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State of North Dakota

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August 15, 2013

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 June 10, 2013 responses to our February 12, 2013 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 numbered items in our February 12, 2013 letter although some new items are included as well.

General

1. BNI's standard response to our February 12, 2013 deficiency letter is "revised as requested". In the future, please cite the page and paragraph in the permit where the changes can be found in the revised application. In many instances the old language has been removed from the permit e.g., (item no. 507), rather than lined through, which makes it very difficult to determine that the changes have been made, and in some instances new language e.g., (response to item 337) is not even highlighted. This is especially the case in Sections 3.5, 3.6 and 3.10 of the permit. The Reclamation Division may have future follow-up on items listed in our February 12, 2013 letter since it is not always clear where changes have been made in the permit to address the particular issue. In the future, please retain the old language with strike-through and specifically cite where changes have been made to address the issue. (GAW/ZAT)
2. Several plates and appendices in the permit are too large to allow one to readily view them in electronic format. This includes Plates 3.4-5, 3.5-1, 3.6-1, 3.6-2 and Appendix 3.5-3.

Please revise these plates and appendices so that they can be opened and viewed efficiently. (GAW/ZAT)

Plate 1.9-1 Surface and Coal Ownership

3. Follow-up to item No. 8: 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 resolve the undetermined coal ownership that 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)

4. Follow-up to item No. 10: The lease for Barbara Hager coal ownership (1.12 percent) in the NW $\frac{1}{4}$ of Section 8, the NW $\frac{1}{4}$ of Section 17, and the N $\frac{1}{2}$ SE $\frac{1}{4}$ of Section 18 of T141N, R83W, appears to be incorrectly labeled as Lease No. 3035. It appears that it should be correctly labeled as Lease No. 2036. Please review and correct as necessary. (WTG)
5. Follow-up to item No. 11: The lease for Jean Clift coal ownership (0.89 percent) in the NW $\frac{1}{4}$ of Section 8, the NW $\frac{1}{4}$ of Section 17, and the N $\frac{1}{2}$ SE $\frac{1}{4}$ of Section 18 of T141N, R83W, appears to be incorrectly labeled as Lease No. 2037. It appears that it should be correctly labeled as Lease No. 3039. Please review and correct as necessary. (WTG)
6. Follow-up to item No. 12: 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 resolve the undetermined coal ownership that totals 200 percent interest for the NE $\frac{1}{4}$ of Section 20, T141N, R83W, on page 43 of Appendix 1.9-1 and provide addresses for all of the coal owners of record. (WTG)

Appendix 1-2 Certified Copies of Leases and Assignment Documents

7. Follow-up to item No. 22: 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, should be included in the application prior to permit approval. The approved completeness review document submitted for technical review only includes a memorandum giving notice of a coal mining lease for this tract. Please note that BNI Coal may redact financial terms of the lease. (WTG/DKM)
8. Follow-up to item No. 23: Please include copies of documents certified by the Oliver County Recorder's Office in the permit coal leases for the NW $\frac{1}{4}$, SW $\frac{1}{4}$ and SE $\frac{1}{4}$ of Section 16, T141N, R83W; the coal lease for the 50 percent coal ownership in the SW $\frac{1}{4}$ of Section 17, T141N, R83W; and the coal lease for the 50 percent coal ownership in the NE $\frac{1}{4}$ NW $\frac{1}{4}$, and Lots 1 and 2 of Section 18, T141N, R83W, all with the State of North Dakota. Although the coal leases in the approved completeness review document includes

a signed statement from the Land Commissioner that the documents are true and correct duplications of the original documents, permit applications typically contain copies of lease and easement documents that have been recorded at the county Register of Deeds (Recorders) office. By providing copies of the recorded documents, we have greater certainty that the permit applicant actually has the legal right to mine the tracts in the permit area. Until lease and easement documents obtained by BNI Coal, Ltd. are recorded, it is possible that another entity could also obtain a mining lease for the same tract and have it recorded with the Register of Deeds. In that case, the other entity would have mining rights ahead of BNI Coal, Ltd. Therefore, we recommend that certified copies of lease and easement documents recorded at the Oliver County Register of Deeds, including the Register of Deeds certification of recording, be included in the application prior to permit approval. (WTG/DKM)

9. Please provide a certified copy of the coal lease for the NE $\frac{1}{4}$ of Section 16, T141N, R83W, in the application. At this time only a soil stockpiling agreement is included in Appendix 1.2 for this tract. (WTG/JRD)
10. Follow-up to item No. 24: 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 SW $\frac{1}{4}$ of Section 16, T141N, R83W, or court order issued pursuant to the Surface Owners 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 obtained. (WTG/DKM/JRD)
11. Follow-up to item No. 25: 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 resolve the undetermined coal ownership that totals 200 percent interest in the NE $\frac{1}{4}$ of Section 20, T141N, R83W, and provide certified copies of coal ownership leases with the coal owners of record. (WTG)
12. Follow-up to item No. 26: As required by NDAC 69-05.2-06-03(1), please provide a certified copy of the surface lease with Robert Reinke for the E $\frac{1}{2}$ SE $\frac{1}{4}$ of Section 31, T142N, R83W. Although we agreed to accept the purchase option agreement executed by Mr. Reinke for completeness approval purposes, Commission approval of the permit application cannot occur until a certified copy of a consent statement executed by Mr. Reinke is provided in the application. (WTG/DKM/JRD)
13. We noted that the coal leases with Loretta Tabor for 6.25% of the coal interests for the NW $\frac{1}{2}$ of Section 8, NW $\frac{1}{4}$ of Section 17 and SE $\frac{1}{4}$ of Section 18, all in T141N, R83W, and Ralph and Irene Kautzman for 50% of the coal interests in the S $\frac{1}{2}$ SW $\frac{1}{4}$ of Section 20 and SE $\frac{1}{4}$ of Section 21, both in T141N, R83W, has expired. Please provide documents showing these leases have been renewed or include new coal leases for these tracts. (JRD)

Section 3.2 Geology

14. Follow-up to item No. 33: Your response to this item was to provide a reference from Hemish, 1975, which is an adequate response for a more regional perspective of the Sheet Sand hydrostratigraphic unit. However, we ask that you please review the data derived from your specific drilling information within the permit area and provide the range and mean/average of thicknesses (within the permit area) of the Sheet Sand and a range and mean/average of underburden thicknesses (zone between the Hagel Seam and Sheet Sand) as your response to this item. NDAC 69-05.2-08-05(1). (BEB)
15. Follow-up to item No. 34: After reading the initial response to this item, we are still unsure of the names and/or locations of the *“Two prominent glacial meltwater channels that join with Square Butte Creek.”* Please simply state the names of the meltwater channels in the narrative (if they have names) and provide the legal description (T-R-S) of where the meltwater channels “join” or confluence with Square Butte Creek. (BEB)

Plate 3.2-2 Geologic Cross-Section Map

16. Follow-up to item No. 40: The only notable change made to the map was in reference to the last sentence that was provided in the original deficiency regarding nomenclature in the legend. Please re-read the entire original deficiency and revise the map as requested and required by NDAC 69-05.2-08-05(2)(e). (BEB)

Plate 3.2-3 Overburden Thickness/Depth to Hagel Seam

17. Follow-up to item No. 41: As requested, the contour interval was reduced from 15 feet to 10 feet and that update is adequate; however, a standard for contour/isopach maps is the use of contour indexes. Generally, a contour index every 50 feet or so is depicted darker (or of a different color) than the rest of the contours lines to make the contour information much easier to interpret, now and in the future. We suggest you retain all of the provided information on the map including all of the depicted elevations, but we ask that you darken the contour indexes on this map, e.g. at 0, 50', 100', 150', and 200' intervals. Please consider the request. (BEB)

Section 3.3 Groundwater

18. Follow-up to item No. 45: The additional permit area and adjacent water well information added to the new table is sufficient for most of the updates required to be addressed by this deficiency, with the exception of whether or not loss of water resource and subsequent water replacement will be required in consideration of the premine well condition (operable/inoperable), whether or not the postmine land use requires water replacement and whether or not mining operations will disrupt, diminish or destroy the water resource. For those wells that are listed as “OPERABLE”, please note on the spreadsheet whether or not water replacement is expected (probable) or not. Those wells located off-coal or

upgradient will likely not require replacement; however, those wells located down gradient and within the Hagel seam or aquifers located stratigraphically above the Hagel, or possibly within the lower Sheet Sand aquifer may likely require replacement if the postmine land use dictates that a reliable water source is required. Specifically note on the spreadsheet for each well if water replacement is likely to be required or not required based on your hydrologic assessment and whether or not a water source is needed for the approved postmine land use. Please re-read the original deficiency and provide the Probable Hydrologic Consequences information that is requested as required by NDAC 69-05.2-08-04(4). (BEB)

