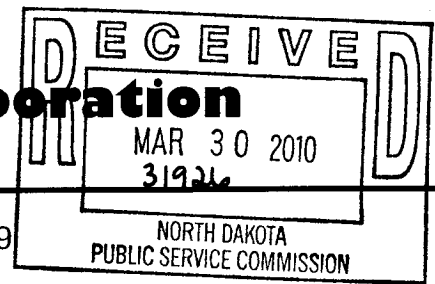


# Dakota Westmoreland Corporation



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

FROM DIRECTOR - RECLAMATION DIV.

March 29, 2010 Date: \_\_\_\_\_  
Action: \_\_\_\_\_  
Info. Only: \_\_\_\_\_  
Info & File: \_\_\_\_\_

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. 25, KRSB-8802  
Technical Deficiency #2 Responses

The following information is submitted in response to the technical questions dated September 16, 2009. Individual comments are set forth below followed by Dakota Westmoreland's responses and a list of revised information. Four copy sets are enclosed.

## General

- 1) Please update the Table of Contents (see item no. 9) of the permit to accurately reflect the changes occurring with this revision. Also, prior to the approval of the revision, a set of comprehensive filing instructions will need to be provided. With the subsequent submittals, the instructions have been provided for filing the revised information into the revision but now a comprehensive list of filing instruction for filing the revision into the permit will need to be provided prior to revision approval. Also, we noticed that the footer on some of the pages submitted on August 4<sup>th</sup> do not show they are being updated on that date as part of Revision 25. Please review and update the footers as appropriate. (GAW)
  - The Table of Contents has been updated to include Revision 25 changes. The page numbers have been removed from the table of contents as everything is listed sequentially as it appears in the permit. Footers have been corrected.

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

- 2) Follow up deficiency #6: While the changes in post-mine topography and watersheds may be negligible in relation to the entire Brush Creek and Otter Creek watersheds, the downstream landowners within the affected watersheds may be impacted, e.g., field flooding or lack of water for stock dams. Please update the surface water PHC to include calculations comparing the pre-mine runoff volume to the post-mine runoff volume for the watersheds

which have been affected by mining to make the necessary demonstration that the downstream water users will not be impacted. (MDB)

- The PHC currently provides information on water supply and quality for watersheds supplying Otter Creek and the pond 52 watershed for Brush Creek. Changes to the postmining topography significantly modify the size of some watersheds in the current disturbed area that drains into Brush Creek. However, we believe these changes will not significantly impact interests downstream. The watershed supplying ponds 68 and 71 will decrease in size, thus peak flows will be decreased after reclamation. Sustainance of the small dugout located downstream in this intermittent drainageway will be supported by groundwater flows emanating below the pond sites. The watershed for pond 70 will increase substantially in areal coverage; however, it appears that stream channels down to Brush Creek are adequately incised to handle increased flows. No intensive agricultural development exists along the secondary tributary where pond 70 is located or the primary tributary it supplies. Although no impoundments exist downstream to the confluence with Brush Creek, increased runoff will serve to enhance whatever streambed water supply is available to the cattle grazing lands surrounding the tributaries. Impacts along Brush Creek and downstream are deemed negligible because the reclaimed watersheds constitute only a fraction of a percent of the 33-square mile Brush Creek watershed. Please refer to the response for deficiency #7 for complete information regarding Pond 70. Pre-mine versus post-mine watershed comparisons are provided in Table 2.2.1 added to narrative 2.2.

### **Section 2.7 – Land Use**

- 3) Original Item No. 12: DWC is proposing to change the post-mine land use of lands disturbed prior to 1969 from hayland and fish and wildlife habitat grassland to cropland in the S½ of Section 12. In addition, the post-mining land use of a portion of the area in the SE¼ of Section 12 is being changed from hayland to cropland. These proposed changes to the narrative on page 2.7.2 are not acceptable. The first sentence that states that “If a landowner or renter has successfully established a post-mining land use on an area, even though there are resource limitations within the area, the post-mining land use may be changed to reflect actual land use practices” is in conflict with rules and does not address the original item. As previously requested, please update the permit with information showing that this land is suitable as cropland, i.e. slopes and topsoil and subsoil respread thicknesses and quality. This can be supplemented with historical yields on the reclaimed tracts, and include updated landowner preference statements, if necessary. The Commission does not have to approve land use changes on areas not disturbed by mining and pre-law mined areas that were not re-affected by post 1969 mining activities, as these areas are considered undisturbed areas for the purposes of our regulations and no revegetation success standards apply to these areas. Please revise the permit to clarify this issue and update to address the requirements listed in NDAC 69-05.2-23-03, if necessary. (GAW)
- We have replaced most of the previously amended language with new language while retaining reference to the recent cropping history of the reclaimed land. The newly revised language refers to results of a composite soil sample gathered from the portion of

