the paragraph on page 4.
36. Exhibit 2.4.9 indicates that the NRCS prime soil was represented by a Flaxton 57B soil (Site No. 141). Flaxton is not considered a prime soil in Mercer County thus using this comparison would be erroneous. Why was the Arnegard Site No. 98 not used instead? Please explain. (SAS)
  - The objective of Exhibit 2.4.9 was to compare nonprime and prime soils as mapped by the NRCS. The mapping of prime farmlands in the cooperative soil survey, as opposed to the detailed soil survey in the permit, is used as the basis for our comparisons. Sample site 141 was used because it is within the area mapped by the NRCS as prime. Site No. 98 is within an Arnegard 44C map unit in the detailed soil survey and although Arnegard 44C is a map unit that qualifies as an additional farmland of statewide importance, it is not prime farmland.
37. Please label the township and range on the Composite Soil Survey Map, Exhibit 2.4.7. (WTG)
  - The township and range have been labeled on Exhibit 2.4.7.
38. Kenneth Thompson proposed an unofficial series, Flaxbar (page 16 of Exhibit 2.4.8), and map unit 70B - Flaxbar loamy sand, 3 to 6 percent slopes (page 12 of Exhibit 2.4.8), to describe soils formed in wind-blown loamy sand overlying bedrock. The map unit description states in part: “This unit differs from Krem in having a shale substratum rather than glacial till. Agronomically, they are the same.” After reviewing the series

and map unit descriptions, and the sample analysis, we have concluded that the productivity index for Krem lfs on Slope Group B (48) should be applied to the 70B map unit for revegetation success standards, rather than the Flaxton lfs as suggested. Please reword the italics on page 16 to state the following: "Since Flaxbar is not an official soil series, use the Krem lfs productivity index for revegetation success standards for map unit 70B." In addition, please remove the NRCS Flaxton official series description from pages 21 and 22. Finally, please correct the legend footnote on Exhibit 2.4.7 to indicate the change, and correct the 70B map unit on the legend to read "Flaxbar loamy sand". Only a small acreage of map unit 70B was identified in the permit area in the NW¼SE¼ of Section 20. Another area of 70B was also mapped in the NE¼ of Section 18, but that area is unlikely to be permitted. (WTG)

➤ The changes have been made as directed.

39. Please change the orientation of Exhibit 2.4.7 (Composite Soil Survey) so that it is properly oriented. It needs to be rotated 90 degrees counterclockwise. (DKM)

➤ The orientation of Exhibit 2.4.7 has been changed.

## **Section 2.5 – Wildlife Inventory and Plan**

40. Please check the acreage figures for the area being added to the permit as broken down by habitat type with Revision 22 as presented in Table 2.5.1. Total acreage added to the permit with Revision 22 is shown to be 890.3 acres and all other documentation submitted with the revision application reflects a total of 890.4 acres. Also, acreage for all habitat types listed with the addition of Revision 22 adds up to 1178.8 acres. Please revise or explain. (BEB & GAW)

➤ The acreages present in Table 2.5.1 have been revised and corrected.

41. The fourth sentence on page 1 of Section 2.5, Wildlife Inventory Plan, implies that the habitat types and acreages for Revision 19 are listed in a separate column in Table 2.5.1. Please review and clarify as necessary. Perhaps the acreage of each habitat type on the Revision 19 area should be summarized in narrative form in the paragraph to retain historical information. (GAW)

➤ The habitat types and acreages for Revision 22 are listed in a separate column, and the words Revision 19 has been changed to Revision 22.

42. Please identify the boundaries of the Wildlife Study Areas on Exhibit 2.5.1A, Classification of Habitat Types Map. The original study area was increased by 1580.5 acres in 2005. (GAW)

➤ The Wildlife Study areas have been identified and are shown on Exhibit 2.5.1A

43. Please eliminate or explain and identify the black and white north-south trending gridlines in Exhibits 2.5.1A and 2.5.4A. (BEB)

- The white north-south grid lines have been eliminated.