19. The third paragraph in the PHC provides a general overview that mining could affect ground water quantity in wells adjacent to the mining area and the last paragraph states that "*specific wells that may be affected are discussed below*", but the discussion following that narrative describes available lower aquifers that a water supply replacement could target, not specific wells that will be affected. Please review and revise accordingly. (BEB)
20. Follow-up to item No. 49: After reviewing your original deficiency response and re-reviewing our hydraulic head evaluation, data interpretation still dictates that ground water flow in both the Hagel Seam and Sheet Sand appears highly variable, with no prevalent or discernible flow direction dominating either flow system. In both aquifers, flow direction is variable and for central areas of the permit area flow direction appears to be predominantly from **north to south**, not south to north. We have calculated that Sheet Sand monitoring wells C2-1, C7-1, and C9-1 which are generally located in the middle of the permit area has a hydraulic gradient of 4.5 ft. /mile or roughly .001 ft. /ft. from north to south. The same scenario holds true for central areas of the permit in regard to the Hagel Seam potentiometric surface, but to a lesser degree. Areas along the west and east sides of the permit area for both the Hagel and Sheet Sand aquifers trend toward a more south to north flow gradient, similar to what is stated in the narrative. Again, since it appears that no particular flow direction dominates for either the Hagel or Sheet Sand aquifers, we again suggest that the narrative in Section 3.3 be revised to state that flow direction within the permit area is variable. Please review your data and revise as necessary. (BEB)
21. Follow-up to item No. 54: Square Butte Creek Aquifer continues south of Nelson Lake as mapped in the Ground Water Resources of Mercer and Oliver Counties, Part III, Plate 1 and comes within a couple of hundred feet of the permit boundary in the NE $\frac{1}{4}$ of Section 9. Please extend the SBC Aquifer depiction on the Ground Water Monitoring Map, Plate 3.3-1 to the south to include the area on the map for which aerial photography is provided. (BEB)
22. Follow-up to item No. 56: The only response that we have been able to find in the permit relating to this deficiency regarding projected pit water inflow volumes was a reference to the ground water study conducted many years ago by DSAntonic Tribble and Richardson for Permit BNCR-9702. Based on the data provided in the permit including your recent slug test analyses on select wells in determination of hydraulic conductivity and other

aquifer properties and/or a review of BNI's previous pit water pumping records over the years for other permitted areas demonstrating similar aquifer hydraulic properties, please provide an estimate of pit water inflow volumes in gallons/day, gallons/month, or whatever capacity/time calculation that BNI uses in projecting pit water handling operations for this particular permit area. (BEB)

23. Follow-up to item No. 57: It appears your response to this deficiency was a reference to Ackerman, 1980, in which he provides a generalized statement that the sand zone which forms the aquifers within the Sentinel Butte Formation are discontinuous both laterally and vertically. This generalized statement from Ackerman is based on his data interpretation derived from a broad report area in Morton County, ND and not specific to the BNCR-1101 permit area. Please review and respond to the original deficiency with the data that BNI has collected from the many ground water monitoring wells and other drillhole information acquired in support of this application. If review of your data continues to support the statement that the Sheet Sand aquifer within the permit area is substantially discontinuous, it may be deemed necessary that you install additional ground water monitoring wells to whatever hydrostratigraphic unit is determined to be the next prevalent and viable aquifer below depth of mining. Please review your data and the current narrative in the permit regarding the Sheet Sand aquifer and provide the specific information originally requested in the deficiency. (BEB)
24. We respectfully question the encompassing statement in the ground water narrative on the first page of Section 3.3 that describes that recharge to the ground water flow system is primarily lateral inflow from the upland to the south of the permit area. This statement likely holds true for the deeper Sheet Sand aquifer, but not for the Hagel Seam aquifer. Uplands to the south of the permit area are separated/cut-off from the permit area by SCS Dam 5 Creek across Sections 28, 29, and 30 and along portions of a Hagel Creek tributary that defines the limit of coal availability along the western extent of the permit area. The Hagel Seam crop line follows the topographic contour of both of those creeks/drainages as depicted on several maps in the permit. This scenario leaves a relatively small area within Section 25 of the permit for the Hagel Seam to be topographically connected to, and receive lateral inflow from uplands to the south. It appears to us that recharge to the Hagel Seam in the permit is generally localized from within the permit area itself, and that BNCR-1101 is essentially an island or outlier coal reserve mostly surrounded by substantial drainages to the east, south and west along which the Hagel coal seam outcrops. Based on our review, it is our opinion that the permit area is the Hagel Seam recharge zone and the drainages surrounding the permit are the discharge zones. Please review your data and revise the narrative if you concur with our assessment regarding Hagel aquifer recharge. (BEB)
25. Follow-up to item No. 59: The one-sentence response to the original deficiency regarding expected postmine ground water quality in the reclaimed spoils compared with Hagel Seam baseline water quality is inadequate. Please re-read the original deficiency and provide the requested information. NDAC 69-05.2-05-02. (BEB)

Plate 3.3-2 Hagel Seam Potentiometric Map

26. As noted in a related follow-up deficiency, information provided in the permit application appears to indicate that flow direction and hydraulic gradient within the Hagel Seam is highly variable and Plate 3.3-2 seems to confirm that. Based on the potentiometric contours provided on this map, flow direction across southern portions of the permit area is from west to east and flow direction across northern portions of the permit area is from east to west. Direction of ground water flow has to be perpendicular to the elevation isopleth contour lines and it appears that perhaps the potentiometric surface grid/map may need to be reassessed and/or regenerated. Please review and update as necessary. (BEB)

Plate 3.3-3 Sheet Sand Potentiometric Map

27. Follow-up to item No. 64: The title text located within the title block of this map labels the map as the Sheet Sand Potentiometric Map as does the complete permit Table of Contents; however, the Section 3 home page still has the map labeled as *Sand Potentiometric Map*. Please change the name on the Section 3 home page to *Sheet Sand Potentiometric Map*. As noted in the original deficiency, the plate title should preferably be changed to Sheet Sand Potentiometric Surface Map because it is the aquifer potentiometric **surface** information that the map is required to represent. (BEB)

Plate 3.3-4 Certified Well Location Map

28. Follow-up to item No. 66: A number of certified water well locations and corresponding ownership information has been cut-off from the right side of the map. Some of these wells include the A. Schwalbe wells, D. Hilton wells and the A. Hagerott well, in addition to a couple of the D. Hagerott wells. Please expand the map to the east so that all of the certified wells that were included in the approved completeness version of the application are visible. Also, we requested that you label the four Keith and Kent Reuther wells and we are unsure of what the labeling of "*Wells #1/#2 (Both)*" is supposed to mean or represent on the map. Please plainly label the wells as Kent Reuther #1 and #2 and Keith Reuther #1 and #2 so that the water well certification information provided in Appendix 3.3-2 can be matched to the correct well location on the map. Without accurately mapped well location data, the well certification information is basically useless. It was also noted that there are several instances where there is a single owner of multiple wells and the numbers associated with a particular well location needs to be placed near the well that it represents for the same reason that was described for the Reuther wells. Please address the multiple elements this deficiency describes. (BEB)
29. Follow-up to item No. 67: Information regarding the D. Porsborg wells and the J. Lackman well is still covered up by the permit boundary. Please revise as was originally requested. (BEB)

Appendix 3.3-7 Monitoring Well Hydrographs

30. Follow-up to item No. 74: The original item requested that the water level hydrograph for Sheet Sand monitoring well C4-1 be updated to eliminate erroneous water level information on the graph and your response was that the graph was updated. The graph was not updated and in fact, was eliminated from the section. In addition to C4-1, monitoring wells C1-1, C2-1, C2-2, C3-1, C3-2, C4-2, and C5-1 were all eliminated from this appendix. Now that the C1, C2, C3, and C4 nests of ground water monitoring wells are actually located within the BNCR-1101 permit area and are included in your ground water monitoring plan for Permit BNCR-1101 and information incorporated into many other ground water sections of the permit, all of the water level and water quality data originally provided for those monitoring wells in the application need to be re-inserted in the permit. Please provide the requested update to well C4-1 and return the above-mentioned monitoring wells to this appendix and any other sections of the permit requiring the information. (BEB)