the area disturbed under the 1969 and 1971 North Dakota mining laws. Areas disturbed under the 1973 law have been respread with topsoil and therefore not sampled. While we are unable to establish the soil respreading history in this area, it appears that up to approximately 8 inches of topsoil quality material resides on the surface in the areas mined under the 1971 and 1973 laws, based on the lab report and limited field observations. Results from analysis of the slopes within the currently permitted areas mined under 1969 and later laws have also been addressed. Most of the area proposed for land use change was disturbed prior to January 1, 1970, and the remainder prior to onset of the quantitative revegetation standards under the 1975 law. No change to the landowner preference statement is necessary.

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

- 4) Follow-up to Item No 15: Exhibit 3.2.4, Proposed Constructed Wetland, shows the elevation of the perimeter of the wetland basin to be 2047 feet in elevation but the elevation of the area outside of the perimeter of the wetland is 2045 feet in elevation (i.e., the elevation of the wetland basin is higher than the surrounding area). It is not clear how runoff will enter this wetland with this design criteria. The design information on page 3.2.62 indicates that this wetland will only be 1.6 feet deep with a 2044 foot elevation capacity. In addition, it appears the area adjacent the wetland is too flat to ensure runoff will enter into the wetland. Please revise or refine (1 ft contour interval) the topographic contours to show that runoff from the watershed will be directed to the wetland basin. (GAW/MDB)
  - The proposed constructed wetland in the SE¼ of Section 19 has been moved slightly, while still in the SE¼, its perimeter elevation is now at 2046 feet. With the current proposed post-mining topography, contour slopes have been increased to ensure adequate runoff into the wetland. Exhibit 3.2.4 and page 3.2.63 have both been updated with the changes for proposed constructed wetlands in the Sections 19 and 24.
- 5) Follow-up to Item No. 16: Although post-mine annual runoff calculations have been included on page 3.2.62, DWC did not include the pre-mine runoff calculations. This information is needed to determine if the runoff volume/watershed size is being changed by more than 10 percent. Please address these issues. (GAW)
  - Every effort was made to maximize the drainage area. Even though the acreage was reduced by more than 10 percent, this wetland has been functioning as intended for the last several years. The pre-mine runoff calculations has been added to page 3.2.63.
- 6) Follow-up to Items No. 16 and 18: Pages 3.2.49, 3.2.50 and 3.2.62 were updated with the August 4<sup>th</sup> response; however, the information for Ponds 70 and 71 and the Section 19 wetland was previously on pages 3.2.48, 3.2.49 and 3.61 of this revision, respectively. Please review and update to correct the page numbers for Ponds 70 and 71 and the wetland, and/or include updates to the preceding pages and document all changes occurring with this revision as required. Also, wording at the bottom of the previously mentioned updated pages incorrectly indicates the pages were revised with Revision No. 24 rather than 25 and the date

listed is not consistent with the balance of the section. Please review and correct as necessary. (GAW)

- The footer's have been changed to reflect Revision 25. The entire narrative 3.2 is being submitted with the Revision 25 changes highlighted. This will correct the page numbering problems.
- 7) Follow up to Item No. 18: Once the area is completely reclaimed, a CN value of 66 and the size of the pond may be adequate; however, a majority of this watershed has been disturbed and will remain disturbed until spoil grading, soil respread and revegetation is completed. In addition, the watershed size increased by 180%. Please provide calculations showing the sediment pond will adequately meet the requirements of NDAC 69-05.2-16-09. (MDB)
- Pond 70 will be able to handle the 30.2 acre-feet of runoff when the area is fully reclaimed. In the meantime, a proposed wetland along with a sump in the south half of section 19 will control the runoff from the reclamation area. The sump will provide 80 acre-feet of capacity.

