

Reclamation Division

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Memorandum

TO: Commissioners Christmann, Haugen-Hoffart, and Kringstad  
FROM: Jonathan Emmer, Warren Swenson, and Guy Welch  
DATE: November 10, 2025  
SUBJECT: Bond Release No. 2 to Surface Coal Mining Permit NACT-9501 held by the Coteau Properties Company, Case No. RC-21-383

**Summary**

On September 1, 2021, the Coteau Properties Company filed Final Bond Release No. 2 to Surface Coal Mining Permit NACT-9501 requesting release of all reclamation liabilities on 162.5 acres in portions of Sections 15 and 16, T146N, R88W, Mercer County at the Freedom Mine. These lands are subject to current reclamation laws and rules and Coteau has demonstrated that the reclaimed lands have 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**

The bond release application contains 162.5 acres in portions of Sections 15 and 16, T146N, R88W which is owned by Pfennig Properties LLLP. The tract consists of 64.9 acres of reclaimed native grassland, a 0.4-acre stock pond, and 97.2 acres that were not affected by mining activities.

The tract was initially affected by mining in 2005 with the construction of sediment ponds and soil removal operations. Coal removal operations were completed in 2008 and 2009. Backfilling and grading operations were completed from 2009 through 2011 and soil respreading activities and initial seedings to initiate the 10-year revegetation period were completed in 2012 and 2014. These reclaimed lands were respread with 11.8 inches of topsoil and subsoil respread depths ranged from 12.2 to 36.21 inches based on graded spoil properties.

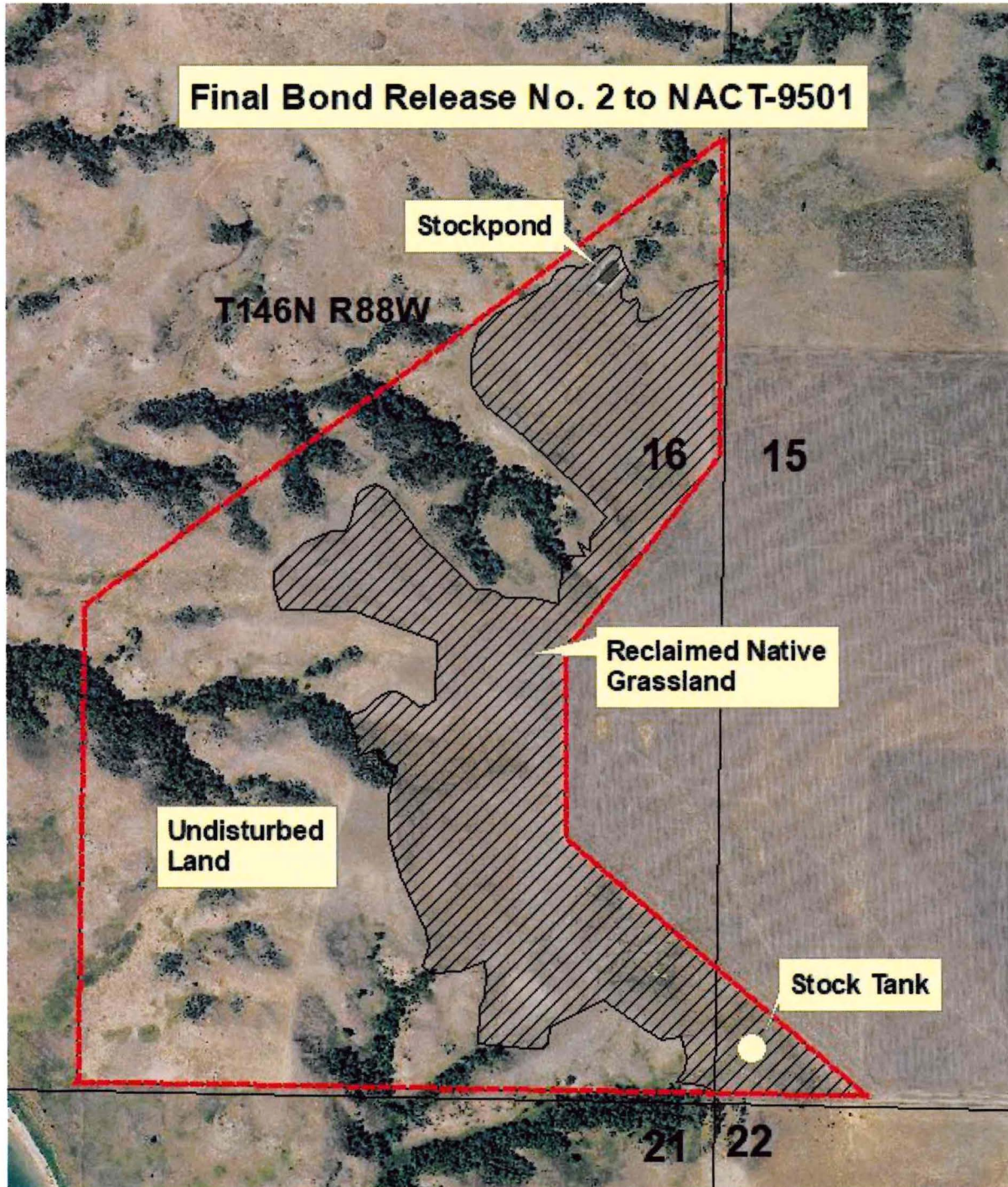
Sediment ponds, soil stockpiles, and access corridors were removed in 2012 and 2014. A developed water resource was constructed in the SE¼ of the NE¼ of Section 16. On August 18, 2021, the Reclamation Division granted Coteau a variance from the 10-year revegetation responsibility period for 4.9 acres in Section 16 that was reclaimed in 2014. This variance from the 10-year revegetation period allowed final bond release two years earlier than would have otherwise been allowed. This variance has allowed Coteau to use 2019 vegetation sampling data to demonstrate revegetation success.

