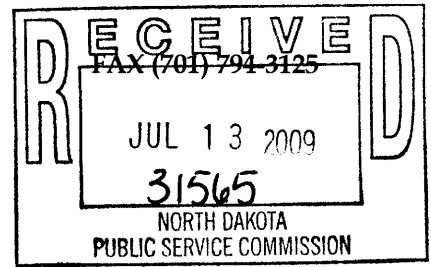


PHONE (701) 794-87



July 13, 2009

FROM DIRECTOR - RECLAMATION DIV.

Date: \_\_\_\_\_

Action: \_\_\_\_\_

Info. Only: \_\_\_\_\_

Info & File: \_\_\_\_\_

Mr. Jim Deutsch, Director  
Reclamation Division  
Department 408  
600 East Boulevard Ave  
Bismarck, ND 58505-0480

Re: Bond Release No. 12 for Permit BNLS-8109

Dear Mr. Deutsch:

This submittal contains a response to your letter to us dated June 9, 2009. In this letter you listed technical deficiencies that must be addressed before the bond release can be approved. Enclosed, please find three copies of instructions and the updated items to address the deficiencies. A complete copy of all notification letters is also enclosed.

**Attachment III – Proposed Newspaper Advertisement**

- 1. The first paragraph should indicate that this tract was initially permitted in Permit 48 and later re-permitted into Permit BNLS-8109. Please revise accordingly and state the approval date of Permit 48 in the newspaper notice. (SAS)

*Updated as requested.*

**Attachment IV – Notification Letters**

- 2. It appears Dagne Holte will receive a letter with notice of this bond release as the owner in the S½ of Section 16. However, ownership information listed in Permit BNCR-8109 shows Leonard Holte as the owner of this tract. Please explain. (SAS)

*Leonard Holte passed away in which ownership went to Dagne Holte (wife).*

**Attachment V – Aerial Photo**

- 3. Please specify the initial seeding date for the former haul road area located in the northwest corner of the bond release tract. (GAW)

*Added date that was requested to Attachment V.*

4 RC-09-64 Filed 07/13/2009 Pages: 7  
Response to Deficiency Letter Filed by BNI Coal  
BNI Coal, Ltd.  
Jay Volk

## Attachment VI – Tract...Success

4. The first sentence in the first paragraph on page 1 is confusing. Please edit to provide clarity. (GAW & BEB)

*Revised first sentence in the first paragraph.*

5. The last sentence in the first paragraph on page 1 references Table 6 but there is no Table 6 in this bond release application. It appears the reference should be to Table 5. Please correct. (GAW)

*Revised.*

6. Please mention in the first paragraph on page 1 that this area was originally permitted under Permit 48 before being re-permitted into BNLS-8109. (SAS)

*Updated first paragraph on page one as requested.*

7. Please add a statement in the “Bond Request” section on page 1 that all remaining bond for Permit BNLS-8109 is being requested by this bond release application. (The amount is slightly more than that currently listed in the permit for this tract.) (SAS)

*Revised “Bond Request” section on page one indicating all remaining bond for permit BNLS-8109 is being requested.*

8. The Law Liability Section of Attachment VI states that all of the acreage was disturbed under the 1978 Interim Rules and that the area was also used in support of mining after the 1979 law was enacted. However, mine maps covering the period from July 1, 1978 to December 31, 1979 do not show the southeast portion of this tract as having yet been affected by mining and it also shows that other areas had been reclaimed and seeded during that time period. Another map showing mining activities between July 1, 1977 and July 1, 1978 depicts topsoil removal area on this tract, thus it appears part of the area was disturbed before the May 3, 1978. Please review the annual maps and update the Law Liability Section with historically accurate information. Please discuss how the various areas were used to support mining after the 1979 law became effective and include a map showing when different areas were disturbed under various reclamation laws and rules. Areas initially affected (topsoil removal) and had mineral removal **prior** to May 3, 1978 were subject to 1977 law reclamation requirements. Areas initially affected (topsoil removal) prior to May 3, 1978 and had mineral removal between May 3, 1978 and July 1, 1979 were subject to 1978 Interim rules. Areas mined or used in support of mining from July 1, 1979 through August 1, 1980 are subject to the 1979 Interim Rules. Areas mined or used in support of mining after August 1, 1980 are subject to the Permanent Program (current) Rules. (GAW)

*Revised narrative in attachment VI and added law periods to map in Attachment V, per 7-9-09 phone conversation with Guy Welch.*

9. A sentence in the second paragraph on page 2 of 13 reads as follows: "From 1999 through 2008 the following crops were planted in the respective years, ..., from 2002-2008." Please edit to provide clarity since only 7 years of crops are listed. (GAW & SAS)

*Revised.*

10. The last sentence in the third paragraph on page 2 of 13 of Attachment VI states that the two differential settling features that had been repaired were "well established, stable and functioning as intended." It is not clear what is meant by the statement as to before or after repair. (GAW & SAS)