## Section 2.6 – Pre-Mining Vegetation Inventory

44. Please clarify if the range site species composition percentages listed in Exhibit 2.6.13 for the Revision 22 areas are from 2007 or 2008 or a cumulative value from both years. A sentence at the bottom of page 2.6-27 indicates the range condition was assessed in 2007 and 2008. Please update the tables in Exhibit 2.6-13 to clarify. (GAW)
  - A footnote has been added to page 6 of Exhibit 2.6.13, specifying the sampling periods.
45. Please update Exhibit 2.6.1, Vascular Plant Species List, to document which species were present on each land use in the Revision 22 addition area as required by NDAC 69-05.2-08-08(1)(b). (GAW)
  - While all land uses were surveyed in order to develop a comprehensive species list, a list was not developed for each land use. The listing approach in Exhibit 2.6.1 employed for this revision is consistent with the approach we have taken in both permit areas through the years. Please advise if you would like species listed by land use for future revision areas and we will gladly provide the information in the new format.
46. Exhibit 2.6.12a, Wetland Plant Species List, only identifies a half dozen species present at the wetland sampling point(s) but a complete species list for the wetlands are required. Please include a comprehensive species list for the wetland communities as required by NDAC 69-05.2-08-08(1)(b). Also, in the wetland narrative of Section 2.6 please discuss how the sampling points capture the variability of the vegetation within these drainageways that obviously consist of seeps, channels and pools. (GAW)
  - Exhibit 2.6.12a has been expanded to include an expanded species list for each zone. A sentence has been added to the paragraph on wetland 20-1 to clarify that the vegetation sampling points are intended to typify the wetland vegetation composition.
47. In the appropriate narratives for each land use, please mention the dates that plant species surveys were conducted to ensure all species present were realized. (GAW)
  - An umbrella statement applying to all uses has been added to the introduction on page 1. Surveys were conducted on many dates in 2007 and 2008, and were often conducted casually in conjunction with other objectives. While land uses were visited in each season, sometimes several times, specific dates were often not logged.
48. In Section 2.6, please include copies of the woodland sampling data, and include detailed woodland plant community assemblages (species composition) information for **each** of the tall shrub and mixed deciduous woodlands in the Revision 22 area. The woodland plant species assemblages can be listed as an insert in a map depicting the woodland communities. The information presented to date does not provide a detailed description of the woodland communities, or show the variability of the species composition of the

woodland communities as required by NDAC 69-05.2-08-08(1)(c)(4). It does not appear that any tall shrub communities were sampled to estimate species density. If any of these communities are going to be disturbed by mining, detailed characteristics of the communities is required. (GAW)

- Simple count data for each woody class at each sampling site – the only data available - was added to the narrative in response to the completeness deficiencies. Available species composition information for each woodland community has been added as Exhibit 2.6.16. Discussion on sampling results at a couple of tall shrub community locations has been added to the narrative of Section 2.6.
49. Pursuant to NDAC 69-05.2-08-08(1)(a)(4) please discuss if there are any low shrub communities within the native grassland areas and if so, why these communities were not considered woodland. If the low shrub communities are being classified as native grassland, discuss its relative percent composition of the grassland community and provide an estimate of its spatial distribution or depict the communities on the Pre-Mine Land Use Map. In addition, discuss the value of the low shrub communities for wildlife and how its value will be replaced. (GAW)
- The text of the General Observations section has been expanded to include discussion on the wolfberry communities inhabiting native grassland. Refer to Section 2.7 for discussion on replacing and/or improving habitat values.
50. Please update Exhibit 2.6.9, Pre-Mining Land Uses and Vegetation Map Units, to show the thin upland native grassland reference area. (GAW)
- The Thin Upland reference area is shown on Exhibit 2.6.9.
51. Exhibit 2.6.15 is labeled Historic Reference Area Data (Shelterbelt Data). This is very misleading as this exhibit has nothing to do with Historic Reference Area Data. Update the name of Exhibit 2.6.15 accordingly so that the information is presented clearly and concisely as required by NDAC 69-05.2-02(1). (GAW)
- The exhibit title has been corrected.
52. Please label the shelterbelts on Exhibit 2.6.9 according to the naming convention listed in Exhibit 2.6.15. (GAW)
- Shelterbelt labels have been revised.
53. A magenta colored polygon is depicted in the N½ of the NE¼ of Section 16 on the Pre-Mining Land Uses and Vegetation Map Units, Section 2.6.9. According to the map legend this would be a Developed Water Resource, but that appears to be an error. Please review and update as necessary. (GAW)
- The extraneous polygon has been removed.