Section 3.4 Surface Water

31. Follow-up to item 79: The location of SCS Dam 5 Creek is not shown on Plate 3.4.2. Please update the map or the link in the first paragraph on page 2 of Section 3.4 as appropriate. (RLK)
32. Follow-up to item 80: The location of SCS Dam 5 Creek is not shown on Plate 3.4.2. Please update the map or the link in the second paragraph on page 2 of Section 3.4 as appropriate. (RLK)
33. Follow-up to item 81: Please clarify what type of analytical analysis was completed in regard to surface water quality information discussed in the first sentence of water quality narrative. It may be helpful to indicate that surface water quality was evaluated by analyzing water samples from surface water features in the permit area for major cations and anions as well as related parameters such as pH, total dissolved solids, and total suspended solids. (RLK)
34. Follow-up to item 81: Please revise the forth sentence in the first paragraph of the water quality narrative for clarity. The link to Appendix 3.4-1, Surface Water Analysis, does not appear to be relevant to the sentence and the appropriate reference and link are provided later in the narrative. The surface water sampling locations that will continue to be monitored during ongoing operations and sampling protocol are described in Section 4.7. In addition the text "as well" added, following the link to Appendix 3.4-1 does not seem necessary. (RLK)
35. Follow-up to item 82: In the third paragraph, please clearly indicate that the two sampling locations are developed water resources located on SCS Dam 5 Creek. (RLK)

36. Follow-up to item 86: Please revise the last paragraph in the Section 3.4 narrative for clarity. It would be helpful to the reader to cite the NDSU Extension Service publication regarding livestock water suitability. (RLK)
37. Follow-up to item 89: Please revise the sentence added to the end of the last paragraph of the Surface Water Quantity narrative to indicate that the stream segments may dry up and flow only in response to precipitation due to a decrease in the levels of ground water influx to surface water and reduces flows from springs/seeps. Also the flow rate summary values provided for Square Butte Creek do not correspond to the information presented in Appendix 3.4-3. It may be worth noting that the average April flow rate for Square Butte Creek increased 5cfs from 2010 to 2011 for the period of record as a result of the runoff occurring in April 2011. (RLK)
38. Follow-up to item 90: Table 3.4-2 was not added or is not identified as indicated in the response. While the narrative added under the heading Usable Pre-mining Water Supplies is appreciated, please review and revise the narrative for clarity. The first paragraph is disorganized. The sentences related to reclamation and landowner preference (original text) in the first paragraph would be more relevant to the paragraph beginning after the added text on page 6 of Section 3.4. A sentence in the third paragraph states that “BNI will not be mining through any of the intermittent stream channels, therefore no effects will be seen in functionality of these streams in concern of pre-mine usages such as livestock watering.” This statement is an oversimplification of the potential effects the planned mining and associated disturbance will have on intermittent streams in particular the springs/seeps that contribute to the intermittent flow and water supply to the streams. In addition the conclusion that there will be no effects on the functionality without some post mine enhancements contradicts statements made in the Probable Hydrologic Consequences narrative. In the paragraph beginning with the statement that the springs and seeps shown on Plate 3.4-4 contribute water to other water features within or near the permit area on a variable/seasonal basis, it appears that the last sentence is discussing a specific example thus the type of features should be specified for clarity. (RLK)
39. Follow-up to item 94: Please review and revise the narrative added to the first paragraph under the heading Usable Pre-mining Water Supplies. It is not clear from the narrative that Square Butte Creek (Nelson Lake) is the water source used at Minnkota’s generating facility for cooling water and other industrial purposes. Also clarify the last sentence to provide a sense of how extensively the records were investigated to determine potential past agricultural uses or state the current status based on observation and current water use permits. (RLK)
40. Follow-up to item 95: Please revise the paragraph for clarity. It would be helpful to the reader to include the title or state the topic for the report found in Appendix 3.4-9. Also, in the second to last sentence it is not clear what conditions may be different for the “long-range forecast” for expected future classifications. (RLK)

41. Follow-up to item 97: Please revise the sentences added to the second paragraph of the PHC to clarify how the springs/seeps were evaluated for their contributions to other water features and what information is presented in the referenced appendices. (RLK)
42. Follow-up to item 98: Please provide additional narrative on how wetland designs may be adjusted for replacement wetland acreage in drainages where the source for flows from springs/seeps may be removed by mining. (RLK)

Plate 3.4-1 General Drainage Map

43. Follow-up to item 101: On Plate 3.4-1, please extend the line depicting SCS Dam 5 Creek to SCS Dam 5 and extend the lines for the tributaries beginning in the permit area to the main stem of the creek. Also, please label the creek on the map. (RLK)

Plate 3.4-5 Lentic Wetlands, Lotic Wetlands, and DWR Locations

44. Follow-up to item 103: On Plate 3.4-5, Lentic Wetlands, Lotic Wetlands and DWR Locations, please identify the location for DWR-SW30-1-141-83 which is discussed in the Section 3.4 narrative. (RLK)
45. Follow-up to item 103: The symbols used on the map for “Springs & Seeps Sampling Locations” and “Springs_AreaC_2012” appear to be the same; please differentiate the symbols on the map. Also, please label the symbols appearing in the map legend under Linear (Lotic) Wetlands & DWR. (RLK/GAW)
46. Follow-up to Item No. 1: Please remove the associated disturbance boundary and mining disturbance boundary lines from Plate 3.4-5 and all other maps that contain baseline environmental resource data. Including these planned disturbance boundaries make the maps more difficult to interpret and these maps will need to be revised every time the mine plans change. (GAW)
47. The narrative in the wetlands discussion on pages 8 through 11 of Section 3.5, Pre-Mining Land Use, states that linear wetland are lentic features and depressional wetlands are lotic in nature but the Legend on Plate 3.4-5 indicates that linear wetlands are lotic and depressional wetlands are lentic. Please review and update as necessary. (GAW)
48. Follow-up to Item No. 207: Please revise the legend of Plate 3.4-5 so that there is a difference between the springs and seeps that were sampled and those that were not sampled. Both are identified with an orange circle outlined in black. (GAW)
49. Please revise Plate 3.4-5 so that the individual wetlands can be identified. For example, 22 seasonal and 26 temporary wetlands are labeled in the NE1/4 of Section 16 but it is difficult to determine the location of each individual wetland. The black lines around the color symbols of each wetland create the appearance that the whole drainage is a black line. The map may need to be broken down by section to allow a larger scale. It is not

clear why separate wetlands of the same class that are contiguous to each other in linear drainages under the same ownership are delineated separately. In other words, contiguous wetlands of the same class and same ownership should be identified as one wetland.
(GAW)

Appendix 3.4-1 Surface Water Analyses

50. Follow-up to item 106: Please provide an explanation for why the sample data for Access (East) and Access (West) were removed. Even if the locations are no longer in the permit area, the data obtained from these locations could still be relevant to permit area. (RLK)
51. Follow-up to item 107: The location for spring sampling location SPG-NW20-1-141-83 is not identified on Plate 3.4-4, Spring/Seep & SW Monitoring Locations. Please review and revise as appropriate. (RLK)
52. Follow-up to item 110: We appreciate changes made to the tables in Appendix 3.4-1; however, please start each water feature type subdivision on a new page and sort the sample site groups by township, range, section and then by quarter sections. (RLK)

Appendix 3.4-7 Spring/Seep Report

53. Follow-up to item No. 112: To retain consistency within the permit, please update the name of this section in the Table of Contents to Spring/Seep Information Summary, similar to the name of the section provided at the top of the spreadsheets. Additionally, as originally requested please add a column to these spreadsheets that identifies the probable hydrostratigraphic unit that is the source unit of ground water discharge as seeps and springs. (BEB)

