

PUBLIC SERVICE COMMISSION

Reclamation Division

Memorandum

TO: Commissioners Christmann, Haugen-Hoffart, and Fedorchak
Steven Kahl, Executive Director
John Schuh, General Counsel

FROM: ^{ZB} Zanna Brinkman, ^{JE} Jonathan Emmer, and ^{PR} Preston Ripplinger

DATE: March 8, 2023

SUBJECT: Bond Release No. 4 for Permit NAFK-8405 held by the Falkirk Mining Company,
Case No. RC-22-262

Summary

On June 8, 2022, The Falkirk Mining Company filed an application for Bond Release No. 4 to Surface Coal Mining Permit NAFK-8405 for 286.9 acres located in portions of Sections 22 and 27, T146N, R82W, of McLean County. The tract is located one mile east and one mile south of Underwood, North Dakota. The entire 286.9 acres were affected by mining or associated disturbance (0.10 acre) and the tract is subject to the current reclamation laws and rules. The coal was privately owned. Falkirk has demonstrated that the reclaimed lands have met all applicable final bond release performance standards. The Reclamation Division has completed its review of the bond release application and recommends Commission approval.

Discussion

Bond Release No. 4 to Permit NAFK-8405 comprises 286.9 acres. The approved post-mining land uses within the bond release tract are: 272.3 acres of cropland, 8.1 acres of seasonal wetlands, a 0.9 acre two-row conservation shelterbelt planting, 5.4 acres of county road, and a 0.2-acre industrial area occupied by a Basin Electric Power Cooperative tower. The entire bond release tract is owned by Chad Berg, subject to a Contract for Deed to Michael Berg.

Mining disturbance within Bond Release No. 4 was initiated in 1988. Coal was removed from this tract from 1989 to 1994. Final grading was completed in 1990-1993, 1995, 2008, and 2011. Topsoil and subsoil were respread and initial seedings were completed in 1990-1995, 2008, and 2011. Final grading and seeding were completed on two topsoil stockpile areas in the SW¼ of Section 22 in 2014. Falkirk requested a variance to the 10-year liability period for 11.3 acres in the SW¼ of Section 22 that contained the topsoil stockpiles, and the variance request was approved by the Commission on June 23, 2021. The variance area comprised 3.9 percent of the bond release tract. A second variance was requested to the 10-year liability on February 3, 2023, for approximately 4.5 acres of reclaimed cropland in the SW¼ of Section 22. The variance tract was part of a topsoil stockpile and a temporary access road leading to the stockpiles. The two variance areas total 10.3 percent of the disturbance area in the SW¼ of Section 22 or 5.2 percent of the bond release area. The February 3, 2023, variance request was approved by the commission on February 22, 2023.

There have been no previous stages of bond release on this tract. Falkirk is requesting the release of all stages of bond release, including first stage (backfilling and grading), second

stage (soil respread), third stage (vegetation establishment), and fourth stage (demonstration of revegetation success) for the 286.9 acre tract.

Successful revegetation of the cropland was evaluated using productivity standards contained in Standards for Evaluation of Revegetation Success and Recommended Procedures for Pre- and Post-Mining Vegetation Assessments, NDPSC, (July 2003). Separate unadjusted productivity standards (not climatically corrected) were developed for Sections 22 and 27 using all of the pre-mine soil mapping units in each section as agreed by the surface owners. The unadjusted standards were climatically adjusted annually using ND Agricultural Statistical Service (NDASS) county yield data. The reclaimed cropland in the Bond Release No. 4 was farmed by Michael Berg and Brent Peterson and is currently being farmed by Chad Berg.

The reclaimed cropland revegetation performance standard requires that the permittee demonstrate that crop production is equal to or greater than the approved standard. In Section 22, the 2017 adjusted soybean standard was 21.3 bushels per acre (bu/ac) and the tract yielded 26.9 bu/ac. Wheat and soybeans were used to demonstrate revegetation success in 2013. The adjusted standard for wheat was 46.4 bu/ac and the tract yielded 49.5 bu/ac. The adjusted standard for soybeans was 32.9 bu/ac and the tract yielded 36.4 bu/ac. The yield data is from whole field harvest and accounts for dockage and test weight.

Spring wheat was used to demonstrate revegetation success in the NW¼ of Section 27. Two separate cooperators farmed portions of this tract so four years of data were provided to demonstrate revegetation success. In 2017, the adjusted standard for wheat in the NW¼ of Section 27 was 28.5 bu/ac and the tract yielded 33.2 bu/ac. In 2015 the adjusted standard for wheat was 45.2 bu/ac and the tract yielded 59.7 bu/ac. In 2013 the adjusted standard for wheat was 44.2 bu/ac and the tract yielded 54.8 bu/ac. In 2011 the adjusted standard for wheat was 26.9 bu/ac and the tract yielded 46.4 bu/ac. The crops harvested from the representative tracts exceeded the required adjusted annual productivity standards and accounted for dockage and test weight.