54. Please update the Pre-Mining Land Uses and Vegetation Map Units, Exhibit 2.6.9, to show the location where the water samples were taken for the linear Wetlands 20-1 and 22-1, and the location where the line drawings were taken along representative segments of the linear wetlands. (GAW)

- The location of water sampling and line drawing locations are now displayed on the exhibit.

55. Please identify the Revision 16, Revision 19 and Revision 22 areas on Exhibit 2.6.9 since these areas are commonly referenced in the narratives in Section 2.6. (GAW)

- The Revision 16, 19, and 22 areas have been identified in Exhibit 2.6.9.

56. The trees near the Pleasant Valley Farm must be identified as either woodlands or shelterbelts; shelterbelts if the volunteer tree and shrub species are not native. DWC's response to item No. 23 of our completeness review letter (December 23, 2008) is not considered a valid argument for not classifying the trees and shrubs as woodland or shelterbelt. Please update Section 2.6 to meet the requirements of NDAC 69-05.2-08-08(1)(a)(6), and Sections 2.7 and 3.7 of the permit as necessary. (GAW)

- Some of the woodies around the Pleasant Valley farmstead have been planted in an arrangement and others are volunteer. Consequently, we have identified both woodland and a shelterbelt in this area and made the appropriate changes to Exhibits 2.6.9 and 2.6.11. The narratives of sections 2.6, 2.7, and 3.7 have also been modified accordingly.

57. Subsection D indicates 55 acres (gravel pit plus roads) of Industrial and Commercial but Exhibit 2.6.11 only lists 17.6 acres, yet the total acreage listed exceeds the new total for the permit. Please correct this anomaly. (SAS)

- Exhibit 2.6.11 lists 34.7 acres as Industrial and Commercial map units. The differential of 20 acres is a result of including county road corridor acres under adjoining land uses, instead of industrial and commercial, prior to this revision. The footnote to Exhibit 2.6.11 has been revised to clarify that map unit acres within road corridors were first listed as Industrial and commercial in this revision. Further clarification has also been provided in the narrative to explain that only some of the 53 acres of road corridor are listed as industrial and commercial in Exhibit 2.6.11.

58. The total land uses in Exhibit 2.6.11 (2667.3 acres) exceed the new total acreage in the permit (2666.1 acres) by 1.2 acres. Please indicate if this is due to rounding of numbers and if this is the case, then state that in the narrative. (SAS)

- Rounding error is the likely culprit (there's a 0.5-acre difference in this revision alone) and the footnote of Exhibit 2.6.11 has been amended to lay the blame at it's feet.

## **Section 2.7 – Land Use**

59. Please fix the hyperlinks to Exhibit 2.7.1 and Exhibit 2.7.2 within the narrative of Section 2.7, Land Use, and all others within this section that do not work properly. (GAW & WTG)

➤ The links have been fixed.

60. The second sentence of Section 2.7 states that the pre-mining land uses have been in place for a minimum of five years; but according to Section 2.6, the hayland in the northwest corner of Section 20 was converted from hayland to cropland in 2008. Please clarify. (GAW)

➤ The narrative has been revised to indicate that the statement applies unless otherwise noted.

61. Please include any landowner post-mine land use preference statements for the Revision 22 area that have been received by DWC but not included in the application. If changes are made to this section, then please also organize the preference statements chronologically or by revision area or in some manner that allows one to find the information in a logical fashion. Presently, the Revision 22 preference statements range from the first to the last page of the 25 pages in Section 2.7.2. (GAW)

➤ No additional landowner preference statements have been received by DWC. The landowner preference statements have been reorganized and grouped by the section number they fall into.

62. DWC's proposal to convert 50.2 acres of DWC-owned land from native grassland to hayland in Section 20 is not acceptable. The native grassland is important habitat for wildlife. In addition, the conservation shelterbelts must be planted on cropland or hayland area rather than on areas that should be returned to native grassland. Please revise the table on page 1 of Section 2.7 and Exhibit 2.7.1 accordingly. NDAC 69-05.2-09-17(1)(d). (GAW)

➤ As stipulated, plans have been changed so that native grassland acreage is not being converted to hayland. The shelterbelt planting has been moved to a hayland location. Section 2.7 narrative and Exhibit 2.7.1 have been modified accordingly.

63. On page 2.7.3, please discuss plans for replacing the spring seep area and developed water resource that will be mined through in the drainageway near the Pleasant Valley Farmstead. (GAW)

➤ The narrative on page 2.7.3 has been modified to address the two issues cited.