Section 3.5 Pre-Mine Land Use

54. Follow-up to item No. 120: In the first sentence on Roads, Trails, or ROW's, the total acreage is listed as 294.26 acres; please change this to 294.44 acres to be consistent with the acreage given on Table 3.5-1. (ZAT)
55. Follow-up to item No. 130: The land descriptions for Section 18 shelterbelts on Table 3.5-2 appear to be switched; please review and correct as appropriate. (ZAT)
56. Follow-up to item No. 131: Please correct the footnote section of Table 3.5-2 Premine Shelterbelt Conditions in Section 3.5. Move the Shelterbelt Age Classifications footnote so it is all together on one line. (ZAT)
57. Follow-up to item 149: In the Developed Water Resource narrative in Section 3.5, please include a brief narrative and reference to Table 3.4-1, Pre-Mining Developed Water Resource Conditions, which provides detailed information on the pre-mine Developed Water Resources in the permit area. (RLK)

58. Follow-up to item No. 179: As previously requested, change the title of Appendix 3.5-2 to Pre-mine Land Use Acreage tables by Landowner and Mapping Unit on page one of Section 3.5 so the table has one name consistently throughout the permit. (ZAT)
59. Follow-up to item No. 133: A new sentence on page 8 of Section 3.5 indicates that Class II and III as defined by Stewart and Kantrud are considered seasonal wetlands. This is incorrect. Class I and II wetlands are considered temporary wetlands. Please correct this error. (GAW)
60. Follow-up to item No. 133: Table 3.5-3 on page 10 of Section 3.5-1 includes abbreviations that need to be explained. Please clarify what “LSW” wetlands means in the table and the acronym “DWR’s” should be clarified. (GAW)
61. Follow-up to item No. 155: The last sentence of the Gravel/Scoria Pits narrative on page 14 of Section 3.5-1 states that the active land use of these areas is native rangeland. The scoria pits in Section 24 are not classified as native grassland in Table 3.5-1 and these areas are not included in the Ecological Site table in Appendix 3.5-2 so stating that the current active land use of these areas is native rangeland is confusing. The discussion that was added to this narrative regarding rock quarries and mine dumps doesn’t belong in this narrative as these areas are being classified as native grassland. This language should be included in the native grassland section rather than the Gravel/Scoria land use discussion. (GAW)
62. Follow-up to item No. 164: Please include a narrative for the Industrial land use in Section 3.5-1 as has been done for all other land uses. Table 3.5-1 shows that there are 5.38 acres of Industrial land in the permit. Please discuss this land use in Section 3.5-1. (GAW)

Plate 3.5-1 – Pre-Mine Land Use

63. Follow-up to item No. 130: Please label each shelterbelt on the Pre-Mining Land Use Map, Plate 3.5-1. (GAW)
64. Follow-up to items No. 133, 205, and 224: New language in the wetlands sections of Sections 3.5, 3.6 and Appendix 3.6-5 state that Corps of Engineers Wetland Delineation Manuals were used to classify the wetlands. The USACE Wetlands Delineation Manual (1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region (Version 2.0) are not wetland classification systems. As indicated by the titles of these documents, they are delineation manuals not classification manuals. Page 14 of the USACE Wetlands Delineation Manual (1987) clarifies the purpose of the delineation manuals and references the Fish and Wildlife Service classification system developed by Cowardin et. al. (1979). Therefore, please revise to clarify the wetland classification system that was used and classify the wetlands using an appropriate established classification system. For example, it is important to know that

the wetland in the NE¼NW¼ of Section 19 is a fen wetland. It is recommended that Appendix 3.5-4 be revised to include the classification of each wetland. (GAW)

65. Follow-up to item No. 169: Please revise Sections 3.5, 3.6 and/or 4.12 to specifically clarify if there are any previously tilled areas with tracts of native grassland. This should include areas that were seeded or otherwise reverted back to grassland and depict these areas on Plate 3.5-1. NDAC 69-05.2-08-08 requires a detailed narrative describing the nature and variability of the vegetation in each mapping unit and previously tilled native grassland should normally no longer be classified as its previous ecological site. The general statements on page 2 of Section 3.5 do not meet the requirements of NDAC 69-05.2-08-08(1)(d). (GAW)

Appendix 3.5-1 Landuse Acres per Landowners

66. Please revise the title of Table 3.5-1 in Appendix 3.5-1 to Pre-mine Land Use Acres per Landowner to be consistent with references to this table in the narrative. (ZAT)

Appendix 3.5-2 Premine Land Use Acreages

67. Follow-up to item No. 176: Please check page 157 in Appendix 3.5-2 that is located between the rangeland tables for Section 13 and the E½ of Section 24. The page is not labeled and appears to be out of place since the total does not match any rangeland acreage in the Summary table. Please review and correct as appropriate. (ZAT)
68. Follow-up to item No. 182: Please review Section 5 information on the Woodland Acreage summary table and the landowner tables of Appendix 3.5-2; the land descriptions for Section 5 should be the same in the Woodlands Summary table and on the two Minnkota tables. The original deficiency requested a consistent land description between Table 3.5-1, the Woodland Summary table and the individual woodland landowner tables; however, BNI has chosen to use more specific land descriptions for the Woodlands Summary table and therefore the individual woodland landowner acreage tables should be listed as they are on the Woodlands Summary table on page 65 of Appendix 3.5-2. (ZAT)
69. Follow-up to item No. 182: Please move page 66, the Wetland Acreage Tables Summarizing Acres per Landowner title page, out of the woodlands section to the appropriate section of Appendix 3.5-2. Also move the bookmark for this table out of the woodlands section to its appropriate location. (ZAT)

Section 3.6 – Pre-Mine Vegetation

70. Follow-up to items No. 197 and 198: Please revise the Claypan discussion on page 2 of Section 3.6 and the Sandy narrative on page 4 of Section 3.6 to clarify if the sampled claypan and sandy sites are representative of the other claypan and sandy sites in the study area. See Appendix 3.5-2 to determine which tracts have considerable acreage of these sites. (GAW)

71. Follow-up to item No. 205: The heading at the bottom of page 10 of Section 3.6 is labeled “Linear Wetland (Lotic)” but a sentence in the preceding paragraph states that “there are both linear (lentic) and depressional (lotic) wetlands found within the permit boundary”. Please correct this discrepancy. (GAW)
72. Follow-up to item No. 205: A sentence in the third paragraph on page 10 of Section 3.6 states that Class II and III wetlands were classified as seasonal wetlands but our Guidelines Document indicates that class II wetland should be considered temporary. Please review and clarify why class II wetlands were classified as seasonal wetlands. Perhaps this is because of the vegetation established due to the ground water influences. (GAW)
73. Follow-up to item No. 208: The Depressional Wetlands narrative that begins on page 11 of Section 3.6 clarifies that the sampled representative depressional wetlands are located in Section 31 which is now outside of the proposed permit boundary. The resulting inventory and floristic quality summary shows that each of these wetlands have poor floristic quality index rating values. The Reclamation Division finds it completely unacceptable to portray these wetlands as representative of the depressional wetlands in native grassland because these features are located on lands that were mined and reclaimed under early reclamation laws or even prior to implementation of these laws. That portion of Section 31 where these wetlands were located was included in Permit No. 4 according to BNI’s Annual Map and the land was bond released in 1975. Thus, it is not acceptable to state that these depressional features are representative of natural undisturbed depressional wetlands in the proposed permit area. Please revise the narrative and remove all reference to these wetlands that are located outside of the proposed permit boundary and provide new information that is representative of natural depressional wetlands in the permit area. Please comply with the wetlands pre-mining assessment requirements listed on page II-H-6 of our guidelines. (GAW)
74. Follow-up to item No. 212: Please revise the woodland and native grassland narratives in Section 3.6 to provide an assessment of the spatial frequency or relative abundance of low shrub communities not considered woodlands in each tract of native grassland. NDAC 69-05.2-08-08(1)(d). GAW

Plate 3.6-2 - Woodlands

75. Follow-up to item No. 218: Please increase the size of the diamond symbol that is being used to show where woodland density samples were taken on Plate 3.6-2, Woodlands. This symbol is too small to be seen on the map. A larger symbol with a leader showing the location may be necessary so the symbol does not cover up small woodlands. (GAW)

Appendix 3.6-5 – Wetland Drawings and Methodology

76. Follow-up to items No. 133, 205 and 224: New language in the wetlands sections of Sections 3.5, 3.6 and Appendix 3.6-5 state that Corps of Engineers Wetland Delineation

