

Reclamation Division

Memorandum

TO: Commissioners Fedorchak, Christmann and Kroshus
Steve Kahl, Executive Secretary
John Schuh, General Counsel

FROM: *DKM* *ZAB* *GW*
Dean Moos, Zanna Brinkman and Guy Welch

DATE: December 30, 2020

SUBJECT: Bond Release No. 8 to Surface Coal Mining Permit NACT-9101 held by the Coteau Properties Company, Case No. RC-19-180

Summary

On May 9, 2019, the Coteau Properties Company filed the application for Final Bond Release No. 8 to Surface Coal Mining Permit NACT-9101, requesting release of all reclamation liabilities on 318.6 acres of land located in the W½ of Section 15, 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 findings discussed below.

Discussion

The NW¼ of Section 15 is owned by Bradley and Camey Gunsch and the SW¼ of Section 15 is owned by the Irene Scheid Life Estate. Both tracts have been leased to a farmer / cooperater who has managed both tracts as a single unit comprising the W1/2 of Section 15. The bond release tract will be referred to as the W1/2 of Section 15. The bond release tract contains 285.3 acres of cropland, 19.8 acres of wetland and 13.5 acres of road rights-of-way. Approximately 255.5 acres were affected by mining related activities and 63.1 acres were not affected by mining. Lands affected by mining were reclaimed to 247.7 acres of cropland, of which approximately 119.6 acres is prime farmland, and 7.8 acres of county road and adjoining road right-of-way. Approximately 2.6 acres of temporary wetland were replaced in the NW1/4 of Section 15. Figure 1, attached, provides an overview of the bond release tract.

Initial mining related disturbance occurred with construction of a sediment pond in 1993, and coal removal operations began in 1994. Coal removal was completed in 1996. Soil respreading operations occurred between 1997 and 2001. The reclaimed cropland has been continuously cropped since reclamation was completed. Portions of County Road No. 27 and 3rd Street SW, which lie on the west and south sides of the tract, respectively, were mined through and reclaimed to Mercer County standards.

The reclaimed cropland was respread with 10.3 to 15.8 inches of topsoil and 13.7 to 37.7 inches of subsoil. Reclaimed prime farmland that was affected by mine pits or spoil placement was respread with 48 inches of soil and the non-prime farmland was respread with 24 to 48 inches of soil. Rocks were picked after topsoil was respread and the reclaimed cropland was planted to small grain and row crops during the revegetation responsibility period. A few low areas developed and periodically ponded water on reclaimed cropland and these areas were repaired in 2007. Approximately 2.6 acres of wetland acreage formed adjacent to a large undisturbed semi-permanent wetland in the general area of a reclaimed sediment pond. It appears that portions of the reclaimed cropland are affected by flooding due to high

water levels in the large undisturbed wetland adjacent to the reclaimed cropland. This wetland acreage is replacing temporary wetland acreage that existed prior to mining. Grassed waterways were constructed in drainageways where needed in the SW1/4 of Section 15, and the temporary wetland acreage in the NW1/4 of Section 15 also functions as waterway.

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 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 farmland) so three years of cropland yield data is needed to demonstrate revegetation success beginning no sooner than year seven of the responsibility period (2006).

The surface owners, Bradley and Camey Gunsch, and Irene Scheid (Life Estate) agreed to using a single combined yield standard for demonstrating revegetation success since the two tracts are planted, harvested and managed as a single field. The unadjusted yield standard for the cropland was determined to be 28.42 bushels of wheat per acre. A cropland control area was established on undisturbed land in the area to allow for annual climatic adjustment of the cropland yield standard during years when ND Agricultural Statistic Service (NDASS) County average yield data is not available. The control area was established on soil similar to the soils on the reclaimed cropland and the control area was managed like the reclaimed land during the revegetation responsibility period. Mercer County NDASS data was not available in 2015 and 2017. NDASS data was used to climatically adjust the standard in 2014. Table 1, below, shows the adjusted yield standard and the actual yield of the reclaimed cropland during years being used to demonstrate revegetation success.

Sample Year	Adjusted Yield Standard bushels/acre	Actual Yield bushels/acre
2014	34.11	57.5
2015	33.25	34.7
2017	29.55	31.1

County roads on the west and south sides of the bond release tract, County Roads No. 27 and 3rd Street SW, were reconstructed by Coteau as directed by the Mercer County road authority and are open to public travel. County Road No. 27 is paved with asphalt while 3rd Street SW is a gravel road. Roy Braun, Mercer County Road Superintendent, and Steve Mamer, Interstate Engineering, Inc., inspected the reclaimed county roads on April, 2008 and again on August 31, 2011 and have accepted the roads in their current condition. Those portions of these roads beyond the section line (the other half of the road) were previously bond released.

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

General Information

The formal bond release inspection was conducted May 13, 2020. The surface owners, Mercer County Commissioners, OSM and the NRCS local District Conservationist were invited but declined to participate in the final bond release inspection. The reclaimed cropland in the W1/2 of Section 15 was supporting 2019 spring wheat stubble that had not yet been tilled. Boundaries between reclaimed and undisturbed land and prime and non-prime farmland soils within this field could not be visually distinguished. There was some surface irregularity or surface undulation on reclaimed lands within this tract. The stubble height and density were consistent throughout the field with the exception of a few small (<0.1 acres) low areas where it appears water may temporarily pond. No ponded water was observed on this field but spring moisture conditions were dry. Only a few scattered rocks were observed on this reclaimed land.

Conservation grassed waterways have been established in drainageways in the SW1/4 where surface water runoff from adjacent lands flows to the NW1/4. The drainageway in the NW1/4 is quite flat and is being farmed. Erosion features were not observed on any cropland acreage although it appeared water may flow outside of a bend of an established grassed waterway in the SW1/4 of the SW1/4.

Soil respread thickness was deemed satisfactory as verified by Bill Gunnerson, Reclamation Division, with a truck mounted hydraulic probe on October 4, 12, and 13, 2011. Observations from 22 soil borings completed in the mining disturbance area recorded a mean topsoil thickness of 12 inches ranging from 7 to 24 inches thick, and a mean subsoil thickness of 19 inches ranging from 10 to 39 inches thick. Observations from 12 soil boring completed in the associated disturbance area of affected topsoil recorded a mean topsoil thickness of 21 inches ranging from 8 to 48 inches thick.

Notice of the bond release application was published in the official county newspaper, the Beulah Beacon for 4 consecutive weeks from April 30, 2020 through May 21, 2020. 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. 8 to Permit NACT-9101 is approved, Coteau Properties Company will be released from all reclamation liabilities the on 318.628 acres of land. With a January 6, 2021 approval, the bond release will become effective February 8, 2021, unless a formal hearing is requested.

Figure 1: Final Bond Release No. 8 to Permit NACT-9101