64. The pre-mine field windbreaks and the trees and shrubs near the Pleasant Valley Farmstead in Section 20 must be replaced and the shelterbelt revegetation standards must be applied. Please include language in the shelterbelt narrative on page 2.7.3 that discusses these replacement plans and show where an equivalent acreage of shelterbelts will be planted on the Post-Mine Land Use Map, Exhibit 2.7.1. (GAW)

- The narratives of Section 2.7 and Exhibit 2.7.1 have been modified to address the replacement of the Pleasant Valley farmstead woodies.

65. In Section 2.7, Land Use, please discuss the fish and wildlife enhancement measures that will be applied to each surface owner's property. Simply replacing the pre-mine land uses is not adequate compliance with NDAC 69-05.2-09-17(1)(d). (GAW)

- A discussion regarding fish and wildlife enhancement measures has been added to Section 2.7.

### **Section 2.9 – Alluvial Valley Floor Inventory**

66. Pursuant to NDAC 69-05.2-08-13 please provide an alluvial valley floor investigation of the area being added to the permit and adjacent areas. (BEB)

- The Coyote Creek alluvial valley floor study of the area being added to the permit was submitted to the PSC on May 22, 2009. The determination will be added to permit upon approval.

### **Section 2.10 – Cultural Resources Inventory & Protection Plan**

67. The Cultural Resources Inventory Summary Table on page 2.10.4 does not include Site 32ME2237 in Section 20, but does list Site 32ME223 in Section 20. A review of the cultural resource report does not indicate a Site 32ME223 in Section 20. It appears this should be Site 32ME2237. Please make the necessary corrections. It also appears that the significance determination correspondence regarding the sites within the area to be added to the permit (see November 17 and 20, 2008 letters in Exhibit 2.10.7)) also refer to Site 32ME223 which does not exist. It is recommended that the SHPO clarify that Site 32ME2237 has been deemed not significant and the appropriate documentation be included in Exhibit 2.10.7. If necessary, the appropriate letters in Exhibit 2.10.7 should be footnoted to indicate that Site 223 does not exist in the permit area and that it actually refers to Site 32ME2237. Regardless, documentation must be provided from the SHPO indicating the significance status of Site 32ME2237. (DKM)

- Site ME223 has been correctly changed to site 32ME2237 throughout the narrative of Section 2.10. Also, a revised letter from SHPO has been added to Exhibit 2.10.7 with the correct listing.

68. Exhibits 2.10.8 and 2.10.9 are marked "review draft report" indicating these reports are drafts rather than the final version of these reports. If these reports are in final version, please replace these exhibits with the final version. (DKM)

- Exhibits 2.10.8 and 2.10.9 have been replaced with the final versions.

### **Section 3.1 – General Mining Plan**

69. Please update the Facilities Area Map, Exhibit 3.1.6, so that the map is legible when printed. The scale values and residence owners are not legible even when zoomed to a

larger size. Please update the map using a paper size commensurate with the size of the permit area and labeling font. (GAW)

➤ The Facilities Area Map has been updated so it is legible.

70. Page 2 indicates that the lands included within the Extended Mine Plan, Exhibit 3.1.1, includes Sections 25 and 30, T143N, R87W. These sections are not shown on the map for future mining. Please correct. (SAS & WTG)

➤ Sections 25 and 30 have been removed from page 2 of the narrative for section 3.1.

71. Page 3.1.2 indicates that 240 acres of federal coal has been added to lease NDM 041765; however, Exhibit 1.4.2 on page 2 indicates that the 240 acres is pending and the lease shown on page 230 of 236 doesn't show any new areas other than those listed in an old copy of the lease in Permit KRSB-8802 on page 120 in Section 1.4 of that permit. Please explain. (SAS)

➤ The lease modification area comprising 240 acres is not yet approved by the BLM. The lease modification is expected to be approved in June 2009. At that point, the lease documentation will be added to the lease summary. A sentence to this effect has been added to the narrative for section 3.1, and Exhibit 1.4.2 will be updated upon approval.

72. Please place the section numbers on Exhibit 3.1.1 to make it easier to locate and identify the sections. In addition, the map should contain an appropriate contour interval and the estimated crop and recovery lines as required by NDAC 69-05.2-07-03. (SAS)

➤ The section numbers, Beulah-Zap geologic cropline, and Beulah-Zap mineable cropline have been added to Exhibit 3.1.1. Five foot topography contours are located on Exhibit 3.1.3 (when the topography contours were added to Exhibit 3.1.1, it was very difficult to isolate the extended mine plan information; in other words, the Exhibit was too busy).