Manuals were used to classify the wetlands. The USACE Wetlands Delineation Manual (1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region (Version 2.0) are not wetland classification systems. As indicated in the titles of these documents, they are delineation manuals not classification manuals. Page 14 of the USACE Wetlands Delineation Manual (1987) clarifies the purpose of the delineation manuals and references the Fish and Wildlife Service classification system developed by Cowardin et. al. (1979). Therefore, please revise to clarify the wetland classification system used and classify the wetlands using an appropriate established classification system. We recommend using the US Army Corps of Engineers Hydrogeomorphic classification system (HGM) as is mentioned on page 5 of Appendix 3.6-5. A link to the HGM classification system is as follows - <http://el.erdc.usace.army.mil/elpubs/pdf/trel06-5.pdf> (GAW)

77. Follow-up to item No. 228: A sentence at the end of the first paragraph on page 5 of Appendix 3.6-5 states that detailed information for springs has been included within the permit separate from lentic and lotic wetlands as springs and seeps are unique features. Please clarify that springs and seeps are wetlands and address them as wetlands in the wetland sections of the permit. (GAW)
78. Follow-up to item No. 229: See follow-up to item No. 208 above. The sample depressional wetlands are outside of the permit boundary on lands that were previously mined. Thus, they should not be used as representative of undisturbed premine depressional wetlands. (GAW)
79. Follow-up to item No. 231: Please revise Appendix 3.6-5 to clarify how individual wetlands were delineated in continuous linear reaches of drainages as shown on Plate 3.4-5 and listed in Appendix 3.5-4. For example, 26 temporary and 22 seasonal wetlands have been identified in the intermittent stream located in the NE¼ of Section 16. Please explain why this entire drainage way in the NE¼ was not classified as a single wetland recognizing that portions are more temporary in nature than other areas. (GAW)

Appendix 3.6-7 Shelterbelt Drawings/Descriptions

80. Follow-up to item No. 243: Please review Appendix 3.6-7 for accuracy, completeness and organization. Several deficiencies requested changes to this appendix and a large amount of information was added, but no change in text color was used to indicate the new information. This appendix needs to be proofread for minor errors and maps should be placed directly after the written description. It was also noted that SB24A is depicted on the map for the E½ of Section 24, but this shelterbelt is not depicted on Plate 3.5-1. Section 5 acreages need some explanation or clarification on the map to enable any reader to easily understand the different acreages given on page 2, which gives quarter section acreages at the top of the page and shelterbelt acreage two paragraphs later. This could be explained by adding quarter lines to the map and/or a brief explanation that part of SB5B is in the NW¼. (ZAT)

81. Follow-up to item No. 237: Please review the links to the bookmarks in Appendix 3.6-7. The Section 24 bookmark opens to a shelterbelt located in the SE¼ of Section 19 and Section 19, S½ bookmark does not contain the shelterbelts located in the SW¼ of Section 19 but instead this shelterbelt description is located with the Section 18 information. There is no shelterbelt drawing of the shelterbelt labeled Section 13-1 in the bookmark section of Appendix 3.6-7 and the shelterbelt depicted in the SE¼ of Section 13 on the Pre-Mine Land Use Map is not included in either of the drawings/descriptions in Section 13. Please review and revise accordingly. Please include the shelterbelt parcel description in the bookmark links. (GAW)
82. Follow-up to item No. 239: Planting No. 5, SB24A, on the shelterbelt survey form for the E½ of Section 24, page 34, is not shown on the Pre-Mine Land Use Map, Plate 3.5-1. Please review and revise as necessary. (GAW)

Appendix 3.6-8 – Woodland Cover and Density Data

83. Follow-up to item No. 258: The tall shrub woody plant density table shows that the sample community in the NW¼ of Section 5 is comprised of lilac and caraganna. Please describe in the permit why this tall shrub community was considered woodland rather than a shelterbelt. (GAW)

Section 3.7 Prime Farmlands

84. Follow-up to item No. 261: As required by NDAC 69-05.2-05-02(1) and 69-05.2-09-15, please review the following items in Section 3.7 and revise as appropriate: (WTG)
 - a. Expand the Section 3.7 narrative to include the information required for prime farmland operation and reclamation plans by NDAC 69-05.2-09-15(7) or provide a reference to the section of the permit where the information is provided.
 - b. Add headings to Table 2b now that one table (previously titled as Figure 2) has been split into two tables (Tables 2a and 2b).
 - c. Revise the acreage numbers for prime farmland soil map units described throughout the narrative or listed in Tables 2a and 2b as necessary to be consistent. Most of the total acreages listed in Tables 2a and 2b do not agree with acreage totals described in the narrative.
85. Please correct the narrative on page 6 of Section 3.7 to state that there are five, rather than six, prime farmland soil map units within the BNCR-1101 permit boundary and remove map unit GcB from the listing that follows. (WTG)
86. Please describe the minimum percentage value that constitutes a dominant soil map unit within the mining disturbance boundary on page 6 of Section 3.7. (WTG)
87. Please remove the reference to “*See Figures 1b & 2b below*” on page 6 of Section 3.7 that is a remnant of the November 28, 2012 version that no longer applies. (WTG)

88. Please reference Plate 3.7-2 in the paragraph that references Tables 3a and 3b on page 6 of section 3.7 for a depiction of dominant soil map units in the mining disturbance boundary and dominant soil map units in NRCS prime farmland soil map units. (WTG)
89. Please correct the prime - nonprime designations in Tables 3a and 3b for Williams soil map units. Williams soil map units are listed as prime but they should be listed as non-prime. (WTG)
90. As noted in a similar deficiency for Plate 3.7-2, the soil map units listed in Table 3a in Section 3.7 should exactly match the soil map units depicted on Plate 3.7-2 and listed in the legend of Plate 3.7-2 as dominant soil map units in the mining disturbance boundary. Soil map unit 32B Amor loam is listed in Table 3a as occupying seven percent of the mining disturbance boundary but does not appear to be depicted or listed on Plate 3.7-2, while soil map unit 22B Arnegard loam is depicted and listed on Plate 3.7-2 but is not listed in Table 3a. Please carefully review and correct these significant discrepancies. (WTG)
91. Please correct the sentence on page 7 of Section 3.7 stating that four soil map units comprise the dominant soils within the mining disturbance boundary. The sentence should reference five rather than four soil map units. (WTG)
92. Please expand Table 4 to include NRCS subsoil data for the entire profile depth and cite a reference (website) for the data presented. (WTG)
93. Please expand the narrative at the bottom of page 7 of Section 3.7 to explain how the values in Tables 5 and 6 were derived or what they represent. (WTG)
94. Please add Amor loam and its analytical values to Table 6. (WTG)
95. Please replace the abbreviations in Tables 5 and 6 headings with the complete analyte term. We assume that CCE is intended to represent cation exchange capacity that was analyzed but as presented it could be mistaken for calcium carbonate equivalent that does not appear to have been analyzed. (WTG)

Plate 3.7-1 Prime Farmland Soils

96. Follow-up to item No. 267: Please revise Plate 3.7-1 to correct the prime farmland soil map unit boundary and label discrepancies in Section 12, T141N, R84W between what is represented on Plate 3.7-1 and the prime farmland map units defined by the NRCS. (WTG/RLK)

Plate 3.7-2 Dominant Order 1 Soils and NRCS Designated Prime Farmland Areas Within Mining Disturbance

97. As noted in a similar deficiency in Section 3.7, the soil map units listed in Table 3a in Section 3.7 should exactly match the soil map units depicted on Plate 3.7-2 and listed in the legend of Plate 3.7-2 as dominant soil map units in the mining disturbance boundary. Soil map unit 32B Amor loam is listed in Table 3a as occupying seven percent of the mining disturbance boundary but does not appear to be depicted or listed on Plate 3.7-2, while soil map unit 22B Arnegard loam is depicted and listed on Plate 3.7-2 but is not listed in Table 3a. Please carefully review and correct these significant discrepancies. (WTG)

Plate 3.8-1 Soils Map

98. Follow-up to items No. 272f and 272i: Please review the following items on Plate 3.8-1 and revise as appropriate: (WTG)
- a. Please rearrange or add soil map unit labels as necessary in the W½ of Section 5 of the Lunde soil survey area to ensure that each delineation are labeled with a soil map unit symbol.
 - b. Please add the soil sample location number for the sample located near the center of Section 19.

