



Public Service Commission

State of North Dakota

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Tony Clark
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Kevin Cramer

Executive Secretary
Darrell Nitschke

600 East Boulevard, Dept. 408
Bismarck, North Dakota 58505-0480
Web: www.psc.nd.gov
E-mail: ndpsc@nd.gov
Phone: 701-328-2400
ND Toll Free: 1-877-245-6685
Fax: 701-328-2410
TDD: 800-366-6888 or 711

December 7, 2011

Mr. Donn Steffen
Environmental Manager
Coteau Properties Company
204 County Rd. 15
Beulah, ND 58523

Dear Mr. Steffen:

The Reclamation Division has reviewed Coteau's September 29th deficiency response and changes to Final Bond Release Application No. 4 to Permit NACT-9101. The following items must be satisfactorily addressed before the Reclamation Division recommends Commission approval:

Attachment VIIa – General Information

1. Follow-up to original item No. 7: New language on page 5 of Attachment VIIa, states that "Tract 1 had five temporary and ephemeral wetlands present pre-mining." It is not clear which portion of the bond release is considered Tract 1. Please delineate Tract 1 on Attachment V or otherwise clarify the statement. (GAW)
2. Follow-up to original item No. 7: During the final bond release inspection a wetland feature was noted between the reclaimed cropland and reclaimed native grassland in the SE $\frac{1}{4}$ of the NE $\frac{1}{4}$ of Section 21. Please clarify if this is a feature that is going to be retained and update Attachments VIIa and Attachment V, accordingly. (GAW)

Attachment VIII – Site History, Management and Vegetation

3. Follow-up to original item No. 16: Please list the pre-mining and post-mining acreages for cropland and hayland separately in the table in the first part of Attachment VIIa – Vegetation Management and Production. (RK)

4. Follow-up to original item No. 22: Please provide the name or names of the individuals who collected the data included in the bond release application. This information should be included on pages containing the data and in a narrative in Attachment VIIIa, Vegetation Management and Production. Simply stating that sampling was completed by an outside contractor on the Vegetation Sampling Location Map is inadequate. (GAW)
5. Follow-up to original item No. 23: Although the reference to Attachment VIII f was corrected on page 5 of Attachment VIIIa as requested, new language on Page 4 of Attachment VIIIa refers to Attachment VIII f-2 which is not included in the application. Please include the attachment or make the necessary corrections. (GAW)
6. Follow-up to original item No. 21: Please include a narrative that characterizes the 13 small wetlands that were constructed in the re-disturbed orphan spoil. Discuss if these wetlands were designed as temporary or seasonal features and if they are ponding water or supporting hydric vegetation. In other words, please characterize these wetlands and discuss the intended purpose of these features. The last sentence of the first paragraph of page 4 of Attachment VIIIa states that the wetlands have functioned in a normal fashion since construction but it is not clear what this really means. (GAW)
7. Please recalculate the relative species composition of the 2009 cover data for native grassland reference areas in Sections 9 and 13. A total of 2006 pin hits were used when only 200 ten-point frames were taken on the Section 13 reference area in 2009 and the total cover value of the Section 9 reference area in 2009 is incorrectly listed as being 99.7% in Attachment VIIIc-1. However, the correct value, 100%, was used in the table to compute the standard in Attachment VIIIc. Please correct these errors. (GAW)
8. The degrees of freedom values used to calculate sample adequacy using the two stage sampling technique in all of the hand sample production values included in the application are incorrect. A value for the number of samples taken (n) was used rather than n-1. Please correct this error in this and all future bond release applications. (GAW)
9. The total cover values of 1994 and 1988 are listed in the cover summary data for the reclaimed native grassland in 2009 and 2010, but 200 ten-point frames were taken so the total should be 2000 in both instances. Please correct these errors in Attachment VIIIc-2. (GAW)
10. The diversity table on page 6 of Attachment VIIIa indicates that the native species composition in 2009 was 94.7%. However, the cover data shows that native species comprised 65.7% of the relative composition and the reference areas mean Kentucky bluegrass value was 19.25%. Thus, it appears that forbs were added to the value listed in the table. Given the abundance of non-native forbs on the tract, it is not appropriate to include forbs as part of the native species composition standard. Please correct this error. Please note that the 65% native standard is achieved in 2009 without adding Kentucky bluegrass or forbs. (GAW)

11. The narrative in the diversity discussion on page 6 of Attachment VIIIa states that Kentucky bluegrass averaged 26.5% of the cover composition on the reference area in 2010. However, the data shows the mean value to be 24.4%. Therefore it appears the native species composition value listed in the diversity table on page 6 of Attachment VIIIa should be 78.0% rather than 87.1%. Please review and correct as necessary. (GAW)
12. Please correct the continuous cropping formula (Step 2) used in the 2007 cropland productivity standard, page 3 of Attachment VIIIId. While the final number appears correct, the formula listed is incorrect. (GAW)
13. The 2007 and 2008 cropland yields were calculated using average dockage and test weight values rather than weighted average values. In other words, the dockage and test weight values should be applied to the bushels they represent separately. In 2008, dockage and test weights of 2.6 % and 55.1 lbs/bu. respectively, should be applied to 940 bushels and values of 3.2 % and 55.6 lbs/bu should be applied to 425 bushels. Please update the pages 2 and 3 of Attachment VIIIId-1 accordingly as well as the values listed in the yield summary table in Attachment VIIIa and the standards in Attachment VIIIId. (GAW)
14. Follow-up to Original Item No. 29: Coteau's response to the original deficiency is not acceptable since the NDAC 69-05.2-26-02(3)(f) requires that the postmining productivity of reclaimed prime farmlands be proven using crops most commonly grown on the surrounding prime farmland. The Revegetation Success Standards identify that crop as spring wheat and that crop needs to be grown for at least two of the required three years that yield measurements are taken. However, we are recommending that Coteau consider revising the application to show that the portion of cropland established with perennial hayland (including a prime farmland parcel) is properly represented by other reclaimed cropland within the bond release application that is being annually cropped with small grains. This would have to include an evaluation of the similarity of the premine soils and landscape forms of both areas, the reclamation ages and SPGM respread thicknesses as required in Section III-D-3 of the Revegetation Success Standards Document. The cropland productivity standards in Attachment VIIIId will need to be updated accordingly. If such a demonstration can be made, the hayland information and data included should remain in the application as additional supporting information. (GAW)
15. Follow-up to Original Item No. 29: If Coteau determines that revegetation success of the cropland that is established with perennial hayland can be demonstrated as indicated in Item 14 above, the following changes should also be made:
 - a. The hayland acreage will need to be included in the unadjusted standard for prime and non-prime cropland of the Dakota Star Region of the Consolidated Vegetation Success Standards (CVSS) document (Pending Revision 13 to NACT-0401). (GAW)

- b. The discussion of the Cropland (Hayland) tract should indicate that the tract contains both prime and non-prime farmland and three years of productivity data have been used to demonstrate revegetation success similar to what has been provided under Cropland in the attachment. (RK)
- c. There appears to be an error in the calculation of the productivity standard for hayland calculated for land within Section 21, T145N, R85W in the Consolidated Vegetation Success Document referred to in the bond release application. For soils map unit 102, Bowbells soils with 0-3% slope the suitability group should be A3 with a median yield of 2.1 t/ac. By using the 2.1 t/ac rating for this map unit, it appears the unadjusted yield standard for hay production increases to 1.72 t/ac. Please review and revise as necessary. (RK)

If you have any questions, please contact this office.

Sincerely,



James R. Deutsch
Director
Reclamation Division