There have been no previous partial bond releases on this property. Therefore, all four stages of bond release are being requested with this application. The bond release stages are as follows: the first stage is backfilling and grading, the second stage is soil respreading, the third stage is successful vegetation establishment, and the fourth stage is a demonstration of revegetation success as set forth in the Reclamation Division's revegetation success standards document.

Coteau has demonstrated that the revegetation performance standards have been achieved as discussed below and described in the bond release application. Vegetation establishment has been successful and actual topsoil and subsoil respread depths have been verified by Reclamation Division staff. The bond

release tract has been shaped to conform to the contours of the approved post-mining topography. **Figure 1** below depicts the bond release tract on 2024 National Agricultural Imagery Program (NAIP) aerial imagery.

**Figure 1: Final Bond Release No. 2 to Permit NACT-9501**



### Revegetation Success Standards

The Reclamation Division's revegetation success standards require that each landowner's property be evaluated independently for the purposes of demonstrating revegetation success. Pfennig Properties LLLP is the surface owner of the bond release tract, and they own lands adjacent to the bond release tract in Sections 15 and 16. A southwest water pipeline and stockpond provide water to the reclaimed tract.

### Native Grassland

Mining companies must demonstrate that reclaimed native grassland yields are as good as or better than pre-mine native grassland yields during any two years after year six of the ten-year revegetation responsibility period. The productivity standard is calculated using Natural Resources Conservation Service (NRCS) ecological site expected yields of the pre-mine native grassland and these values are climatically adjusted annually using native grassland reference areas. The native grassland ground cover standard is developed using reference areas and a value that the Agriculture Research Service determined to be sufficient to control erosion. The native grassland species diversity and seasonality standards require at least five native grass species be present on the reclaimed tract using ground cover or production data. The relative composition of all warm-season grasses must be at least 15%. Four native grass species must each contribute at least 3% relative live basal cover or at least 5% by weight during the years sampling data is used to demonstrate revegetation success. Of these four species, at least two must be warm-season species and at least one must be a cool-season grass. For each sampling year that is used to prove reclamation success, the permittee must show that a fifth native grass species is present, and a species list must show at least three native forbs species present.

