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State of North Dakota

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March 27, 2014

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

Dear Dr. Volk:

The Reclamation Division has reviewed BNI Coal, Ltd.'s February 12, 2014 responses to our January 21, 2014 technical review letter for BNI's application for Surface Coal Mining Permit No. BNCR-1101 for the Center Mine. The following items must be satisfactorily addressed before the Reclamation Division will recommend Commission action on the permit application. Please note that most items are in follow-up to items as numbered in our January 21, 2014 letter, although there are several new items resulting from permit application changes made with the February 12, 2014 response.

Plate 1.9-1 Surface and Coal Ownership

1. Follow-up to item No. 2: As required by NDAC 69.05.2-08-02(1)(a), and as noted in similar deficiencies for Appendix 1.9-1 (Ownership Information (within Permit Boundary)) and Appendix 1-2 (Certified Copies of Leases and Assignment Documents), please update Plate 1.9-1 when BNI has resolved the undetermined coal ownership that currently totals 200 percent interest in the NE $\frac{1}{4}$ of Section 20, T141N, R83W, on Plate 1.9-1. (WTG)

Appendix 1.9-1 Ownership Information (within Permit Boundary)

2. Follow-up to item No. 3: As required by NDCC 38-14.1-14(1)(c)(2), and as noted in similar deficiencies for Plate 1.9-1 (Surface and Coal Ownership) and Appendix 1-2 (Certified Copies of Leases and Assignment Documents), please update Appendix 1.9-1 when BNI has resolved the undetermined coal ownership that currently totals 200 percent

interest for the NE¼ of Section 20, T141N, R83W, on page 43 of Appendix 1.9-1.
(WTG)

Appendix 1-2 Certified Copies of Leases and Assignment Documents

3. Follow-up to item No. 4: As required by NDAC 69-05.2-06-03(1), a certified copy of the coal lease with Great Northern Properties for Section 7, T141N, R83W, must be included in the application (certain financial terms can be redacted) prior to permit approval or submitted separately with a trade secret request as discussed between your attorney and the Commission's general counsel. (WTG/DKM)
4. Follow-up to item No. 5: As required by NDAC 69-05.2-06-03(1), please provide either a certified copy of a surface lease executed by Kasper and Donna Kraft for the SW¼ of Section 16, T141N, R83W, or court order issued pursuant to the Surface Owner Protection Act authorizing the Commission to issue a mining permit. This parcel will need to be removed from the permit application prior to Commission action if neither instrument conveying right of entry is added to the application. (WTG/DKM/JRD)
5. Follow-up to item No. 6: As required by NDAC 69-05.2-06-03(1), and as noted in similar deficiencies for Plate 1.9-1 (Surface and Coal Ownership) and Appendix 1.9-1 (Ownership Information (within Permit Boundary)), please update Appendix 1-2 when BNI has resolved the undetermined coal ownership that currently totals 200 percent interest in the NE¼ of Section 20, T141N, R83W, and provide certified copies of coal ownership leases with the coal owners of record. (WTG)
6. Follow-up to item No. 7: Please complete following updates to the permit application as the result of inserting a certified copy of the surface lease with Robert Reinke for the E½SE¼ of Section 31, T142N, R83W, in Appendix 1-2: (1) remove the purchase option agreement (pages 427 through 434) from Appendix 1-2; and, (2) remove the reference to the purchase option agreement on page 80 of Appendix 1.9-1 (Ownership Information (within Permit Boundary)). (WTG)

Appendix 1-7 Approval Documents

7. Follow-up to item No. 9: The response letter states that Appendix 1-7 has been updated to include documentation that the Oliver County Board of County Commissioners has approved BNI's plans to close roads and section line trails and an alternative relocation road. However, Appendix 1-7 is vacant and this is not included in the list of changes for the third technical review response. Please add copies of the Oliver County road approval documents to Appendix 1-7. (GAW)

