



Public Service Commission

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December 8, 2010

Jay M. Volk, Ph. D
Environmental Supervisor
BNI Coal, Ltd.
2360 35th Ave. SW
Center, ND 58530-9499

Dear Dr. Volk:

The Reclamation Division has reviewed BNI's October 28, 2010 responses to our September 1, 2010 technical deficiency letter on the application for Revision 30 to Surface Coal Mining Permit BNCR-9702 for the Center Mine. The following items must be satisfactorily addressed before we recommend Commission approval of this revision.

Table of Contents

1. Follow-up to Original Item No. 48: The Table of Contents identifies Plate 4.1-1 as the Limited Mine Plan Map, but Plate 4.1-1 has been changed to the Pit Layout and Facilities Map with this revision. Please correct this discrepancy. (GAW)

Section 1.7 Business Entity Information

2. Several changes have been made to the controlling officers of BNI and Allete in Section 1.7.2. One of the name changes is for Al Hodnik who appears to be the same individual as Alan R. Hodnik and Alan Hodnick listed elsewhere in the section. Please update pages 1-3 through 1-10 to list the individual's correct name consistently (this is important for information that is entered into OSM's Applicant Violator System) throughout the section. (SAS)

Section 1.9 Surface and Coal Ownership

3. Follow-up to Original Item No. 9: On page 1-19, please properly align Dale Miller's name under the surface and coal ownership listing for the SE $\frac{1}{4}$ of Section 30. (SAS)

Plate 1-2 Ownership Map

4. Follow-up to Original Item No. 8: The listing for John Yantzer has not been changed to the John P. Yantzer Estate for coal ownership in the SW¼ of Section 29. Please make the appropriate changes. (SAS)

Section 3.3 Ground Water

5. Follow-up to Original Item No. 17: BNI indicated the Piezometer Nests Location Map that is provided in Plate 3.3-1 was revised to address the deficiency; however, we are now unable to open up the map in either the Internet Explorer or Google Chrome web browsers. Please repair the html link to Plate 3.3-1. (BEB)
6. There are a handful of ground water monitoring wells throughout the Center Mine that are located within permit areas other than BNCR-9702 and BNCR-9401, as well as being located off-permit, and those wells are incorporated into the Monitoring Well Inventory of Appendix 3.3-1 of Permit BNCR-9702. Data from monitoring wells BNI C1-1, C2-1, C2-2, C3-1, C3-2, C4-1, C4-2, and C5-1 have been collected and submitted to the Reclamation Division for many years and are incorporated into the ground water monitoring plan for Permit BNCR-9401. With Permit BNCR-9702 now in an electronic format, we believe it would be appropriate to include information for the eight C-series of monitoring wells in the Monitoring Well Inventory of Appendix 3.3-1. This would result in a complete listing and information for all of BNI's monitoring wells in the approved ground water monitoring plan(s) would be available in a single spreadsheet. A simple notation on the spreadsheet could denote the permit location of the wells and consolidation of the Monitoring Well Inventory into one spreadsheet. Please consider combining the C-series of wells into Appendix 3.3-1. (BEB)
7. Data from the fourteen 95-series of monitoring wells in Section 22 has been collected and submitted to the Reclamation Division since the 3rd quarter of 2008. These wells include 95-221 A&B, 95-222 A&B, 95-223 A&B, 95-224 A&B, 95-225 A&B, 95-226 A&B, 95-227, and 95-228. Since it appears these wells have not been formally incorporated into the ground water monitoring plan, we request that you do so at this time, or perhaps a representative sampling of those wells could be incorporated into the ground water monitoring plan, into the Piezometer Location Map, and the Monitoring Well Inventory in Appendix 3.3-1. Please consider placing a representative sample of the 95-series of ground water monitoring wells into the permit and review the Monitoring Well Inventory spreadsheet of Appendix 3.3-1 to ensure that all wells for which quarterly water levels and annual water quality data is being provided to the Reclamation Division is listed under the ACTIVE status column. (BEB)
8. There are a total of six 94-series of ground water monitoring wells (94-02, -03, -04, -12, -13, and -14) for which data from these wells has been collected by BNI Coal and submitted to the Reclamation Division since the 3rd quarter of 2008 and we feel that the application for Revision 30 to Permit BNCR-9702 provides BNI an excellent opportunity to formally incorporate the 94-series of monitoring wells into your ground water