The reclaimed grassland was seeded with seven native species: western wheatgrass, slender wheatgrass, green needlegrass, blue grama, sideoats grama, switchgrass, and little bluestem. Vegetation sampling data from 2019 and 2024 are being used to demonstrate revegetation success as summarized in the tables below. The productivity and cover standards were developed using all the disturbed Pfennig Properties LLLP pre-mine native grassland in Sections 15 and 16.

### Production

Year	Reclaimed Yield (lbs/acre)	Yield Standard (lbs/acre)	Achieved
2019	2,210	1,405	Yes
2024	1,771	1,448	Yes

### Ground Cover

Year	Reclaimed Cover	Cover Standard	Achieved
2019	89.5%	79.5%	Yes
2024	95.1%	90.3%	Yes

### Diversity and Seasonality Standards

Five native grass species must be present and four must each contribute at least 3% of the relative live basal cover or at least 5% of the relative composition by weight (production). Of these four species, at least 2 must be warm-season species and at least 1 must be a cool-season species. Cover or production data must show the relative composition of all warm-season species to be at least 15%. The sampling data or a species list must show that at least 3 native forbs are present.

Seasonality	Standard	2019	2024	Achieved
% Warm Season Composition	15	33.9	64.1	Yes
Number Cool Season Species >3%	1	2	1	Yes
Number Warm Season Species >3%	2	3	3	Yes

Diversity	Standard	2019	2024	Achieved
Total Number Species Present	5	5	11	Yes
Number Species >3% Composition	4	5	4	Yes
At least 3 native forbs	3	Yes	Yes	Yes

A comprehensive species list in the bond release application, Table 1 of Attachment IX, documents the presence of at least three native forbs in the reclaimed native grassland.

The permanence standard is achieved by the established vegetation's continued persistence in the reclaimed area. This reclaimed native grassland is cross fenced on the quarter line and has been managed with prescribed grazing during the revegetation responsibility period. Fencing and livestock watering facilities have been installed to support the intended post-mine land use. The water facilities include a stock pond in the NE¼ of Section 16 and a Southwest Water Pipeline pasture tap in the southwest corner of Section 15.

### Developed Water Resources

A stock pond and a Southwest Water pasture tap were constructed as livestock water sources to support the post mining land use. Stock pond SP-H16-01 has functioned as intended during the revegetation responsibility period. The Southwest Water tap provides water to the southern portion of the tract while stockpond SP-H16-01 provides water to the northern portion of the tract. Coteau has documented that the water in the stock pond is suitable for livestock consumption, according to water quality sampling results in the bond release application.

### Hydrologic Assessment and Wildlife

Coteau has completed surface and groundwater post-mine hydrologic assessments for the bond release and the adjacent area. The reports show that there was no material damage to the hydrologic balance outside of the permit area and no significant negative impacts were observed to the surface and groundwater resources within the bond release area. The bond release application contains a wildlife report that concludes that habitat in this area has not been diminished.

### General Information

The formal bond release inspection was conducted on September 28, 2022. Participants of the bond release inspection included Reclamation Division staff; Coteau Properties Company staff; John Sieving with the Office of Surface Mining Reclamation and Enforcement (OSMRE), Casper Field Office; and a landowner, Gwen Dinkins. The Mercer County Commissioners and the Mercer County NRCS District Conservationist were invited to participate in this bond release inspection but declined the offer to participate. OSMRE concurrence regarding approval of this bond release application is not needed because the tract does not contain any federal coal.

Notice of the bond release application was republished in the official county newspaper, the Hazen Star, weekly from June 1, 2023 through June 22, 2023 after an error was realized with the initial public notice published in September of 2022. No objections to this bond release application were received.