### **Section 3.2 – Water Management Plan**

73. Please provide design plans for the emergency spillways of Ponds 95, 96, 97 and 99 to include cross-sectional views, velocities of the flow and erosion control measures which will be taken if necessary. Ponds 101 and 102 include most of this information; however, flow velocities are also needed for these ponds as well. NDAC 69-05.2-16-09. (MDB)

➤ The design plans have been updated to include cross-sectional views within each pond exhibit. Runoff velocity and erosion control measures are now discussed within each pond narrative in Section 3.2.

74. It appears that Pond 99 may meet the MSHA size requirements. Per 30 CFR 77.216 (MSHA Impoundments) if a structure impounds water, sediment, or slurry to an elevation of five feet or more above the upstream toe of the structure and has a storage volume of

20 acre feet or more, the design plans must be submitted to MSHA for approval. Please provide the MSHA approval of the design plans for this pond. (MDB)

- The pond 99 watershed has been re-assessed to only address the runoff affected by Revision 22. This has dramatically decreased the acres of runoff control needed. DWC feels that the incised area Pond 99 encompassed, through the completeness review process, would be difficult to construct. Therefore DWC has now elected to cut two sumps connected by four diversion ditches to control the runoff. The sumps are placed in areas where there is coal, but will not need to be mined until years later. Both of the sumps combined will easily be able to handle the runoff from the 10-year 24 hour and 25-year 6 hour storm events. Exhibit 3.2.35 has been changed to Pond 100 (a small incised dugout in the NE end of the Gold Pit area), and Exhibit 3.2.38 has been modified to include the diversion ditch designs and flow calculations with the two sump designs (Sump 99W & 99E) for the Pond 99 watershed. The narrative has also been updated to reflect these changes.

75. Table 3.2.36 – indicates that Pond 101 has a ten-year sediment storage of 1.308 acre-feet; however, the calculations indicate a sediment yield of 0.80 acre-feet. Please make the necessary corrections. (MDB)

- Table 3.2.36 has been updated to show the ten-year sediment storage of 1.308 acre-feet. This volume coincides with the permanent pool elevation of 1964.4.

76. Please include the final slopes of Diversions 95N, 98E, and 99W as they are not provided on the plan drawings. Also, please include the cross-sectional views, velocities of the final slope as well as any erosion control material which will be used. (MDB)

- The final slopes for the diversion ditches are now included on the profiles as well as on the flow calculations. Exhibit 3.2.38 includes Diversion Ditches 95N, 98E, 99W-A, 99W-B, 99E-A, 99E-B, as well as Sumps 99W & 99E. A cross-sectional view, as well as runoff velocities for the diversion ditches, has been included within Exhibit 3.2.38. The discussion has also been updated within the narrative.

77. Diversion 101S indicates an overall depth of 1.5 feet with a flow depth of 1.3 feet. NDAC 69-05.2-16-06(6)(b) states a minimum of 0.3 feet of freeboard is required. Please revise the plans to provide the necessary freeboard. (MDB)

- Diversion 101S has been updated to have an overall depth of 1.6 feet to abide by the NDAC 69-05.2-16-06(6)(b) freeboard requirement. The finished ground line was lowered by 0.1 ft on Exhibit 3.2.39.

78. Please delete the annual yield calculations for Pond 86 as it is no longer a permanent structure. (MDB)

- The annual yield calculations have been deleted from the narrative for Pond 86.

### **Section 3.3 – Blasting Plan**

79. Please indicate in the Listing of Revised Information for the blasting section that Exhibit 3.3.1 was updated. Currently, the listing incorrectly indicates that Exhibit 3.1.1 was updated to show the new permit boundary on the blasting map. (BEB)

- The listing of Revised Information in Narrative 1.1 has been updated to show that Exhibit 3.3.1 was updated.

80. Please update the Blasting Notice of Exhibit 3.3.2, as currently the blasting schedule indicates May 14, 2007 to be the notice deadline. (BEB)

- The blasting notice has been updated to indicate May 14, 2010 as the notice deadline.