There are two reclaimed seasonal wetlands in this bond release application. Reclaimed seasonal wetlands R-E27-01 and R-E27-02 total 8.09 acres in the NW¼ of Section 27. These wetlands represent a net decrease of 1.35 acres in Section 22 and a net increase of 4.22 acres in Section 27 compared to the pre-mine wetland acreage. The contributing drainage area is 210 acres and 54 acres for reclaimed seasonal wetlands R-E27-01 and R-E27-02, respectively. Wetland R-E27-01 has developed low-prairie, wet-meadow, and shallow-marsh vegetation zones. Wetland R-E27-02 has developed low-prairie and wet-meadow vegetation zones.

A post-mining wildlife assessment of Permit NAFK-8405 is submitted biannually and reviewed by the Commission. The report is in compliance with NDAC 69-05.2-09-17. The report concludes that wildlife habitat and species in this area have not been diminished.

Falkirk has completed surface and groundwater post-mining hydrologic assessments (PHA) for the proposed bond release area and adjacent areas, in accordance with NDCC 38-14.1-24, NDAC 69-05.2-14, and 69-05.2-16. The East PHA is a stand-alone document that was attached and approved with Revision 36 of Permit NAFK-8405. The report shows that there was no material damage to the hydrologic balance outside of the permit area and no significant unmitigated negative impact to the surface and ground water resources within the bond release area.

The 0.2-acre industrial land use was subject to a revegetation liability period of fewer than ten years for industrial areas as allowed by North Dakota Administrative Code 69-05.2-12-09(2). The revegetation success performance standard for industrial land is ground cover not less than that required to control erosion. The ground cover at this 0.2 acre site is adequate to control any potential erosion.

The county road ditches associated with the reclaimed county road between Sections 22 and 27 are well established with vegetation and have excellent ground cover. Mr. James A. Grey, McLean County Superintendent of Highways, provided written acceptance of the county road on September 12, 2022.

General Information

The formal bond release inspection was conducted on October 26, 2022. Reclamation Division staff and Falkirk Mining Company staff participated in the bond release inspection. Others were invited to participate in the inspection including the landowners (Bergs), McLean County Commissioners, North Dakota Game and Fish, the North Dakota Soil Conservation Committee, and the Wetland Advisory Committee; however, they did not attend the inspection. The inspection report and photographs taken of the bond release tract are on file with the Reclamation Division. No concerns were noted during the inspection.

The reclaimed cropland in Sections 22 and 27 was seeded to annual crops in 2022. The NW¼ of Section 27 consisted of wheat stubble and straw that had been baled. Some surface undulations were present in the SE¼NW¼, but the surface irregularity did not appear to impede the planting or harvesting of crops. The SW¼ of Section 22 supported unharvested corn. The two reclaimed seasonal wetlands, R-E27-01 and R-E27-02, were both dry with volunteer trees growing around the perimeter. Vegetation throughout the bottoms of the wetlands indicates that they hold water but not for extended periods. The two-row tree planting north of the wetlands provides a wetland buffer zone, Buffalo berry and Chokecherry are the principal species established.

Actual soil respread thicknesses were verified by Dean Moos, Reclamation Division, with a truck mounted soil probe across multiple locations. The topsoil thickness ranged from 8 to 15 inches and subsoil thickness was estimated between 12 and 28 inches, which were deemed satisfactory.

In accordance with NDCC 38-14.1-24(2), Falkirk has restored the pre-mine capabilities of lands affected in Bond Release No. 4. The post-mine topography and the post-mine respread depths are comparable to pre-mine conditions.

Notice of the final bond release application was published in the official county newspaper, the McLean County Independent and in the Bismarck Tribune for four consecutive weeks, on October 13th, 20th, 27th, and November 3rd, 2022. No objections or concerns were received regarding this bond release application.

Falkirk did not request any reduction in the bond amount for Bond Release No. 4 to NAFK-8405 since this area is currently covered by a worst-case reclamation condition that still exists at the Falkirk Mine. This permit is part of a consolidated bond area that includes other permits at the Falkirk Mine. If Bond Release No. 4 is approved, Falkirk Mining Company will be released from

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all reclamation liabilities on the 286.9 acres of land. With a March 8, 2023 approval, the bond release will become effective April 7, 2023, unless a formal hearing is requested.

Attached are the motion and award form for consideration at the March 8, 2023 Commission meeting.

Final Bond Release No. 4 to Permit NAFK-8405 in Sections 22 and 27, T146N, R82W