Appendix 3.8-1 High Intensity Soil Survey Report by Prairie Soil Consulting, LLC

99. Follow-up to item No. 273: Please revise footnote number 2 on page 1 of Appendix 3.8-1 to reference Appendix 3.8-3 (not Appendix 3.8-2) as the 1995 Lunde soil survey report. (WTG)

Section 3.9 Alluvial Valley Floors

100. Follow-up to item No. 275: Appendix 3.9-1 is labeled as *Alluvial Valley Floor Determination* but the information provided in the appendix is not the AVF determination, but rather the AVF report. AVF determinations are provided in a separate section. As stated in the original request, please rename Appendix 3.9-1 to *Alluvial Valley Floor Evaluation Report*. (BEB)

Section 3.10 Fish and Wildlife Resources

Appendix 3.10-3 – Fish and Wildlife Monitoring Plan..... Whooping Crane Study

101. Follow-up to items No. 292, 338 and 531: Please revise the Significant Ecological Communities discussion that begins on page 22 of Appendix 3.10-3 to discuss meaning of the state and global ranking systems and if there are any regulations protecting these significant communities. Please also discuss why the tall shrub woodlands in the permit area are not considered significant buffaloberry shrubland communities, why the western

snowberry communities are not considered significant buckbrush shrubland communities, why the saline ecological site is not considered a significant saline lowland ecological community and if the other grassland significant ecological communities listed in the table on page 22 are present in the permit area. Please revise the language on page 22 that states that the buffaloberry shrubland and buckbrush shrubland “may” be found in the permit area to specifically state whether or not these communities exist in the permit area. Please also include a map that depicts all significant ecological communities, including the western snowberry shrubland community type, and provide an assessment of the relative abundance of the buckbrush community type in the proposed permit area. (GAW)

102. Follow-up to item No. 325: A new sentence on page 17 of Appendix 3.10-3 incorrectly states that there has never been a recorded sighting of a Dakota skipper in Oliver County. Please correct this error as the species has been identified at the Cross Ranch in Oliver County. (GAW)
103. Follow-up to item No. 328: A map or plate entitled, Attachment 1: Spraugue’s Pipit Sightings and Dakota Skipper Survey Areas have been created in response to a technical deficiency no. 328; however, this attachment is buried thirty pages deep into Appendix 3.10-3. Please include a shortcut to this Attachment in the Bookmark section of the permit and entitle this map as a Plate rather than an Attachment as was done for all other maps included in the permit. (GAW)
104. Follow-up to item No. 329: The ND GAP conclusions paragraph on page 26 has been revised to state that the bluestem-needlegrass-wheatgrass community is located in the Coteau region. Please review and clarify if this community type is not actually referring to the tall grass prairie which is not in the Coteau region. (GAW)
105. New language on page 20 of Appendix 3.10-3 mentions a USACE Jurisdictional Determination being prepared in 2009. Please include a copy of all correspondence regarding this determination and the USACE Jurisdictional Determination in Sections 3.4 or 3.6 of the permit and include a copy of the issued Regional General Permit 11-01 (2011-2288-BIS). (GAW)

Appendix 3.10-7 – Grouse & Pheasant Data 2010-2011 Table

106. Follow-up to item No. 341: Please include Plate 3-10-2 in the HTML table of contents under the heading Plates. (GAW)

Plate 3.12-1 Cultural Resource Location Map

107. Please correct the handful of typographical errors associated with the legend on the cultural resource location map. It appears that most of the typographical issues are due to unnecessary or inadvertent capitalization of the letter i. Please review and update. (BEB)

Section 4.1 Operations Plan

108. Follow-up to items No. 360 and 365: Proposed impoundment locations have not been modified as a result of deficiency 360 and the perennial and intermittent stream discussion in Section 4.1 has not been updated to provide sufficient justification to allow construction of proposed sediment ponds P-16-1, P-21-5 and P-12-1. BNI's response to item 365 was to move the breeding bird survey location from Section 16 to Section 9. As previously requested, please revise the mining plan to minimize disturbance to lands that are not going to be mined in Section 16. The Reclamation Division does not find it acceptable to construct an MSHA class pond that will need to remain in place for life of mine in the intermittent stream in the NE¼ of Section 16. A portion of this watershed will not be mined until 2038 so clean water from Sections 8 and 9 will be contaminated and unnecessarily managed for life-of-mine. Alternative ponds must be designed in secondary drainages to handle runoff from areas that will be mined during the first term of the permit. It is also unacceptable to propose overburden and SPGM piles on important wildlife habitat in Section 16. An alternative location must be found that will accommodate the plan to use these stockpiles by 2019. NDAC 69-05.2-13-05, NDAC 69-05.2-16-20. (GAW/RLK)
109. Follow-up to item No. 364: Please revise Section 4.1 to include the information about avoiding cultural resource site 320L333 until a determination has been made. Responses to deficiencies must be addressed in the permit not in the response letter to our technical deficiency letter. Section 4.1 should state that when the dragline walkway is constructed, BNI will have an archeologist on site during construction to further delineate the site's boundary as is stated in the BNI response letter. (GAW)
110. Follow-up to item No. 366: Please revise Sections 4.1 and 4.9 to clarify when the dragline walkway corridor will be converted to an access trail and partially reclaimed. (GAW)
111. Follow-up to item No. 367: Please depict on the Pit Layout and Facilities Map, Plate 4.1-1, areas that will be used to protect and enhance fish and wildlife and related environmental values as required by NDAC 69-05.2-09-02(11). Plate 4.12-1, Post Mine Land Use map, does not identify these areas as indicated in the response to this deficiency. (GAW)

Plate 4.1-1 Pit Layout and Facilities Map

112. Follow-up to item No. 379: The depiction of cultural resource site 320L544 that is located in the NW¼ of Section 16 has now been added to the map; however, the labeling of this site is provided in both blue and green colored text. In the legend of the map, the blue text for cultural resource sites represents those sites that require mitigation and the green text represents those sites that require further testing. Please eliminate the green text for this site and retain the blue text because it has been determined that this site requires mitigation prior to site disturbance. (BEB)

113. Follow-up to item No. 384: Please comply with deficiency 384. The outlet of diversion 12-1 must be moved so that it outlets into Pond 12-1, not the open-channel spillway. The outlet of Diversion D-7-1 is also shown outletting into the open channel spillway of pond P-7-1. Please correct. (BAJ/FSE)
114. Follow-up to item No. 387: Please address original deficiency 387 as the appropriate changes have not been made as indicated in the deficiency response. (BAJ)

Section 4.2 Existing Structures

115. Follow-up to item No. 388: Please move item number 10 to the section titled "*Occupied dwellings and unoccupied buildings that are not within the permit boundary and will not be disturbed*" because the St. Lucas cemetery is not in the permit boundary. Please also list and describe the Great River Energy tower in Section 8 in the same section. (WTG)
116. Follow-up to item No. 390: Please address original deficiency 390 as the appropriate changes have not been made as indicated in the deficiency response. (BAJ/FSE)
117. Follow-up to item No. 391: Please address original deficiency 391 as the appropriate changes have not been made as indicated in the deficiency response. (BAJ/FSE)
118. Follow-up to item No. 392: Please address original deficiency 392 as the appropriate changes have not been made as indicated in the deficiency response. (BAJ/FSE)

Plate 4.2-1 Existing Structures

119. Follow-up to item No. 396: Please address original deficiency 396 as the appropriate changes have not been made as indicated in the deficiency response. (BAJ)

Section 4.4 Blasting Plan

120. Follow-up to item No. 403: Please correct the Notice of Blasting schedule to comply with deficiency 403 as the appropriate changes have not been made as indicated in the deficiency response. (BAJ/FSE)

Section 4.5-1 Transportation Narrative

121. Follow-up to item No. 411: Please remove the reference to constructing Haulroad A from station 120+00 to 230+00 with subsoil to comply fully with deficiency 411 (page 3 Section 4.5.) and for Haulroad Section C - Dragline Walkway on page 4 of Section 4.5. (BAJ/FSE)
122. Follow-up to item No. 412: Please comply with deficiency 412 to add a schedule (we suggest a table format) that clearly shows the schedule of removal and reclamation of roads not retained for proposed post-mining land use. (BAJ)