### **Section 3.4 – Suitable Plant Growth Material Handling Plan**

81. For clarity, please reference and hyperlink Exhibit 2.4.7, the Composite Soil Survey Map, in the first sentence of subsection 6 (Prime Farmland) on the bottom of page 3.4.5 to show the prime farmland location. (WTG)

- A hyperlinked reference to Exhibit 2.4.7 has been added as requested.

82. Please review the calculations for estimated spring wheat production, and correct if necessary, for the comparison of prime and non-prime farmland on the top of page 3.4.6. Our calculations resulted in a comparison of 35 bushels per acre for the prime farmland versus 28 bushels per acre for non-prime farmland. (WTG)

- We have added language to the narrative to clarify the basis for the yield figures. A review of calculations did not yield any changes to yields.

83. Please correct the spelling for “spoil” in the first paragraph of page 3.4.7. (WTG)

- Narrative 3.4 has been updated with the correct spelling for “spoil”.

84. Page 3.4.7 states that SPGM respread depths shown on Exhibit 3.4.1 (Suitable Plant Growth Material Redistribution Depths) are based on the complete set of overburden analysis data found in Exhibit 2.1.3. NDAC 69-05.2-08-05(2) requires a minimum density of one test boring per 40 acres for overburden analysis, but only two test boring locations are shown in the NW¼ of Section 20 on Exhibit 3.4.1 (one boring per 80 acres). Exhibit 2.1.7 (Geologic Cross Section and Drill Hole Locations Map); however, shows that eight additional test borings (labeled 1 through 8-08) were completed in the N½ of Section 20 in 2008. Please plot the location of test borings 1-08 and 5-08 in the NW¼ of Section 20 on Exhibit 3.4.1, and provide the overburden analysis of the eight test borings in Exhibit 2.1.3. Please also add test borings 1-08 and 5-08 to Table 3.4.1, determine the projected respread depths for the boring locations, and revise the SPGM respread depths for the NW¼ of Section 20, if necessary. (WTG)

- Only two additional test holes are located in the NW¼ of Section 20, both in the east half near the north quarter line. The 40-acre zone of influence of the easternmost is entirely overlapped by the sites presently shown on Exhibit 3.4.1 and the other would

only add another 6 acres of coverage, without changing the proposed total respread depth. For these reasons and the more recent vintage of the holes currently used, we chose to idle the additional test holes. The test hole locations in the NE¼ of Section 19 and SW¼ of Section 17 provide coverage into the NW¼ of Section 20, reducing the area not represented to the neighborhood of 20-30 acres. Test borings 1-08 through 8-08 were not sampled to determine overburden quality. These sites should not have been listed on Exhibit 2.1.3 and have been removed.

85. DWC has proposed to not sample the regraded spoil in the NE¼ of Section 19 and the W½NW¼ of Section 20 because of the good quality of the overburden materials in these areas. The Reclamation Division will require graded spoil sampling of all final graded spoil areas before soil resspreading begins. Please make the necessary corrections. (WTG)

➤ The refused language has been removed.

86. Please specify the factor that will be used to account for compaction of SPGM. Although a compaction factor is discussed on pages 3.4.12-13, the factor is not clearly stated. (WTG)

➤ The compaction factors have been added to the text.

87. Please either remove the paragraph referencing NDAC 69-05.2-15-06 on page 3.4.13, or cite the entire section. As written, the paragraph conveys the impression the only rills and gullies deeper than 9 inches require stabilization. (WTG)

➤ The paragraph has been removed.

### **Section 3.5 – Backfilling and Grading**

88. Please extend cross section #2 of map 3.5.1b to the north to include the spoil laydown/valley fill area in order to represent the topography of this area. (MDB)

➤ Cross section #2 has been extended to the north to include the valley fill area.

### **Section 3.7 – Revegetation Plan**

89. Please update Section 3.7 to show shelterbelt replacement plans for the pre-mine field windbreaks and the shelterbelts located near the Pleasant Valley Farmstead that are going to be destroyed in Section 20. These field windbreaks and shelterbelts provide fish and wildlife habitat and their value must be replaced. (GAW)

➤ Shelterbelt planting plans have been revised in accordance with changes to Section 2.7

90. Please provide detailed reclamation plans for re-creating the wetlands that will be disturbed in the drainages in Sections 20 and 22 and discuss how seasonal or more

permanent wetlands will be created if the groundwater that supported the pre-mine wetland is altered by mining. (GAW)

- The text has been expanded to address the groundwater support for reclaimed wetlands. Please note that mining plans for Section 22 have changed, resulting in only partial disturbance of the wetlands, including the riparian wetland, in the NW¼ of Section 22.