monitoring plan. We have noted that the 94-series of monitoring wells is incorporated into the Monitoring Well Inventory of Appendix 3.3-1 as ACTIVE wells, although the Ground Water Monitoring Schedule in Table 1 of BNI Coal's 2009 Annual Ground Water Report does not list this series of wells as being ACTIVE, nor does the annual report provide any data or analysis of the 94-series of monitoring wells. Both of these spreadsheets should provide identical status information unless new wells have been added since 2009 or wells have been removed or destroyed by mining or other reasons. Please advise the Reclamation Division of the permanent status of the 94-series of ground water monitoring wells. (BEB)

9. Changes to the Monitoring Well Inventory spreadsheet in Appendix 3.3-1 were noted with submission of BNI's 1st technical response to Revision 30 to Permit BNCR-9702. Namely, there were a total of sixteen MPC wells added to the ACTIVE status in the Inventory and an additional six MPC wells added to the DESTROYED status in the Inventory. All of these wells are located in Section 36, presumably to monitor ground water conditions surrounding the Horseshoe Pit and adjacent areas with reporting requirements to the State Health Department for the ash disposal pit in that area. If BNI desires to incorporate a handful of those wells into the Permit BNCR-9702 Ground Water Monitoring Plan, information concerning those wells such as geophysical logs, lithologic logs, well completion reports, and locations of the wells depicted on the Piezometer Nest Location Map in Appendix 3.3-1 would be required. The Reclamation Division would be amenable to accepting a representative handful of these wells into the monitoring schedule, but probably not all of them. If it is BNI's intention to not add these wells to the ground water monitoring plan, please remove them from the Monitoring Well Inventory of Appendix 3.3-1. (BEB)
10. It does not appear that the hyperlink to Plate 3.3-1, Location Map Piezometer Nests, is operable from the Volume IV-B Home Page. Please review and correct as necessary. (WTG)

Section 3.5 Premine Land Use

11. Table 3.5-7, Wetland Acres, shows that there are 158.9 acres of wetlands in the permit but Table 3.5-1, Premine Land Use Acres, indicates that there are 156 acres of wetlands in the permit. Please review and correct this discrepancy. (GAW)

Section 3.6 Premine Vegetation

12. Follow-up to Original Items No. 29 and 30: Carex eleocharis, needle leaf sedge, Carex filifolia, threadleaf sedge, and Carex heliophila, Sun Sedge, are listed as being associated with wetlands in the revised Comprehensive Plant Species List, Table 3.6-1. These species are normally associated with well drained upland sites rather than wetlands as was initially indicated in the Plant Species List for the Revision 30 addition area, formerly Appendix 3.6-1a. Please review and update as necessary. (GAW)

Section 3.7 Prime Farmlands

13. Follow-up to Original Item No. 35: Table 3.7-1 has been updated to show the new prime farmland acreages. However, this table lists an E. Ganske Estate as the owner of 11.8 acres in Section 29. This name does not appear in the ownership data in Section 1.9 or on the Ownership Map on Plate 1-2. Please explain or correct this discrepancy. (SAS)
14. Follow-up to Original Item No. 36: The title of Plate 3.7-1 to Prime Farmland was changed to make it more descriptive. The title change, however, necessitates an update of the plate title in the permit Table of Contents as well as the hyperlink for the plate on the Volume V Home Page. Please update. (WTG)