123. Follow-up to items No. 415 and 416: With regard to BNI's proposal to construct portions of Haul Road Section A and the Dragline Walkway Corridor (subsequent Access Road Section C) with subsoil, we do not disagree with the assertion that Table 4.11-1 indicates an SPGM surplus for the permit area. The projected required SPGM respread volumes and the projected SPGM salvage volumes listed in Table 4.11-1 are required for the permit application to demonstrate that the SPGM volume (and other suitable strata if necessary) is adequate to meet the redistribution requirements of NDAC 69-05.2-15-04(4)(a). Please note; however, that the projection in Table 4.11-1 is not equivalent to a permit subsoil surplus that might be demonstrated in a detailed annual soil handling plan based on the inventory of stockpiled subsoil and the projected respread depth(s) of acreage requiring subsoil resspreading. Considering that a subsoil surplus does not exist in the permit area (no excess stockpiled subsoil inventory), the predictable loss of subsoil as spoil and subsoil are comingled during construction and road surfacing material is removed during reclamation, and the difficulty of maintaining an accurate inventory of the proposed haul road subsoil stockpiles, the Reclamation Division has determined it is not appropriate to use subsoil for haul road, access road, or walkway corridor construction in BNCR-1101. (BAJ/FSE/WTG)
124. Follow-up to item No. 410: Discussion on page 6 of Section 4.5-1 states that alternative road corridors around the south and east sides of the permit boundary are being completed and that it will be submitted to the Board of County Commissioners in mid-2013. Please update to include this information if the appropriate action has taken place prior to responding to this deficiency letter. (GAW)

Section 4.6 Appendices 4.6-1 through 4.6-12

125. Follow-up to item No. 436: Please standardize how the design information for the ponds in the water management section is presented. Changes were not completed as described. (FSE)
126. Follow-up to item No. 438: Please update Plates 4.1-1 and 4.6-1 as necessary to depict all design changes made in the appendices. (FSE)
127. Follow-up to items No. 439, 442, and 445: The pond design information in some appendices have inconsistencies; please review and make sure that the values are consistent throughout the designs. (FSE)
128. Follow-up to item No. 444: The calculations are identical to those previously submitted. Please explain if the previous design will be able to handle the combined discharge. (FSE)
129. Follow-up to item No. 449: Please respond to deficiency 449 as the appropriate changes have not been made as indicated in the deficiency response. (BAJ)

Section 4.9 Reclamation Schedule

130. Follow-up to item No. 459: Please respond to deficiency 459. A valid reason must be provided to request reclamation variances for corridors as wide as 800 feet on either side of the ramp centerlines. (BAJ/FSE)

Section 4.12-1 Reclamation Plans

131. Follow-up to item 502a: In Section 4.12-1, the post-mine narrative for the W $\frac{1}{2}$ of Section 7 should reflect that only a portion of the tract will be converted to cropland. (RLK)
132. Follow-up to item 502b: In Section 4.12-1, the post-mine narrative for the S $\frac{1}{2}$ of Section 8 should reflect that only a portion of the native grassland in the tract will be converted to cropland. (RLK)
133. Follow-up to item 502c: In Section 4.12-1, the post-mine narrative for the SW $\frac{1}{4}$ of Section 16 should reflect that only about 20 acres of the native grassland in the tract will be converted to cropland. (RLK)
134. Follow-up to item 502d: In Section 4.12-1, the post-mine narrative for the E $\frac{1}{2}$ of Section 17 does not agree with Table 1 which indicates that the native grassland in the tract was converted to cropland when the post mine acreages indicate that cropland will actually be decreased. Also, the cropland boundary depicted on the Post Mine Land Use map, Plate 4.12-1, should be revised since it contains narrow peninsulas extending into native grassland that would be impractical to farm. (RLK)
135. Follow-up to items No. 482 and 535: Please revise the post mining land use discussion for the W $\frac{1}{2}$ of Section 7, to discuss how farm equipment access will be provided to the native grassland that is going to be converted to cropland in the W $\frac{1}{2}$ of Section 7 located north of the intermittent stream. It does not appear that farm equipment will be able to gain access to this cropland area. Thus, it does not appear that requirements of NDAC 69-05.2-23-03 will be achieved. This proposed alternative landuse change is increasing fragmentation of the native grassland which was repeatedly pointed out as being a detriment in the premine land use section of the permit. Please revise as necessary to meet the requirements of regulation. (GAW)
136. Follow-up to items No. 482 and 535: In each of the tract discussions in Section 4.12-1, please specifically state the acreage of land use conversion. (GAW)
137. Follow-up to items No. 482 and 535: The narrative discussing the proposed land use conversion in the E $\frac{1}{2}$ of Section 17 indicates that native grassland is being converted to cropland. However, Appendix 4.12-6, Land Use Acreage Table, and the Postmine Land Use map show that there will be about 40 acres less cropland post-mining than existed

- prior to mining. Please revise the narrative accordingly and square up the field boundaries of the cropland fields so that they will be practical to farm. (GAW)
138. Follow-up to items No. 482 and 535: The last few sentences of the narrative discussing converting about 120 acres of native grassland in the NW1/4 of Section 18 states that BNI plans to design land uses to reduce fragmentation of native grassland but the land use change being proposed does exactly that. Premining the tract borders native grassland on all four sides with the exception of a portion of the west side. Thus, the statement referenced above is incorrect. The premine wildlife inventory shows that Sprague's Pipits were sighted twice on this tract, that the land has potential habitat for the Dakota Skipper and that sharptailed grouse lek C3 is located on this tract. Please revise to show that native grassland will not be fragmented and that replacement habitat for the species documented to exist on the tract prior to mining will be provided. (GAW)
 139. Follow-up to item No. 484: A sentence in the first paragraph on page 8 of Section 4.12 states that even though there will be land use changes, the conditions of the post-mine land uses will be equal or better than those that exist in the pre-mine. Please clarify how conditions will be equal or better if there are land use changes. (GAW)
 140. Follow-up to item No. 487: Please revise the native grass seed mixture Table 3 to include several native forb species and a greater number of grass species using the best technology currently available. (GAW)
 141. Follow-up to item No. 486: The bookmark table of contents identifies Figure 3 as Perennial Seed Mixture but the figure is labeled as Table 3 when opened. Please correct this discrepancy. (GAW)
 142. Follow-up to item No. 488: The woodland narrative on page 10 states that direct respread will be used to establish woodlands and a new sentence has been added to state that BNI has successfully re-established woodlands using direct respread (Section 3, T142N, R84W). In the pre-mine section of the permit low shrubs, western snowberry, is only considered woodland when associated with tall shrubs or trees but apparently BNI is considering low shrubs not associated with tall shrubs or trees as woodlands in the postmine section of the permit. Please revise to provide clarity and clarify if all disturbed acreage of low shrub woodland will be replaced by direct respread methods. Low shrub species only comprise 10% of the woodland mix in Table 3 so it is confusing when BNI states that woodlands will be replaced using direct respread methods. Please revise to provide clarity. (GAW)
 143. Follow-up to item No. 488: Language in the second paragraph of the woodland section in Section 4.12 states that survival rates from direct respread does not result in adequate densities and that woodland acres will be planted with the woodland mix. Please clarify that this sentence is only referring to the low shrub communities. (GAW)
 144. Follow-up to item No. 488: Please include "acres" in the column of Table 2, Pre-Mine Woodland Acres, to clarify that the 5.05, 4.26 and 53.06 values are acres. (GAW)

145. Follow-up to items No. 489 and 499: The woodland seed mix in Table 3 shows that only 1700 plants will be seeded per acre but the ND FOTG Conservation Specification 612 which is referenced in Section 4.12 requires that over 2000 plants be seeded per acre. A new sentence on page 10 of Section 4.12 states that the densities in Table 3 are based on stocking rates listed in NRCS's Conservation Practice 61 but that does not appear to be the case. Please review and revise as necessary. (GAW)
146. Follow-up to item No. 496: Please revise the wetland narrative in Section 4.12-1 to discuss replacement and reclamation plans for wetlands and streams that will be affected by associated disturbances. Please also explain in detail how pre-mine wetlands formed as the result of ground water seeps and springs are going to be replaced if the coal seam which created the ground water seep is destroyed by coal removal. This section should also discuss compliance with NDAC 69-05.2-13-05, minimizing disturbance on lands where coal is not disturbed and utilizing the best technology currently available. (GAW)
147. Follow-up to item No. 500: Please revise Appendix 4.12-6 so that the red wording is legible. (GAW)
148. Follow-up to item No. 501: Please clarify where in the permit the discussion was added in response to Item No. 501. This deficiency pointed out that NDAC 69.05.2-22-02(4) and (6) requires consultation with the ND State Game and Fish, State Forester and NRCS in development of woodland and fish and wildlife habitat planting mixtures. Please include a discussion about compliance with this requirement. (GAW)