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

- 8) Follow-up to Original Item No. 19: Many of the items requested in original deficiency item no. 19 were not adequately addressed. In addition, concerns were raised during a meeting with Dennis Neuberger and DWC on August 7, 2009 and outlined in our August 21, 2009 letter to you need to be addressed. Please address the following items. (GAW/WTG/MDB)
- a) Existing Exhibit 3.5.3, Post-Mining Topography, is being replaced with a version that only shows a portion of the permitted area (final Charlie and Orange pit areas). Please provide an updated Post-Mining Topography Map of the entire permit area. It is certainly acceptable (and highly recommended) to provide a more detailed post-Mine Topographic Map of final pit area; however, that should be a separate exhibit (e.g., Exhibit 3.5.3a and labeled as the final pit area).
    - Exhibit 3.5.3 has been expanded to two exhibits: Exhibit 3.5.3, Post Mine Topography and Exhibit 3.5.3a, Post Mine Topography – Final Pit Area.
  - b) Please depict the entire topographic disturbance boundary (including all law periods and bond released areas) on Exhibit 3.5.3 (Post-Mining Topography Map).
    - Exhibit 3.5.3 has been updated to include the entire topographic disturbance boundary.
  - c) Please update Exhibits 3.5.1, 3.5.3, 3.5.4, and 3.5.4a to show the pre- and post-mining topography of the entire permit area, including the pre-law and early law disturbance areas in Sections 7, 11, 12 and 18. This information was requested in our August 21, 2009 letter to DWC and is also needed to justify the post-mine land use change that is proposed in Section 12.

- In a telephone conversation between DWC and the PSC in early February, it was stated that we would supply as much information as we could find. DWC is currently showing as much of the pre-mine topo as we have. DWC does not have pre-mine topo for parts of sections 12, 7, and 11; therefore no changes were made to exhibit 3.5.4.a.
  - d) In light of our August 21, 2009 letter to DWC, please review and revise if necessary, the post-mine topography of the early and pre-law mine areas. Topographic highs (hills or knobs) remain in areas that had overburden or SPGM stockpiles on them in the past which leads us to question if all of the stockpiled material has been removed. Based on the current topography, it appears as if some of the stockpiled material may remain and if so, it must be removed. Pre and old law areas that were used to support present law mining will need to be reshaped to the pre-mine topography or to the topography of the area prior to post-1973 law re-disturbance.
  - In 2009 the PSC tested locations of old stockpiles in Sections 7 and 12, T. 143N. R. 87W. Small amounts of SPGM were noted in certain areas of the test site. When our earthmoving equipment is removing a stockpile, they usually quit at a color change. Some SPGM may be left in-place to avoid going too deep and contaminating a respread tract with spoil material. DWC will review future stockpile locations during the removal of a stockpile to verify that excess amounts are not being left behind. A complete response to the August 21, 2009 letter was submitted to the PSC on January 13, 2010.
- 9) The Post-Mining Topography Cross Sections Map is identified as Exhibit 3.5.3; however, the permit table of contents indicates Exhibit 3.5.3 is the Post-Mining Topography Map. Please identify the Post-Mining Topography Cross Sections Map as something other than Exhibit 3.5.3 and update the Table of Contents accordingly. (GAW/MDB)
- Exhibit 3.5.3, is the Post Mine Topography (please refer to response for 8a.). Exhibit 3.5.1 has been updated to include the cross-sections and pre-mine topography. The Table of Contents has been corrected.
- 10) Based on Administrative Law Judge Hoberg's July 22<sup>nd</sup> order regarding the informal conference on Revision 25, additional changes to the proposed post-mining topography in the W<sup>1</sup>/<sub>2</sub> of Section 19 need to be made based on the concerns expressed by Mr. Herman and Reclamation Division staff during the July 16<sup>th</sup> conference. Conclusions of Law Item No. 5 found that DWC has not yet met the requirements for approval of Revision 25 and, that "... if little or nothing can still be done to change DWC's proposed final pit reclamation plans with regard to the two areas of concern in this Informal Conference, then the Commission should require DWC to construct a better defined drainage channel to relieve the possibility of a ponding effect occurring in W<sup>1</sup>/<sub>2</sub>, Sec 19." The order goes on to state that this drainage requirement may be imposed prior to approval of Revision 25 or after approval is given, but before the final bond release. Rather than adding a condition to this effect to the approval of Revision 25, the Reclamation Division prefers this matter be addressed prior to revision approval. To ensure better drainage in the large flat area in the W<sup>1</sup>/<sub>2</sub> of Section 19, we believe the gradient of the drainage channel and adjacent areas need to be **at least one percent**. In order to do so, consideration should be given to lowering the drainageway in the

area of Pond 70. Also, spoil may need to be taken from areas where soil stockpiles are located north of the final pit to move contour line 2045 (as proposed on the 6-23-09 version of Exhibit 3.5.3) further southwest and create a more concave slope as you approach the final pit area from the spoil side. (JRD & MDB)

- The slopes have been increased for a large portion of Section 19, shown on Exhibit 3.5.3. Also, the drainage channel is better defined as requested. The cross-sections show the proposed drainage channel. DWC has included “new” disturbance areas in Section 19, as discussed with Mike Berg. This plan proposes to start grading operations at the bottom of the county road ditch. This would create additional “fill material”. Upon approval of this plan, DWC will petition Oliver County for a waiver on the set-back requirement for mining activity.