*Revised the last sentence in the third paragraph on page two.*

11. PSC inspection reports indicate that differential settling features were repaired on this tract in the fall of 2004 as well as in years prior to that. Please discuss all repair work on page 2 of 13 in addition to the 2005 and 2006 repair work and, if available, include a map showing the size and location of each re-disturbance repair area for each of the years repair work was completed during the responsibility period. (GAW)

*Revised the third paragraph on page two of 13 as requested. No map illustrating the size or location is available due to the limited survey capabilities we have in that area.*

12. The first sentence of the fourth paragraph on page 2 of 13 of Attachment VI is confusing and incorrect. Please revise for clarity and correctness. (GAW)

*Revised.*

13. In the 15th and 18th lines of the first paragraph on page 4, please do not refer to the control area as a reference area. This infers that direct yield comparisons could have been made. Please change the wording to "control area" instead. (SAS)

*Removed reference area and changed wording to control area as requested.*

14. The second paragraph indicates that the sampling dates are listed on Tables 2-4; however, we were unable to locate the sampling dates. Please provide this information. (SAS)

*Added dates production samples were collected on tables 2-4.*

15. The second line of the third paragraph refers to a climatic correction factor being calculated. Actually this is a production ratio as defined by Correction Method 4 in the PSC's revegetation guidelines. The ratio to be used should be the unadjusted reclaimed divided by the unadjusted control, which is the calculation used in Table 2, but not listed correctly in this paragraph. Please correct. (SAS)

*Revised the 3<sup>rd</sup> paragraph as requested.*

16. The last sentence of the last paragraph on page 4 of 13 of Attachment VI concludes that the 2005 data met reclamation success; however, this paragraph is discussing data from 2006. Please correct this error and indicate that although the reclaimed yield was not statistically

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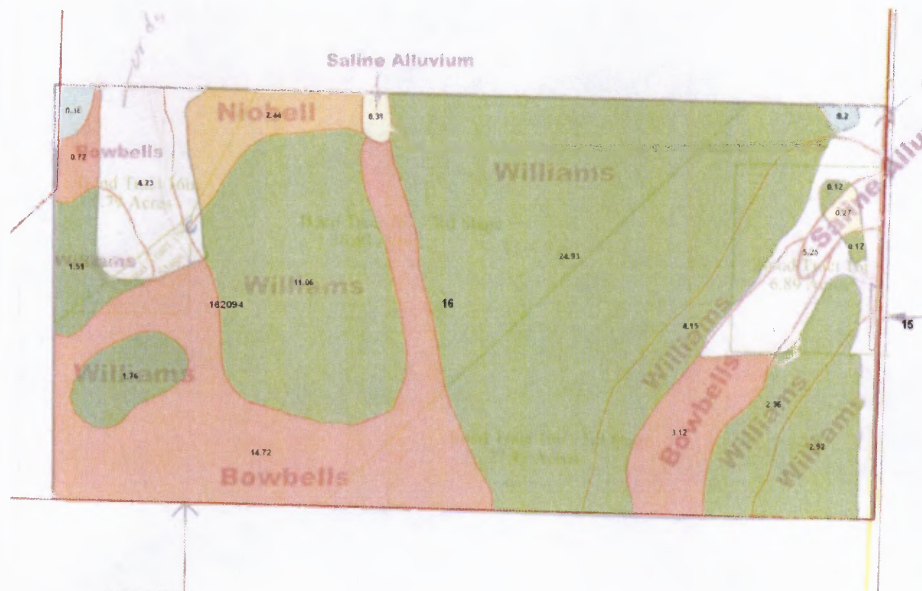
different than the adjusted yield that the data could not be used to prove productivity requirements since the number of control area samples did not meet sampling adequacy. (GAW & MSK & SAS)

*This was updated as requested since multiple other years still meet reclamation standards not affecting the bond release package, although we could not find any regulations in the ND PSC Standards for evaluation of revegetation success and recommended procedures for pre- and postmining vegetation assessments that states how many decimal points the sample adequacy equation has to be calculated to.*

17. The mathematical formulas used to calculate t in Tables 2-4 are not complete. Please complete the equations to show the minus symbols and division lines where necessary. (SAS)

*Illustrated entire t formulas in tables 2-4 as requested.*

18. According to the Attachments V and VII only approximately 2.8 acres of Niobell Loam soil was disturbed, but the standards in Tables 2, 3 and 4 were computed using 6.0 acres of this soil mapping unit. It appears the pre-mine soil acreage difference should be applied to the Bowbells soil mapping unit as our calculations show there were approximately 18.5 acres of Bowbells in the pre-mine cropland. Also, the acreage of the pre-mine soils in the area occupied by the embankment for Pond 9 should not be used in these calculations. Please review and correct Tables 2, 3, and 4 as necessary. An image showing the acres of each mapping unit is shown below. (GAW)



*The soil standard was revised as requested and tables 1,2,3, 4, and the associated narrative was updated as necessary. Acres of each soil series was also included on Attachment VII as well as labeling the undisturbed areas.*

19. In the bond release application, please add a footnote explaining the use of a PI value of 20 to the Saline Alluvium soil mapping unit. (GAW)

