

PUBLIC SERVICE COMMISSION

Reclamation Division

Memorandum

TO: Commissioners Kroshus, Christmann and Fedorchak
FROM: *DKM* *ZAB* *GW*
Dean Moos, Zanna Brinkman and Guy Welch
DATE: March 18, 2019
SUBJECT: Bond Release No. 7 to Surface Coal Mining Permit NACT-9101 held by the Coteau Properties Company, Case No. RC-16-649

Summary

On September 21, 2016, the Coteau Properties Company filed the application for Final Bond Release No. 7 to Surface Coal Mining Permit NACT-9101, requesting release of all reclamation liabilities on 30.579 acres of land located in a portion of the SE $\frac{1}{4}$ of Section 21 of T145N, R86W at the Freedom Mine. The reclaimed lands are subject to our current reclamation law and rules and Coteau has demonstrated that the reclaimed lands have met all applicable bond release performance standards. The Reclamation Division recommends approval of this bond release application based on the findings discussed below.

Discussion

The land in this bond release application is owned by the Coteau Properties Company. The bond release tract contains approximately 18.1 acres of land that was affected by current law mining activities and 12.5 acres of land that was not disturbed. The tract is contains 29.2 acres of cropland and 1.4 acres of road right-of-way associated with Mercer County Road 27.

A sediment pond was constructed on this tract in 1994 and portions were used as topsoil and subsoil storage sites. The sediment pond was used to support mining that took place on adjacent areas and no coal was mined from this tract. The sediment pond, stockpiles sites and an access corridor were removed and seeded by 1999. Affected areas were respread with 11 to 30 inches of topsoil and 30 to 37 inches of subsoil. Approximately 9 acres of prime farmland soils were affected and reclaimed. The reclaimed and undisturbed cropland was managed as hayland until 2011 when it was broken and planted with spring wheat. A small portion of County Road No. 27, which is paved, was affected and restored.

There have been no previous partial bond releases on this property. Therefore, first (backfilling and grading), second (soil respreading), third (vegetation establishment) and fourth (vegetation performance standards) stage bond release is being requested. Coteau has demonstrated that the

revegetation performance standards for third and fourth stage bond release have been achieved for the reclaimed lands included in the bond release application. The revegetation performance standard for cropland is simply yield or productivity. The cropland productivity or yield standard is developed from the pre-mine productivity values of the soils that existed prior to mining. Three years of yield data is needed to demonstrate revegetation success of prime farmland while only two years of data is needed for non-prime farmland. Yield data beginning after year six of the 10-year revegetation responsibility period is needed to demonstrate revegetation success. Coteau developed a single yield standard (combined prime and non-prime) so three years of cropland yield data is needed to demonstrate revegetation success beginning no sooner than year seven of the responsibility period.

The unadjusted yield standard for the cropland was determined to be 32.6 bushels of wheat per acre. A cropland control area was established on undisturbed lands in the area to allow for an annual climatic adjustment of the cropland yield standard. The control area was established on similar soils to the disturbed soils on the reclaimed cropland and the control area was managed similar to the reclaimed land during the revegetation responsibility period. Table 1 shows the adjusted yield standard and the actual yield of the reclaimed cropland.

Sample Year	Adjusted Yield Standard	Actual Yield
2013	46.7 bushels/acre	47.9 bushels/acre
2015	56.9 bushels/acre	65.1 bushels/acre
2018	42.0 bushels /acre	59.6 bushels/acre