Plate 4.12-1 – Postmining Land Use Map

149. Follow-up to item No. 482: Please review the land use labels in the southwest corner of Section 7. A cropland label is located on an area that is to be reclaimed to native grassland based upon the land use legend colors. (GAW)
150. Follow-up to item No. 482: Please revise the shape of the cropland field that is to be reclaimed in the SW $\frac{1}{4}$ of Section 8 so that the field boundary is not irregularly shaped as shown on the Post Mine Land Use Map. The east boundary of this field is not practical as required by NDAC 69-05.2-23-03. (GAW)
151. Follow-up to item No. 482: The post mine topography of the cropland located in the SW $\frac{1}{4}$ of Section 8 is steeper than it was prior to mining. Please revise the topography to show this cropland is no steeper than it was prior to mining. (GAW)
152. Follow-up to item No. 482: Converting 19.88 acres of native grassland to cropland in an irregular shaped field in the SW $\frac{1}{4}$ of Section 16 is not a practical alternative as required by NDAC 69-05.2-23-03 and increased the fragmentation of the native grassland which was repeatedly pointed out by BNI Coal as being a detriment in the pre-mine land use section of the permit. Please revise accordingly. (GAW)

153. Follow-up to item No. 482: The Postmine land use map, Plate 4.12-1, identifies the NE¼ of Section 21 with a color that indicates the disturbed area is to be reclaimed to native grassland but a small, hard to see “CL” is labeled on this tract. Appendix 4.12-6, Postmine Land Use Table, indicates that this area is to be reclaimed to native grassland. Please remove the “CL” from the map and label as native grassland. (GAW)
154. Follow-up to item No. 472: In a number of instances green colored polygons that appear to be grassed waterways but are labeled “FWG”, fish and wildlife habitat, on the Postmine Land Use map. This includes drainages in Section 24, SE¼ of Section 12 and NW¼ of Section 7. The green polygons on the cropland in Section 9 are not located in drainages and are not labeled so it is not clear what they are representing. Likewise, the FWG features in the NW¼ of Section 7 seem out of place given they border a tract of native grassland. Please review and revise as necessary to provide clarity. (GAW)
155. Follow-up to Item No. 472: The proposed developed water resources (DWC) located in SE¼ of Section 16 are on a slope too steep to accommodate this feature and the DWC appears to have a watershed too small to allow it to function appropriately. Please place this feature in a more suitable location or revise the surrounding topography. Perhaps the locations of the reclaimed wetland and the DWR on this tract should be switched. (GAW)
156. Follow-up to item No. 472: The proposed developed water resource (DWC) located in the NE¼ of Section 24 should be placed further downstream so that it receives water from a larger watershed. (GAW)
157. Follow-up to item No. 472: The proposed developed water resources (DWC) located in the SE¼ of Section 8 is shown on a slope too steep to accommodate this feature and the watershed is very small. This pond is also located where a road to the tower needs to be reclaimed and the land will be affected by associated disturbance only so the topography of the area should not be changed significantly. Please review and revise as necessary. (GAW)
158. Follow-up to Item No. 472: The proposed developed water resource (DWC) located in the NE¼ of Section 18 needs to be placed lower in the drainage and centralized to encourage proper livestock distribution. The pre-mine dugout at this location was spring fed which is why it was developed at this location. (GAW)
159. Follow-up to item No. 472: Please show the roads and access trails that will need to be reclaimed/retained on the Postmine Land Use Map. For example, we assume that there is a road easement to access the tower in Section 8 so this road needs to be shown on the Postmine Land Use Map. (GAW)
160. Follow-up to item No. 494: Please show a grass buffer around reclaimed wetland 20-3. (GAW)

161. Follow-up to item No. 516: Please revise Plate 4.12-1 to show that developed water resources in the NE¼ and SE¼ of Section 7 will be reconstructed. Clearly these DWR's will be affected by mining and they must be identified as features that will be replaced on the map. They need to be colored blue (not hollow or lacking color) based on the legend of the map. (GAW)
162. Follow-up to item No. 517: Larry and Ginger Schmidt requested that additional trees be planted in the NW¼ of Section 8 and NW¼ of Section 16 to improve wildlife habitat. BNI responded by planting 0.20 acres in each tract. Please revise to include plans for planting worthwhile acreage for wildlife, such as a planting 3 acres in size in each tract. (GAW)
163. Follow-up to item No. 522: Please revise to locate reclaimed wetland 19-1 on the quarterline where it existed prior to mining rather than in the middle of the field to facilitate farming operations. The post-mine topography will need to be revised accordingly. (GAW)

Section 4.13 – Fish and Wildlife Protection and Enhancement and Monitoring Plan

164. Follow-up to items No. 552 and 558: Please revise to specifically state how mining has been planned to minimize disturbances and adverse impacts to wildlife and the reclamation techniques that will be used that are the best technology currently available. Identify habitat that will be avoided by mining activities and discuss enhancement techniques that will be implemented during mining and reclamation. For example, discuss placing sediment ponds as close to the mineral removal boundary as possible so as to not disturb long reaches of drainage ways that are not going to be mined and discuss including forbs in the native grassland seed mix for pollinator insects. NDAC 69-05.2-09-17. (GAW)
165. Follow-up to items No. 555 and 557: Please discuss if the wildlife values of the premine wetlands, which are formed in drainages and from ground water springs and seeps, will be replaced with the postmine wetlands that will be constructed as prairie potholes and be dependent upon surface water runoff. (GAW)
166. Follow-up to item No. 561: In the 2010-2011 wildlife monitoring report, BNI states that incidental wildlife sightings are of limited value. Please revise the incidental monitoring discussion to state how incidental monitoring will be conducted so that the information obtained is informative and worthwhile. (GAW)
167. Follow-up to item No. 563: Please revise the new language on page 12 of Section 4.13 to state that Sprague's Pipit surveys will be conducted on both undisturbed native grassland in Permit BNCR-1101 and on reclaimed native grassland at the BNI mine and mention the specific protocol that will be used. (GAW)

168. Follow-up to item No. 565: NDAC 69-05.2-09-17(1)(e) requires that the applicant consult with the Commission and the State Game and Fish Department before selecting indicator species that will be monitored to assess the effects of surface mining on fish and wildlife resources. Please consult with the above mentioned agencies as required. The Reclamation Division recommends that a meeting be set up with the Game and Fish Department and this office to fulfill this requirement. (GAW)

Section 4.14 Reclamation Cost Estimate for Bonding Purposes

169. Follow-up to item No. 568: Please include a discussion in Section 4.14 for reconstruction of the Section 7/8 and Section 12/16 county section line roads. This should include the grading costs, cost of culverts, as well as the cost of gravel. (BAJ/FSE)

170. Please include in Section 4.14 (on page 4.14-1) the assumptions for average pit width, angle of repose, highwall angle, and swell factor. For SPGM respread, assumptions should be listed for topsoil respread thickness and subsoil respread thickness. (BAJ)

171. In Section 4.14, please update the date of the worst case condition for BNCR-1101. (BAJ)

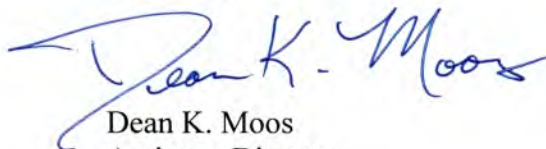
Appendix 4.14-1 Worst Case Bond Calculations

172. Please update the worst case reclamation costs with the July 24, 2013 update to the bond variable costs. (BAJ)

As of today, August 15, 2013, 55 days remain of the Commission's second 120 day review period that will remain suspended until a complete response to the above mention deficiencies are received.

Please contact this office if you have any questions.

Sincerely,



Dean K. Moos
Assistant Director
Reclamation Division

cc: Oliver County Auditor