DWC also plans additional “new” disturbance in Section 24. This will help smooth the transition from original ground to reclaimed mine lands. Several abrupt mine disturbance corners will be removed and the additional yardages will be incorporated into this plan. This includes reducing the final highwall slopes as shown on Exhibit 3.5.3. The volume of additional fill located under the stockpiles, north of the final highwall, was not considered for additional yardages. DWC feels the existing final topography is already dropping; therefore any additional yardages would be negligible.

- 11) We also have concerns that there may be insufficient material to achieve the proposed post-mine topography. We will continue to work with DWC to determine if the proposed topography is achievable. Once an acceptable post-mining topography for the final pit area is developed, Exhibit 3.5.5 (Slope Analysis of Post-Mining Topography) will require updating as well as the mass balance data and addressing the drainage concerns. (MDB)

- A balance sheet is included on Exhibit 3.5.3a. A slight surplus of material is indicated. Mapping will continue to be conducted annually. Progress can be reported and adjustments made.

### **Section 3.4.1 – Suitable Plant Growth Material Handling Plan**

- 12) Based on our August 21, 2009 letter to DWC, please update (if necessary) Exhibit 3.4.1 to accurately reflect the remaining soil respread obligations in Sections 7 and 12. For example, it appears that subsoil respread will be required for the remaining post-1975 liability area in the S½ of Section 7 but this area is depicted as requiring topsoil only. (GAW)

- We have reviewed Exhibit 3.4.1 with respect to the depiction of topsoil only or topsoil and subsoil respreading obligations as guided by the law liability areas for pre-law, 1969 and 1971 laws, and 1973 law. These areas were recently determined for the 2009 annual map. A review of part of the permit area was also necessitated by issues that arose during review of the Section 7 final grade approval request. Our analysis has resulted in very little change to the boundaries for areas subject to topsoil and subsoil respreading (post-'75 law) and only minor changes to areas subject to just topsoil respreading. The appropriate changes have been made to Exhibit 3.4.1.

### Section 3.6 – Revegetation Plan

13) Follow up to original deficiency #22: While the new exhibit now shows the location of the Heth control area, it needs to be pointed out that this control area **has not been reviewed or approved** for use as such by the Reclamation Division. This discussion in the current permit was changed in Revision 22 and no discussion of the Heth control area was made at that time. In addition, there is no mention in the Revision 25 filing instructions indicating that this is a new control area and the information in the text is not highlighted to indicate new language. Unless it can be arranged for this control area to be verified in the field and approved prior to the approval of this revision, this language must be removed from the permit. (SAS)

- Your letter of December 15, 2009 stated that you would allow the Heth control area information to remain in the permit if it looked like the revision would not be approved prior to the field season. It appears that this revision will not be approved prior to the onset of the field season and consequently the control area language is being retained. Sorry about the lack of highlighting of our proposed language; staff was directed that highlighting was not necessary for the initial submittal and only changes made in response to the initial technical review were highlighted for the most recent submittal. Changes to language that existed prior to this revision are now highlighted.

### Section 3.7 – Time Schedules

14) Follow up to original deficiency #23: The proposed time schedule for reclaiming the final pit does not comply with the 3-year contemporaneous reclamation requirements in NDCC 38-14.1-24(14). As currently proposed, DWC wants 5 additional years to complete reclamation work through the initial seeding (a total of 6 years to backfill and grade the final Orange and Charlie Pits following coal removal and another 2 years to complete SPGM respread). The discussions on pages 3.7.1 and 3.7.6-8 do not contain sufficient justification for the timeline proposed in Table 3.7.1. Therefore, the Reclamation Division does not intend to recommend Commission approval of a variance for the final pit areas to delay final reclamation for that amount of time. Since much of the initial grading work will most likely be done with dozers, it seems likely that more than 1.2 million cubic yards of backfilling can be done per year and more than one shift per day should be dedicated to carrying out this large reclamation project. With appropriate justification, the Reclamation Division will consider recommending that the Commission allow up to 3 years for completion of backfilling and grading and another 2 years for completion of SPGM respread and seeding. (JRD/SAS/MDB)