91. Please update the woodland narrative on page 3.7.12 to address replacing the pre-mine woodlands that will be disturbed by mining activities. (GAW)

- Page 3.7.12 has been updated with information for this revision.

92. Please consider including a few desirable forbs in the native grassland seed mixture or discuss how native grassland soils will be respread on areas to be reclaimed to native grassland. NDAC 69-05.2-13-08(6) requires the use of the best technology currently available to minimize impacts to wildlife and the USFWS recommends that forbs be included in native grassland seed mixtures. (GAW)

- Although we have seeded mixes that included native forbs on native grassland reclamation, we don't believe we are in a position to specify the types and rates of forbs in the mix at this point. We will be evaluating the success of seedings that contained forbs and expect that forb species and rates will be dynamic for some time as we fine tune the mix to achieve the desired results. We have, however, modified the text to indicate that forbs will be a part of native grassland mixes in the future. Planting native forbs will likely reduce native grass contributions on reclaimed native grassland, thereby affecting the ability to attain current diversity and seasonality standards. Guidelines for these parameters may need to take these impacts into consideration.

93. The Straw, channeled soil in Exhibit 3.7.2 is currently listed as NR (not rated) for cropland productivity. For non-rated soils a PI value of 20 should be assigned as denoted in the revegetation guidelines manual on page II-C-7. Please correct this exhibit accordingly. (SAS)

- The exhibit has been corrected.

94. Two errors were discovered in Exhibit 3.7.3. The Zahl soil (38E) should have an estimated yield of 8.9 bu/ac (37 X 0.24) and the Cabba soil (81E) should have an estimated yield of 5.9 bu/ac (37 X 0.16). This will cause some minor changes in the weighted yield column and the estimated yields. Please adjust the table accordingly. (SAS)

- The estimated yield for the Zahl 38E map unit has been corrected. The estimated yield for the Cabba 81E map unit has not been changed since this unit lies within cropland surveyed by Ken Thompson and was assigned a slope range of 15-35%. Thus, the midpoint for the E and F slope group PI's was used in calculations. An explanation for the rationale of using the midpoint has been added to the table.

95. Please include a prime farmland reclamation plan in accordance with NDAC 69-05.2-26-04 and 69-05.2-26-05. Although the permit states on page 3.4.6 that soil removal within the prime farmland units is not planned, the Extended Mine Plan Map indicates that the prime farmland area will be disturbed between the years of 2015-2017 and therefore, any prime farmland disturbed by mining activities would be subject to the special prime farmland handling provisions. (SAS & WTG)
- Language has been added to the Section 3.7 narrative with respect to the evaluation of revegetation success. Most of the reclamation plan has to do with soil handling and can be found in the narrative of Section 3.4 and on Exhibit 3.4.1.

### **Section 3.8 – Time Schedules**

96. Please eliminate or explain the black and white north-south trending gridlines in the Special Variance Zones Map of Exhibit 3.8.2. (BEB)
- The North-South gridlines have been eliminated.
97. Please update the language in the second paragraph on page 3.8.3 to reflect the current status of Pond 86 and replacement well for the State owned land. (SAS)
- Language to the narrative of Section 3.8 has been added which details Pond 86 reclamation and the replacement well.
98. It appears that a variance from the contemporaneous reclamation schedule will be necessary along the north edge of the NW¼ of Section 22 and S½ of Section 15 where the diagonal pits will tie into the north/south pits. If a variance is not requested for this area, then plans for the disposal of initial pit spoil must be included as required by NDAC 69-05.2-09-14. Please review and update as necessary. (GAW)
- DWC has analyzed these pits in more detail after a thorough review of the new drill holes, and has changed the mine plan in this area based on those results. The pits will essentially continue moving southward, with no North-South pits. Thus, no variance will be requested for this area. However, a new variance zone will be requested for the area south of the existing Red Pits because of this change. Exhibit 3.1.1 (Extended Mine Plan), Exhibit 3.5.1(a) ( Topographic Cross-Section Locations), Exhibit 3.5.2(a) (Topographic Cross-Sections, Red-Gold), Exhibit 3.5.3 (Post Mining Topography), Exhibit 3.8.2 (Special Variance Areas), Exhibit 3.5.4(b) (Area Slope Map, Post-Mining Slopes), and Exhibit 3.5.4(a) (Area Slope Map, Pre-Mining Slopes) have been updated to reflect changes in the mine plan. These changes will not impact the Reclamation Cost Estimate and Performance Bond. The new mine plan was evaluated year by year to determine the worst-case bonding period, and the existing pits within Section 3.9 continue to be the worst-case volumes (the pits locations in these areas did not change from the original mine plan).
99. Please provide an estimated reclamation schedule for special variance Zone No. 3 and any new variance areas that are being requested. (DKM)