Section 3.3 Groundwater

8. Follow-up to item No. 16: The response to the deficiency describes placing fine cement down a water supply well as a decommissioning option; however, we suspect your intention was to describe placing neat cement (a specially-formulated type of flowable grout) down the well. We are unsure of what fine cement is, for this or any other type of industrial/construction application, and if the narrative needs to be updated. Please correct. (BEB)

Section 3.4 Surface Water

9. Follow-up to item No. 20: Please revise the last sentence added to the paragraph introducing the livestock suitability guidelines on page 5. Perhaps the sentence could be revised similar to: *The livestock suitability for water features in the permit area is discussed in the pre-mine land use narrative found in Section 3.5.* (RLK)
10. Follow-up to item No. 21: Please include the monthly mean flow rate for April 2011 and April 2009 in the narrative to go along with the statement that the two months represent the highest mean flows recorded at the Square Butte Creek gauge station. (RLK)
11. Follow-up to item No. 23: Please include “intermittent” along with ephemeral drainages in the second paragraph because intermittent drainages are identified in the permit area and are associated with the water features discussed in the narrative. (RLK)
12. Follow-up to item No. 24: Please discuss intermittent stream segments in the probable hydrologic consequences subsection. The potential effects on the function of intermittent stream segments could be similar to those described for wetlands and springs in the narrative. Linear wetlands are prevalent in the intermittent stream segments and the wetland and DWR acres will be replaced in the stream valleys with similar considerations as discussed for wetlands or springs affected by mining. (RLK)
13. Follow-up to item No. 26: Please revise the sentence in the second paragraph on page 3 of Section 3.4 that reads “[Appendix 3.4-9] describes both current state conditions within the stream segments, based on NDAC 69- 05.2-01-02 Definitions “Intermittent stream”, the report also designates historical stream segment classifications under near normal precipitation patterns.” It is recommended that the sentence be replaced with narrative similar to the following: *The streams were identified as ephemeral, intermittent or perennial according to the definitions in NDAC 69-05.2-01-02. The stream assessment in Appendix 3.4-9 describes both the current stream flow conditions and the expected flow classification under normal precipitation patterns.* (RLK)
14. Follow-up to item No. 31: While an explanation was given in the item response, no change was made to the permit to complete the average sulfate information for wetland

and spring samples in the table in Appendix 3.4-1. Please provide the information or remove the column heading for where data will not be provided. (RLK)

Section 3.5 – Pre –mining Land Use

15. Follow-up to Item No. 119: Please update the relevant narratives, maps and tables in Section 3.5 to address the previously disturbed native grassland located in the SE1/4 of Section 31, T142N, R84W. Plates 1 and 28 (deleted) of Permit BNCR-8106 clearly show that a portion of the SE1/4 of Section 31 was cropped in the 1980's and early 1990's. The discussion on page 12 of Section 3.5 needs to discuss this old field area in Section 31 and the area needs to be depicted on Plate 3.6-1, Ecological Site Location Map. It also appears that an old field located in the NW1/4 of Section 8 needs to be shown on the Ecological Site Location Map, Section 3.6-1. (GAW)

Section 3.7 Prime Farmlands

16. In your response cover letter please describe the changes made to the nonprime farmland and prime farmland subsoil mixing demonstration in Section 3.7 and Plate 3.7-2 (Dominant Order 1 Soils and NRCS Designated Prime Farmland Areas within Mining Disturbance) as discussed between BNI and PSC staff during the weeks of March 10th and 17th. (WTG)

Section 3.8 Soil Resources

17. In your response cover letter please describe the changes made to Plate 3.8-1 (Soils Map) as discussed between BNI and PSC staff during the weeks of March 10th and 17th. (WTG)

Plate 4.1-1 Pit Layout and Facilities Map

18. Please label all proposed ponds and diversions in the permit, including those in Sections 24 and 19. It was noted that some of the ponds and diversions were labeled with a pond and diversion number whereas others were only labeled as the type of pond and the anticipated year of construction. All ponds and diversions should be labeled in a consistent manner on this map. (FSE)

