



Public Service Commission

State of North Dakota

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September 16, 2009

Mr. Jeff P. Frohlich
Manager, Engineering & Environment
Dakota Westmoreland Corporation
Beulah Mine
P.O. Box 39
Beulah, ND 58523-0039

Dear Mr. Frohlich:

The Reclamation Division has reviewed DWC's August 4, 2009 response to our technical review letter dated May 12, 2009 regarding Revision No. 25 to Surface Coal Mining Permit KR5B-8802. The following items must be satisfactorily addressed prior to recommending Commission approval of this revision:

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 4th do not show they are being updated on that date as part of Revision 25. Please review and update the footers as appropriate. (GAW)

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)

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)

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)
- 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)
- 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 4th 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)

- 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)

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).
 - 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).
 - 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.
 - 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.
- 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)
- 10) Based on Administrative Law Judge Hoberg's July 22nd order regarding the informal conference on Revision 25, additional changes to the proposed post-mining topography in the W^{1/2} of Section 19 need to be made based on the concerns expressed by Mr. Herman and

Reclamation Division staff during the July 16th 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 W½, 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 W½ 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)

- 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)

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)

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)

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)

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)
- 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)
- 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)
- 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)
- 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)
- 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)

Mr. Jeff Frohlich
September 16, 2009
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Please be reminded that affidavits showing proof of publication of the newspaper notices for this revision must be sent to the Reclamation Division.

If you have any questions, please contact this office.

Sincerely,

A handwritten signature in black ink, appearing to read "James R. Deutsch". The signature is fluid and cursive, with a large initial "J" and "D".

James R. Deutsch
Director
Reclamation Division

cc: Oliver County Auditor
Mercer County Auditor

m/Beulah/8802/Revisions_Renewals/No. 25/tech2_9-16-09