Section 3.10 Fish and Wildlife Resources

15. Plate 4.13-1, Wildlife Monitoring Map, is referenced in the Upland Game Bird Survey section of Appendix 3.10-1a, Wildlife Summary for Revision No. 30. However, Plate 4.13-1 will change as the monitoring plan is revised. For example, the pheasant crowing count route and locations may be altered if a pit cuts off access through a section line trail. Therefore, please include a separate plate that will not be revised to show the premine locations of the information specific to the studies conducted for the Revision 30 addition area. In addition, Tables 2 and 3 list six tracts, but these tracts are not identified on Plate 3.10-4, Wildlife Habitat Map, for the Revision 30 addition area or Plate 4.13-1. Please identify these tracts on a map. (GAW)
16. Table 2 of Appendix 3.10-1a, Primary Species of Concern within the Center Mine Permit Addition to BNCR-9702 (USFWS 100 Species of Concern), indicates that Sprague's Pipet was indentified in Tracts 4 and 5, and this species is listed as having been sighted during the breeding bird surveys (Table 1). Given that this species was recently (September 10, 2010) listed as a candidate species to the Endangered Species Act, please discuss the presence of this candidate species in the Revision 30 addition area and if the habitat where this species was observed is going to be disturbed by mining activities. (GAW)
17. Please correct the 30-acre discrepancy of acreage added with Revision 30 in the first paragraph of Appendix 3.10-1a. (WTG)

Section 4.1 Mining Operations and Waste Disposal

18. Please correct the following items on Plate 4.1-1, Pit Layout and Facilities Map: 1) Ponds 32-1 and 32-2 are both labeled as 32-1 in Section 32 of Permit BNCR-8106, and 2) update the labeling and location of Pond 32-3 to reflect the recent approval of Pond 32-3.5 in Section 32 of Permit BNCR-9702 (if you have not done so already as indicated in your October 12, 2010 request). (MSK)

Section 4.6 Water Management Plan

19. It appears that the design details for Diversion 5-1 (approved by letter on December 4, 2008 and subsequently approved with Revision 29) have not been included in the

Revision 30 electronic permit, nor is a description of the diversion included in the Section 4.6 narrative. However, the Diversion 5-1 routing information is included in Appendix 4.6-1. Please add the design details to the permit, add a hyperlink to the design details on the Volume X-A Home Page, add a description of the diversion to the Section 4.6 narrative, and add an entry for the design details to Volume X-A in the permit Table of Contents. (WTG)

Volume XI

20. Please expand the hyperlink to Volume XI on the permit Home Page to be more descriptive of the volume contents. Although the Reclamation Division staff is aware that Volume XI contains fish and wildlife information and reclamation cost estimates, staff from other agencies, and the public as well, could benefit from a more descriptive hyperlink. Please also review the remaining volume hyperlinks to ensure that the content of each hyperlink is adequately described. (GAW)

Section 4.10 Backfilling and Regrading

21. Please revise the Post-Mining Topographic Contours Map, Plate 4.10-1, to accurately depict the location of the developed water resource to be constructed in the recreated drainageway located in the SE¼ of Section 21. Since there is value in showing the locations of wetlands and developed water resources on this map, the locations must be accurate and should be identical to the wetland and developed water resource locations depicted on the Post-Mining Land Use Map, Plate 4.12-1. (GAW)

Section 4.12 Post-Mine Land Use and Revegetation

22. Follow-up to Original Item No. 70: BNI has indicated that the land use changes being proposed for Section 32 are in accordance with the surface owner's wishes of the surface owner who owns the largest percentage of land on the multiple ownership tracts. Please include information with the Section 32 preference statements (Appendix 4.12-1) that clarifies the percent ownership by surface owner for the tracts that have multiple owners. (GAW)
23. Follow-up to Original Item No.71: Please add a footnote to Table 4.12-1 to indicate that the 68 acres of industrial land in Section 3 have been bond released. This will help to rectify the actual acres in the permit and the acres shown in the table. (SAS)
24. Follow-up to Original Item No. 74: Please update Section 4.12.2, Pre-Mine and Post-Mine Land Use Discussions, to discuss replacing the shelterbelt located in the NW¼ of Section 32, and update Section 4.12.3, Reclamation Information, with information pertaining to the species to be planted and the design plans as required by NDAC 69-05.2-09-11 (6). In addition, BNI is proposing to change the location and dimensions of the shelterbelts in Sections 5 and 32 with this revision, but the Shelterbelt Table in Section 4.12.3 was not updated. In instances where there are multiple shelterbelts in a quarter section it is not possible to determine what information in the table applies to

which shelterbelt shown on the Land Use Map. A shelterbelt identification number needs to be listed in the table and the shelterbelts need to be labeled on the Post-Mining Land Use Map. (GAW)