Section 4.4 – Blasting Plan

19. Plate 4.4-1 – Blasting Map: Please revise the Blasting map so that it complies with NDAC 69-05.2-09-04(8)(b). The maximum permissible weight of explosives to be detonated is established by NDAC 69-05.2-17-05(7). The map must show the maximum weight of explosives at intervals not exceeding four hundred feet [121.92 meters] and continue until the maximum amount specified in NDAC 69-05.2-09-04(1). (BAJ)

Section 4.5 Transportation Plan

20. Follow-up to item No. 82: Proposed Haulroad Section E is shown on Plate 4.5-1 but there is no discussion of the route in the transportation narrative. Please include a narrative discussion of this proposed haul road in Sections 8 and 9. (NDAC 69-05.2-09-06, NDAC 69-05.2-09-01(3)). (FSE)

Section 4.6 Surface Water Management Plan

21. Please update Section 4.6 (Surface Water Management Plan) to clarify how runoff from disturbed areas around the NE¼ of Section 18 will be managed. It would appear that several sediment ponds will be needed to control runoff from adjacent pits. If any water management structures are to be built on this tract, then they should also be depicted on Plate 4.1-1, Pit Layout and Facilities Map. (GAW)
22. Please label all ponds and diversions on Plate 4.6-1 (Surface Water Management Plan), including those in Sections 24, 19, 20, 21 and 28. Some of the proposed structures are only labeled as the year they will be constructed. Please also correct the date on the plate (05-12-2014). (FSE)

Section 4.6 Appendices 4.6-1 through 4.6-18

23. Please correct the Design of Diversion D-32-1 in Appendix 4.6-13 because it states that “*The diversion will convey water from a 7.4 Acre watershed into Sedimentation Pond P-5-8*”. Please explain the function of the diversion because Pond P-5-8 was removed from the water management plan. (FSE)

Section 4.10 Regrading Plan

24. Follow-up to item No. 126: Please revise the postmine topography of the land that is to be mined in the SW¼ of Section 16 to comply with the wishes of the surface owner that the land be leveled as feasible. BNI initially proposed to convert 20 acres of this tract to cropland that the surface owner did not request, and now BNI is proposing steeper slopes than are present prior to mining. Please revise the postmine topography to comply with NDCC 38-14.1-24(2) and (3) and to ensure that the pre-mine capabilities are restored. (GAW)

Section 4.12 Revegetation, Post Mining Land Use and Reclamation Success Narrative

25. Follow-up to item No. 103: Please correct the inconsistencies in Section 4.12 regarding the conversion of grassland acres to cropland in the W½ of Section 7. The Appendix 4.12-2 narrative discusses 1.76 acres of grassed waterway that is not discussed in Section 4.12 and is not shown on Plate 4.12-1 (Post Mine Land Use). (RLK/GAW)