- As stated, a large part of this project will be completed with dozers. During the winter months, all earthmoving activities require ripping. All of the draglines, truck-shovel, and scrapers require ripping before any yardages can be moved. This requires our dozers to be in the vicinity of the earthmoving activities. During the summer and fall months, DWC plans on placing several dozers on this reclamation project, as requested by the Reclamation Division. Our estimate is a yearly average. When the equipment is working on this project, it will be 20+ hours/day – 2 to 3 dozers – 5 to 7 days/week. We have

maintained a labor staff similar to our staffing requirements prior to moving our mining activities to Permit-8603. Even though the stripping ratio is substantially better since the move, DWC has maintained this staffing level because of this reclamation project. We need to keep our active mine areas current. DWC respectfully requests 4 years for leveling and 2 years for respreading topsoil and subsoil. The modifications to the final topography have increased the leveling volumes to around 9 million cubic yards. This equates to 2.25 million cubic yards/year for leveling.

### **Section 3.8 – Reclamation Cost Estimate**

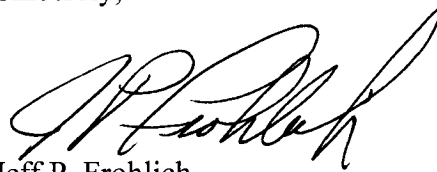
- 15) Please update page 3.8.1 to state the July 2009 variable costs were used determine worst cast cost estimates, not the July 2008 variable costs as currently stated. (MDB)
  - Page 3.8.1 has been updated as recommended.
- 16) Please update page 3.8.2 to state that the worst case will occur in late 2009 with Pit #57 instead of #55. The delayed reclamation area should also be mentioned since there will be more than 4 spoil ridges in this area. (MDB)
  - Page 3.8.2 has been updated to show that the worst case will occur in late 2009 as recommended. The delayed reclamation area is mentioned as well.
- 17) Table 3.8.1 provides the average end area calculations for the worst case pit; however, the values do not correspond with those provided on Exhibit 3.8.2 (Worst Case Bonding X-Sections). Please explain or make the necessary corrections. (MDB)
  - Table 3.8.1 and Exhibit 3.8.2 have been updated to match each other.
- 18) Table 3.8.5 indicates only two subsoil stockpiles which require respread of topsoil; however, Exhibit 3.8.1 clearly shows additional subsoil stockpiles which will also require topsoil respread. In addition, the ponds, haul roads, and substation all show topsoil being respread but no volumes of subsoil. As appropriate, please account for the subsoil respread as necessary. Please update accordingly. (MDB)
- 19) Costs for reclaiming Pond 55 were removed from Table 3.8.6 instead of Pond 52 as indicated by the response to original item 17. Please correct. (JRD)
  - Table 3.8.6 has been updated to remove costs for reclaiming pond 52 instead of pond 55.
- 20) Exhibit 3.8.1 does not correctly depict the area which requires SPGM respread in the final pit area. The area located north of the pit also needs to be included as part of the area requiring SPGM respread. Also please include all areas which will be requiring SPGM respread such as ponds, drainages, haul roads, and stockpiles. These areas should correspond with the information provided in Table 3.8.5. Also please include section lines and numbers and update the permit boundary to include the Revision 24 area. (MDB)

- Exhibit 3.8.1 has been updated to show all areas requiring SPGM respread. Section lines have also been added to Exhibit 3.8.1.
- 21) There are two maps included in the revision that are labeled Exhibit 3.8.2, but are different maps. Please label these maps so they can be distinguished from each other and appropriately filed into the existing permit. (MDB)
- Since cross-section lines have been added to Exhibits 3.8.1 and 3.8.2; the plan view has been removed and been replaced with Exhibits 3.8.2a and 3.8.2b. Exhibits 3.8.2a and 3.8.2b have the cross-sections from exhibit 3.8.1 displayed on them.

Affidavits from the Center Republican (Oliver County), Hazen Star (Mercer County), and the Bismarck Tribune are enclosed.

As your staff reviews this latest submittal, I would appreciate the opportunity to discuss any further issues the PSC may have concerning this revision.

Sincerely,



Jeff P. Frohlich  
Manager,  
Engineering and Environmental

plg/encl.