25. Follow-up to Original Item No. 78: The narrative discussing the pre-mine and post-mine land uses of Section 32 in Section 4.12.2 states that two ponds will be retained as permanent structures but the Post-Mining Land Use Map, Plate 4.12-1, depicts only one pond. Please review and correct this discrepancy. (GAW)
26. Please revise the Post Mining Land Use Map, Plate 4.12-1, to depict the correct location of the developed water resource to be constructed in the SE $\frac{1}{4}$ of Section 21 in the recreated drainageway. Wetland and developed water resource locations depicted on this map must be accurate and should correspond to the wetland and developed water resource locations depicted on the Post-Mining Topographic Contours Map, Plate 4.10-1 (GAW)
27. The Post-Mining Land Use Map, Plate 4.12-1, incorrectly identifies a drainageway located in the W $\frac{1}{2}$ of the SE $\frac{1}{4}$ of Section 5 as being undisturbed native grassland. This area is listed as cropland on the Pre-Mine Land Use Map, Plate 3.5-1B, and a portion of the area has been affected by sediment deposition. Please correct this discrepancy. (GAW)

Section 4.13 Fish and Wildlife Resource Protection and Enhancement Plan & Fish and Wildlife Monitoring Plan

28. Follow-up to Original Item No. 82: Please include a discussion of the enhancement measures in the Fish and Wildlife Resource Protection and Enhancement Plan to be utilized to offset the planned conversion of native grassland to cropland in Section 32, NDAC 69-05.2-09-17. (GAW)
29. Follow-up to Original Item No. 88: Please update Section 4.13 to address the issues that were raised by the USFWS in their letter dated August 20, 2010. The USFWS letter includes recommendations intended to reduce construction related impacts to wildlife and wildlife resources. The Fish and Wildlife Resource Protection and Enhancement Plan needs to address if BNI plans to follow any of these recommendations. In addition, the Fish and Wildlife Resource Protection and Enhancement Plan must include a discussion about the measures or steps BNI takes to minimize impacts on migratory birds for compliance with the Migratory Bird Treaty Act which prohibits the taking, killing of migratory birds, their eggs and nests. (GAW)
30. Please update the Breeding Bird Survey section of the Fish and Wildlife Monitoring Plan to specifically mention that annual surveys will be conducted on undisturbed and reclaimed native grassland to document the presence of Sprague's Pipet (candidate species), and if male nesting flight displays are observed. (GAW)

Section 4.14 Reclamation Cost Estimate for Bonding Purposes

31. Please update Appendix 4.14-4, Worst Case Bond Estimate, to reflect the July 22, 2010 annual updates of the variable costs per Policy Memorandum No. 16 and update Plate 4.14-1 to reflect the updates to Appendix 4.14-1. (MSK)

As discussed during our December 1, 2010 meeting, we intend to attach a condition to Permit BNCR-9702 as part of the approval of Revision 30 to require that lengthy appendices, e.g., geologic and geophysical logs, be organized with bookmarks. We understand that such an effort is a time consuming process so we would not require its completion until the next midterm permit review in early 2013.

We believe it is appropriate at this stage of the Revision 30 review process to include any of the Revision 32 changes or updates that are not already in the electronic version of Permit BNCR-9702. At the time that Revision 30 is approved, all changes previously approved with Revisions 31 and 32 must be incorporated into the electronic version. As you recall, it was necessary to keep Revision 32 separate, and in a paper version, so as not to delay the permit renewal. Some of the changes associated with Revisions 31 and 32 that need to be updated include: 1) removing Plate 4.2-1, General Mine Plan, from the permit because it was replaced with Plate 4.1-1 Pit Layout and Facilities Map with Revision 32 (Please also remove it from the Table of Contents and remove any hyperlinks to it in the narrative and the Volume X Home Page. Please note that the Table of Contents still incorrectly lists Plate 4.1-1 as the Limited Mine Plan rather than the Pit Layout and Facilities Map.); and 2) replacing the Revision 30 version of Plate 3.3-1, Location Map Piezometer Nests, with that version updated with Revision 32 (nests were added as was a plate title).

If you have any questions, please contact this office.

Sincerely,



James R. Deutsch
Director
Reclamation Division

cc: Oliver County Auditor