26. Follow-up to item No. 103: Please revise the new narrative in the post-mine land use discussion section for the W½ of Section 7 to clarify that the land use conversion comprises approximately 0.7 percent of the total pre-mine native grassland in the permit area rather than less than 0.5 percent as stated. (GAW)
27. Follow-up to item No. 103: Please edit the post-mine narrative for the S½ of Section 8 to provide clarity. There is confusing language regarding land use changes that are not planned or proposed and a statement about how a land use change that is not proposed will not present an actual or probable hazard to public health or safety and not be impractical. Please review and revise to provide clarity. NDAC 69-05.2-05-02. (GAW)
28. Follow-up to item No. 105: Please revise the new narrative in the post-mine land use discussion section for the E½ of Section 17 to put the conversion of 1.99 acres of native grassland to cropland in proper perspective. This insignificant change is far less than 1 percent of the total pre-mine native grassland in the permit area as stated. (GAW)
29. Follow-up to item Nos. 105 and 107: The post-mine land use discussion for Opp's land in Section 18 incorrectly states that the conversion of 115 acres of native grassland to cropland is approximately 2 percent of the pre-mine native grassland in the permit area when in fact it is closer to 3 percent of the total. The acreage value listed as a land use conversion should include the cropland grass waterway (3.69 acres) because this is a necessary support feature for this land use conversion, and it appears that the remaining 0.65 acres of native grassland will actually be affected by an SPGM stockpile so this acreage should be included in the total. Please correct as necessary. (GAW)
30. Please revise Section 4.12-1 (Reclamation Plans) to discuss all land use changes being proposed, including those not requested by the surface owners. Appendix 4.12-6 indicates a loss of about 8 acres of cropland in the E½ of Section 24 and increases in native grassland acreage for the E½ of Sections 24 and 18. Appendix 4.12-6 also indicates land use conversion for 41 acres of grassed waterways, but grassed waterways were not considered a pre-mine land use so this is somewhat misleading as pre-mine grassed waterways certainly existed in Sections 24, 25, and 21. Please consider grassed waterways as cropland for the purposes of land use changes. Please revise to provide clarity and summarize the proposed changes so that the Commission can consult with the landowners regarding these changes as required by NDAC 69-05.2-23-03. (GAW)
31. Follow-up to item No. 112: Please include a technical reference section in Section 4.12 that either includes all technical materials used in development of the reclamation plans, or include citations to where all technical reference materials can be found as required by NDAC 69-05.2-05-02(1). For example, the Conservation Practice 612, Tree/Shrub Practice Specification and NRCS Herbaceous Vegetation Establishment Guide materials are mentioned as reference material and therefore specific references or copies need to be included. BNI repeatedly states in various sections of the permit that the best technology currently available will be used but no standard technical material is referenced. Please

include specific reference material in each instance where the “best technology currently available” terminology is mentioned in the permit. (GAW)

32. Follow-up to item No. 114: Table 4 (Woodland Species Mix) has been revised to indicate that 2000 trees will be planted per acre but the percent composition values listed for tall shrubs (40%), low shrubs (36%), and trees (24%), do not agree with the planting rate values. Please either adjust the species planting rate values or the community type percentage so that the information agrees. (GAW)
33. Follow-up to item No. 126: Please revise the post-mine discussion for the SW¼ of Section 16 to comply with the surface owner’s wishes that the land be more level to the extent feasible, and for compliance with NDCC 38-14.1-24(2) and (3) that require the maximum postmining graded slopes to not exceed approximate original contour, and that the premining capabilities be restored. The postmine topography must be revised to comply with NDCC 38-14.1-24(2) and (3). (GAW)

Plate 4.12-1 Post Mine Land Use

34. Please label the trails and roads comprising 13.82 acres in Section 13 on Plate 4.12-1 that are not associated with statutory rights-of-way. Appendix 4.12-6 indicates that there are 29.82 acres of trails, roads, and right-or-ways associated with this section. (GAW)

Appendix 4.12-2 Pre-mine and Post Mine Land Use Discussions

35. Follow-up to item No. 127: As required by NDAC 69-05.2-08-08(1)(d), please revise the discussion for Section 31 to describe the species composition of the previously disturbed land located in the SE¼ of Section 31 and identify the disturbed areas on Plate 3.6-1 (Ecological Site Map). The old disturbance boundaries are readily evident on the ground and a portion of the area may have even been disturbed by mining activities (Hoffmann and Ries study area that helped established the ground cover standard). (GAW)

Section 4.14 Reclamation Cost Estimate for Bonding Purposes

36. Please revise Appendix 4.14-1 (Worst Case Bond Calculations) to remove Ponds 5-8 and 5-9 from the bond calculations because they have been deleted from the permit application, and to include costs for the reclamation of Pond 16-3 in the calculations. (FSE)

Appendix 4.14-1 Worst Case Bond Estimate

37. Page 2 of 5 of Appendix 4.14-1: Please list the area of topsoil and subsoil respread for the stockpiles in the table. The Reclamation Division cannot verify the haul distances without a location. For example, the areas of Mining Disturbance SPGM respread should be broken down by quarter section, topsoil respread for ponds should have the pond identification. (BAJ)

Jay M. Volk, Ph. D
March 27, 2014
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Please contact this office if you have any questions.

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

Minedata/Center/Permits/BNCR-1101/AdminCorr/2014/Tech4_rvw_ltr_3-27-14