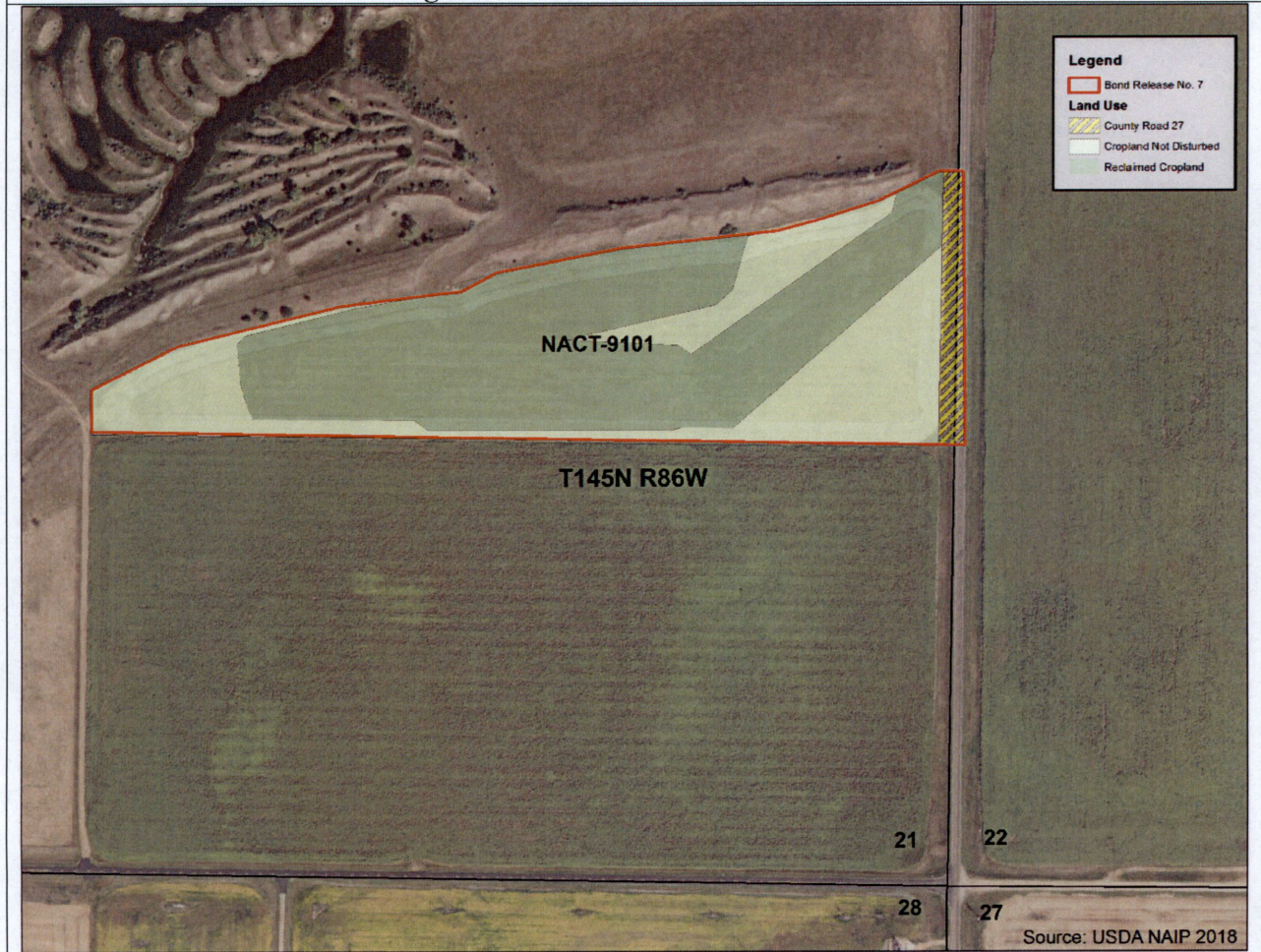
The reclaimed county road ditch has excellent ground cover. Ground cover from perennial vegetation and vegetative litter in the road ditch is preventing suspended solids to streamflow or runoff outside of the permit area as required by NDAC 69-05.2-12-12(7).

The county road on the east side of this tract has been reconstructed by Coteau as directed by the Mercer County road authority. Mr. Roy Braun, Mercer County Road Superintendent, inspected this road on September 13, 2010 and he accepted the road in its current condition.

Coteau has completed surface and ground water post-mine hydrologic assessments for the proposed bond release area and the adjacent area. The reports show that there was no material damage to the hydrologic balance outside the permit area and no significant unmitigated negative impact to the surface and ground water resources within the bond release area.

A post-mining wildlife assessment for the Island Study Area was compiled and included in the biennial wildlife monitoring report. This report and the bond release application contains information that concludes that wildlife habitat on this area has not been diminished.

Figure 1: Final Bond Release No. 7



General Information

The formal bond release inspection was conducted on November 8, 2016. Bill Tviet (Mercer County Commissioner) Ken Miller (Mercer County Road Superintendent) Dan Halstead and Scott Peterson (ND Game and Fish Department) Troy Leingang, Kayla Torgerson, Amanda Hoffer, Ken Link and Mike Berg (The Coteau Properties Company) and several Reclamation Division staff participated in the bond release inspection. The County Commissioner, Mercer County Road Superintendent and ND Game and Fish representatives, the surface owners, did not express any concerns with this bond release application.

The reclaimed cropland small grain stubble had been harrowed after the crop was harvested and a few rocks were evident on the surface. It was difficult to visually determine which portions of this field had been affected by mining and reclaimed. The surface topography blended appropriately throughout and there was no evidence of surface water ponding on this gently sloping tract of cropland. Only a small portion of County Road No. 27 right-of-way was affected by mining and the road ditch was supporting a dense cover of perennial grasses and alfalfa, primarily smooth brome grass and Kentucky bluegrass, and there was no evidence of any erosion.

Actual soil respread thicknesses were verified by Bill Gunnerson, Reclamation Division, with a truck mounted soil probe at several locations in the fall of 2010 (10/20/10-11/04/10 Inspection Report). The topsoil thicknesses ranged from 11 to 26 inches and subsoil thicknesses were estimated to range between 22 to 37 inches, which were determined satisfactory.

Notice of the bond release application was published in the official county newspaper, the Hazen Star, and the Beulah Beacon for 4 consecutive weeks from October 20 through November 10, 2016. No objections to this bond release application were received.

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-9101 and others at the Freedom Mine. If Bond Release No. 7 to Permit NACT-9101 is approved, Coteau Properties Company will be released from all reclamation liabilities the on 30.579 acres of land. With a March 27 approval, the bond release will become effective April 26, 2019, unless a formal hearing is requested.

Minedata/Freedom/Permits/NACT-9101/BondRelease/No.7/BR7_apprvl_memo_3-18-19