

**PUBLIC SERVICE COMMISSION**  
**Reclamation Division**

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Memorandum

TO: Commissioners Clark, Kalk and Cramer  
Darrel Nitschke and Illona Jeffcoat-Sacco

FROM: Jim Deutsch, Dean Moos and Guy Welch

DATE: April 18, 2012

SUBJECT: Bond Release No. 1 to Surface Coal Mining Permit NACT-9501 held by The  
Coteau Properties Company, Case No. RC-11-621

**Summary** - On September 16, 2011, The Coteau Properties Company filed Bond Release Application No. 1 to Surface Coal Mining Permit NACT-9501 requesting release of all reclamation liabilities on 39.72 acres of land at the Freedom Mine. The proposed bond release tract contains 2.3 acres of reclaimed hayland and the remaining 37.42 acres were not disturbed by mining activities. The reclaimed hayland is subject to our current reclamation law and rules and Coteau has demonstrated that the reclaimed hayland has met all applicable final bond release performance standards. The Reclamation Division recommends approval of this bond release application based on the findings discussed below.

**Discussion** – Bond Release Application No. 1 to NACT-9501 pertains to lands located in the N½ of the N½ of the NW¼ of Section 5, T145N, R87W, Mercer County. David Young Payn, Hazen, ND owns this property. No coal was removed from this land but 2.3 acres were affected in 1996 for the construction of a water management diversion and for stockpiling soil. The diversion and stockpiles were removed in 1998, soil was respread, and the area was seeded to a grass legume hayland seed mix. All available topsoil was salvaged and subsoil was also saved when constructing the diversion. The proposed respread depths were 3.7 inches of topsoil for all disturbed areas and 44.3 inches of subsoil was also respread on the diversion. The reclaimed and undisturbed lands were managed as hayland during the revegetation responsibility period. A section of the adjacent section line trail was also reconstructed.

Coteau has demonstrated that the revegetation performance standards have been achieved for the reclaimed hayland as discussed below and described in the bond release application. There have been no previous bond releases on this property. Therefore, all four phases of bond release (first – backfilling and grading, second – soil respreading, third – vegetation establishment, and fourth – restoration of the premine productivity) are being requested for this tract. The revegetation success standards require mine operators to demonstrate reclaimed hayland produces equal to or greater than the approved standard with ninety percent statistical confidence for any two years after the year six of the revegetation responsibility period. Since the tract was seeded in 1998, yield data from any two years after 2003 could be used to demonstrate revegetation success. A small scale map of the bond release area is shown below in Figure 1.

Figure 1: Final Bond Release No. 1 to Permit NACT-9501



**Performance Standards** – All of the land, excluding the section line trails, in the bond release tract is being managed as a single field of hayland. Some of the soils within this tract are marginally suited as cropland due to their shallow nature and are best suited to a land use that supports a permanent vegetative cover such as hayland. The productivity standard is based on the productivity potential of the pre-mine soils in disturbed areas. The unadjusted hayland yield standard for this tract was calculated to be 1.3 tons per acre. This unadjusted standard was then climatically adjusted through the use of a control area located on similar soils in the adjacent undisturbed portion of the hayland field. Coteau included data in the bond release application showing that the actual yields exceeded the climatically adjusted standard for two years beginning no sooner than year six of the responsibility period. Mercer County received only about 6 inches of rainfall during the hayland growing season in 2008 (April-July) which is why the reclaimed and control area’s yields are low. The adjusted yield standards and actual yield values for 2008 and 2011 are shown in the table below.

Sample Year	Adjusted Yield Standard	Reclaimed Yield
2008	0.5 tons/acre	0.7 tons/acre
2011	1.3 tons/acre	1.8 tons/acre

Reclamation success was demonstrated using hand sampling techniques on both the reclaimed land and the control area. Ground cover was also sampled to demonstrate the vegetative cover is

adequate to control erosion and not contributing suspended solids to stream flow on adjacent undisturbed or non-permitted lands.

Coteau completed a surface and ground water postmine hydrologic assessment for this bond release area. Coteau was not required to complete a detailed ground water and surface water assessments for this bond release application because only limited surface disturbance occurred on the tract for a short period of time. No shallow aquifers were affected, and the topography and land use were not changed. Therefore, the volume and quality of surface water runoff is essentially unchanged from the pre-mining conditions. No pre-mine water supplies or wetlands were affected by mining related activities on this tract. The Reclamation Division concludes that there was no material damage to the hydrologic balance outside of the permit area adjacent to this tract due to the mining activities on this tract. The wildlife habitat value of the post-mine hayland is very similar to the pre-mine hayland.

**General Information** – The formal final bond release inspection was conducted October 13, 2011. The surface owner's representative Charles Stroup, the Mercer County Commissioners, and several state and federal agency representatives were invited to participate in the final bond release inspection. Mercer County Commissioners Frank Bittermann and Wayne Entze participated in the inspection and they did not express any concerns regarding the reclaimed section line trails or reclaimed hayland. Charles Stroup called in response to our invitation to participate in this bond release inspection but he did not express any concerns regarding this final bond release application. The public notice for this bond release application was published in the official county newspaper, the Hazen Star, and Beulah Beacon weekly from October 13<sup>th</sup> through November 3<sup>rd</sup>, 2011. No objections to this bond release application were received.

No issues were identified during the final bond release inspection that required follow-up or that would prevent final bond release approval. The reclaimed hayland was not harvested in 2011 even though the established vegetation appeared to have yielded reasonably well and was providing excellent protection from erosion. The species composition of the reclaimed land was similar to that growing on the control area. No issues were identified with the disturbed and reclaimed portions of the adjacent section line trails.

The disturbed areas were probed by Reclamation staff member Bill Gunnerson on October 14, 2011 to verify topsoil and subsoil respread thicknesses. The actual topsoil respread thicknesses was about 12 inches. Only 0.1 acre of the area was respread subsoil.

Coteau is not requesting any reduction in the bond amount since this area is currently covered by a worst-case reclamation condition that still exists at the Freedom Mine. This area is part of a consolidated bond area that includes Permit NACT-9501 and others at the Freedom Mine. If Bond Release No. 1 to Permit NACT-9501 is approved, The Coteau Properties Company will be released from all reclamation liabilities on the 39.72 acres of land. The bond release will become effective May 29, 2012, unless a formal hearing is requested.

Attached are a motion and award form for consideration at the April 25, 2012 Commission meeting.