*Added footnote to tables 2,3, and 4 indicating the Saline Alluvium PI of 20 was used as directed by the PSC.*

20. The sample adequacy calculation of the control area in 2006, Table 3, shows that the number of samples needed is 6.4, but only 6 samples were taken. It is not appropriate to round down or to the nearest whole number to determine the number of samples needed. Please include data from sample 7 and update the 2006 data accordingly. (GAW)

*Same deficiency as number 16, revised according to number 16 response.*

21. Please finish the incomplete sentence at the top of the first paragraph on page 11 of Attachment VI. The sentence begins to describe the necessity of documentation of suspended solids, but the sentence is not complete and leaves the reader confused as to what information the sentence is intending to portray. Please revise the sentence. (BEB)

*Revised first paragraph on page 11 as requested.*

22. The first few sentences of the last paragraph on page 11 of 13 of Attachment VI states that Pond 9 is being retained, but then data from Pond 5 is referenced. Please clarify which former sedimentation pond is being retained on this tract. (GAW & BEB & MSK)

*Changed the misprint to pond 9.*

23. In the last paragraph on page 11 of 13 of Attachment VI, please discuss the measures that were taken to modify Pond 9 to meet the criteria specified in the detailed design plan as required by NDAC 69-05.2-16-19. Also, was sediment removed from this pond? (GAW)

*Revised last paragraph on page 11 of 13 as requested.*

24. Please include a map that shows the post-mine land uses of the bond release tract and any associated conservation practices such as grassed waterways and grass buffer zones. Identify and label the developed water resource that is being retained. (GAW)

*Added requested information on Attachment V.*

### **Attachment VII – Soils Map / Bond Amount**

25. This map shows the bond release status of the various bond release tracts, not the bond amounts. Please correct as necessary. (SAS)

*Added the bond amounts to the attachment as the title designates.*

26. Please delineate on Attachment VII, or on a separate map, the various actual topsoil and subsoil respread thicknesses. (GAW)

*As discussed with Guy Welch on 7-9-09 the narrative was revised in Attachment VI and the map was revised in Attachment VII indicating a range of topsoil and subsoil respread depths that were taken on the S2NE4 of section 16 from data that was summarized in a October 21, 1986 PSC memorandum letter. Although 16 holes were listed in the 80 acre tract in the 1986 memorandum with actual topsoil and subsoil depths no map was included.*

27. On Attachment VII, please identify the soil mapping units in the extreme northwest and northeast corners of the bond release tract. (GAW)

*Added soil mapping units to map.*

28. Please include a map showing the acreage of each mapping unit that was used to calculate the unadjusted standard for the tract. (GAW)

*This was revised per No. 18's response.*

### **Attachment IX – Pond #9 Data**

29. Please include a copy of the pond maintenance agreement for Pond 9 that has been signed by the surface owner. (SAS & GAW)

*Included pond maintenance agreement for pond 9 in Attachment IX.*

30. Please indicate if topsoil has been respread on the embankment of Pond 9. If not, please provide documentation indicating that the embankment for Pond 9 is stable and does not need to be respread with topsoil. (MDB)

*Added statement in first sentences of page 12 of 13.*

31. The Pond 9 narrative and title page states the emergency spillway will be redesigned to handle a 50-year, 6-hour storm event. Please clarify if this is a redesign of the structure or a reconstruction of the approved emergency spillway. If the spillway will be redesigned, please include detailed design plans for the spillway and submit the information as a revision to the permit. (MDB)

*Over time farming has encroached into the existing emergency spillway of Pond 9. In the interest of our pond maintenance agreement with the North Dakota State Land Department we are proposing to reconstruct the existing approved emergency spillway in order to provide better spillway definition. The Pond 9 routing analysis submitted February 16<sup>th</sup>, 2009 as Attachment No. 9 with Bond Release No. 12 was performed in order to develop minimum spillway dimensions required to safely pass the 50-year, 6-hour storm event as required by article 69-05.2-16-09(9) of the regulations for Surface Coal Mining and Reclamation Operations for permanent impoundments. When the approved emergency spillway is reconstructed these dimensions will be used as a guide to ensure that the spillway meets the storm requirements.*

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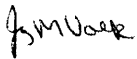
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32. Routing calculations provided for Pond 9 did not take into account any flows through the principle spillway. The peak flow rate for a 50-year, 6-hour storm event through the emergency spillway without any flow through the principle spillway is listed as 51.7 cubic feet per second. At this flow rate, erosion will occur on the backslope of the embankment without additional armoring. Please provide routing for a 50-year, 6-hour storm event, and a 100-year, 24-hour storm event as requested by the landowner, accounting for flow through both the principle and emergency spillways. (MSK)

*We are submitting routing calculations for Pond 9 which include the principal spillway. Accounting for the principal spillway in the routing calculations will drop the flow rate for the 50-year, 6-hour storm event through the emergency spillway to around 36.1 cubic feet per second. Although it is not required by law, we are also submitting routing calculations for the 100-year, 24-hour storm event for information purposes.*

If you have any questions, please contact this office.

Sincerely,



Jay M. Volk, Ph.D  
Environmental Supervisor

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