- Per your request, a reclamation schedule has been added to the narrative of Section 3.8 for special variance Zone No. 3.

100. Exhibit 3.8.2, Special Variance Zones, does not include all of the permit area. Although no variances are currently requested in the area not included on the exhibit, variances may be necessary in this area in the future. Please include the entire permit area on this exhibit. (DKM)

- Per your request, Exhibit 3.8.2 has been expanded to include the entire permit area.

### **Section 3.9 – Reclamation Cost Estimate and Performance Bond**

101. On Plate 3.9.1 cross section B shows a spoil peak of 27,000 square feet. When compared to the area of adjacent spoil peaks, this area measurement appears to be in error. Please correct as necessary. (MDB)

- The spoil peak should have read 2,700 square feet. Exhibit 3.9.1 has been updated with the correct area.

102. Please review and update the net production used for dozer pushes, since the production rate appears higher than what we have calculated. For instance, gross production of a D11 with a universal blade for a 200 foot push is approximately 1500 LCY/hr. With an efficiency factor of 0.71, the dozer is capable of pushing 1080 LCY/hr. Your calculations show a production rate of 1520 CY/hr. in this instance. Please review and update accordingly. (MDB)

- After further review, the dozer production rates have been adjusted as follows:  
200 ft push original = 1,520 LCY/hr                      200 ft push new = 1,095 LCY/hr

103. A subsoil respread depth of 2.15 feet was used throughout Table 3.9.5; however, Plate 3.4.1 indicates total respread depths of 2, 3, and 4 feet. Please update as necessary. (MDB)

- After a phone discussion with Mike Berg on May 18, 2009, it was agreed the numbers, as submitted, are okay. For clarification, DWC simply used a permit-wide average for subsoil depth. Thus, the total SPGM depths average 3.15 feet (1 ft topsoil, 2.15 feet subsoil).

104. Page 3.9.10 states that except for ponds where the embankment also serves as a subsoil stockpile, the embankment will be dozed into the pool area. This statement indicates the pond embankments will be treated as spoil material, except for the embankments which are noted as being constructed out of subsoil. Plate 3.9.2 does not indicate that any of the embankments are constructed out of subsoil; however, no subsoil respread volumes are included for ponds on Table 3.9.5, only topsoil is included for these areas. Please include the volumes and hours required to respread the ponds with subsoil. (MDB)

- None of the embankments are constructed out of subsoil; thus, per your recommendation, subsoil volumes and (consequently) hours have been added to Table 3.9.5 for all of the embankments.

105. Shelterbelts in Section 20 will be removed in support of mining; however, no costs are included in the bond amount to replace them. Please update bond costs accordingly to include replacement costs for trees that are to be replaced as part of the reclamation plan. (MDB)

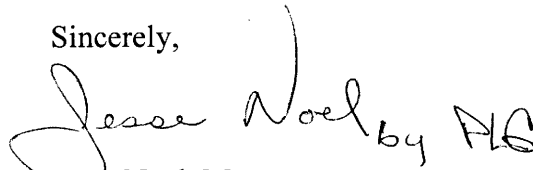
- Per your recommendation, shelterbelts were added to Table 3.9.10. Five shelterbelts of 2,500 feet in length each to be located in Section 20 (12,500 feet total) were included in the total. Because the cost of the shelterbelts is designated per 100 ft, the total units on Table 3.9.10 equal 125.0 (12,500 feet divided by 100).

106. Values from the January 2009 update of the variable cost of Policy Memo 16 can be used if Dakota Westmoreland so chooses. (MDB)

- Costs from the January 2009 update were used in the analysis; thus, equipment costs have changed within the tables and narrative of Section 3.9 to match the updates.

If you have any questions, please contact this office.

Sincerely,



Jesse Noel, Manager  
Engineering and Environmental