### **Background Information**

The Reclamation Division has verified that the reclaimed native grassland has been established with a diverse mix of native cool and warm-season grass species. The seeded species included western wheatgrass, green needlegrass, sideoats grama, blue grama, switchgrass and little bluestem. These species have established throughout this reclaimed land along with invasive non-native grasses, namely smooth brome grass and Kentucky bluegrass. The established vegetation provides excellent ground cover and protection from erosion, but a small headcut and an erosional feature were observed in two reclaimed drainageways during the final bond release inspection. Remnants of an old silt fence in a reclaimed drainage have been removed, and measures have been taken to stabilize the above mentioned erosional features. Developed water resource (DWR) SP-H16-01 was holding water and functioning as intended. Old rills and gullies around the inlet side of the stock pond have been stabilized with rock. The Reclamation Division verified actual soil respread thicknesses with a truck-mounted soil probe in August of 2022.

The Reclamation Division completed an initial review of the bond release application on October 22, 2021. In this review we expressed concerns with the productivity and apparent ecological condition of the loamy native grassland reference area in 2019, which is an expression of species composition. In 2019, the Loamy native grassland reference site only produced 1,235 pounds per acre. NRCS indicates this site in good ecological condition should normally yield 2,330 lbs/ac of grasses and forbs in a year with normal precipitation. On December 12, 2022, the Reclamation Division completed its first technical review of the bond release application, and we informed Coteau that we would not recommend Commission approval without an additional year of data demonstrating revegetation success. Sampling data from 2019 and 2020 were originally used to demonstrate success but sample adequacy was not achieved on the reclaimed grassland when sampled in 2020, which is required for statistical analysis.

On November 22, 2024, Coteau responded to our December 12, 2022 review. They replaced the 2020 sampling data with 2024 data. The US Drought Monitor Maps indicate that Mercer County received normal precipitation during 2019 and 2024, so it is not clear why the loamy ecological site yield produced only about 50% of its expected yield each of those years. On January 9, 2025, the Reclamation Division completed its second technical review of the bond release application. In this letter we recommended that the annual climatic adjustment factor be developed using all the native grassland reference areas at the mine rather than just the loamy and thin loamy reference areas. Coteau correctly pointed out that our Revegetation Success Standards document allows them to use the dominant pre-mine ecological sites of the bond release tract to calculate the climatic adjustment factor.

On February 24, 2025, the Reclamation Division completed a third technical deficiency review. In this letter we advised developing a climatic adjustment factor that does not rely heavily on the loamy reference area that yielded poorly in 2019 and 2024. On April 16, 2025, Coteau responded to our third technical review, stating that the loamy ecological site's reduced yields in 2019 and 2024 were due to site-specific precipitation, the timing of rainfall events, and other weather factors, and not because the reference area was in a reduced ecological condition. On June 2, 2025, the Reclamation Division completed a fourth technical review. In this review we asked Coteau to provide precipitation and reference area production data that provides justification why the loamy reference areas produced only about 50% of its expected yield in 2019 and 2024. Coteau provided precipitation data showing the northern portion of the mine received about 75% of normal April through August precipitation in 2019

and 2024 (8.4 inches vs. 11.1 inches). They also provided sampling data from the sandy native grassland reference area, which is the reference area located nearest the bond release tract. The Reclamation Division has determined that the reclaimed land productivity standard would be achieved if the climatic correction factor was derived from the productivity of the sandy reference area which is in respectable ecological condition. The Reclamation Division, and presumably Coteau, determined the yield standard would not be achieved if climatic correction factor was developed using all the native grassland reference areas at the mine.

Coteau is not requesting a reduction in the bond amount since this area is currently covered by the worst-case reclamation condition that exists at the Freedom Mine. This area is part of a consolidated bond area that includes Permit NACT-9501 and other permits at the Freedom Mine. If Bond Release No. 2 to Permit NACT-9501 is approved on November 19, 2025, Coteau Properties Company will be released from all reclamation liabilities on 162.5 acres of land on December 19, 2025, unless a formal hearing is requested.