

PUBLIC SERVICE COMMISSION
Reclamation Division

Memorandum

TO: Commissioners Christmann, Fedorchak, and Kroshus
Darrell Nitschke, Executive Secretary

FROM: ^{ZAB} Zanna Brinkman and Dean Moos

DATE: January 26, 2018

SUBJECT: Bond Release No. 8 to Permit BNCR-8106 held by BNI Coal, Ltd., for the Center Mine, Case No. RC-14-681

Summary

On August 12, 2014, BNI Coal, Ltd. filed the application for Bond Release No. 8 to Surface Coal Mining Permit BNCR-8106 for final bond release on 56.47 acres of reclaimed land in the SE¼ of Section 35, T142N, R84W at the Center Mine. There have been no previous bond releases on this tract of land. BNI is requesting first (backfilling and grading), second (soil respread), third (vegetation establishment) and fourth stage (demonstration of revegetation success) bond release for the entire reclaimed acreage. BNI has demonstrated that all applicable bond release standards have been met and the Reclamation Division respectfully recommends approval of this bond release application.

Discussion

Bond Release Application No. 8 is for one tract totaling 56.47 acres in the SE¼ of Section 35, T142N, R84W, Oliver County. The bond release tract contains 53.05 acres of reclaimed cropland/hayland and 3.42 acres of county road and section line right of way. About 1.46 acres of land on the south boundary of the bond release tract that includes the section line trail and a portion of the field was not disturbed by mining. The location of the bond release tract is provided in Figure 1.

The reclaimed land was initially permitted under Permits 24 and 37 and subsequently incorporated into Permti BNCR-8106. Mining activities on about 20.8 acres initially occurred prior to July 1, 1975. The revegetation requirement for areas mined prior to July 1, 1975 is generally limited to the reclaimed land being capable of supporting the post-mining land use. Another 15.4 acres were mined after the 1975 law changes became effective and about 20.3 acres were disturbed after the 1977 reclamation law went into effect. Mining companies must demonstrate that productivity has been restored to the pre-mine levels on lands subject to the 1975 and 1977 law. BNI decided to use the revegetation success standards applicable to 1977 law to prove reclamation success on the entire bond release tract.

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Final grading was completed in 1984 on the southern portion of the tract and in 1985 on the northern portion. The post-mining topography was approved with the grade approval process prior to the respreading of subsoil and topsoil. Approximately 11 inches of topsoil and 26 inches of subsoil were respread on the land disturbed prior to July 1, 1975. The later disturbance areas were respread with 12 inches of topsoil and 36 inches of subsoil. Topsoil and subsoil respread thicknesses were checked with a tile spade during the bond release inspection to verify the topsoil respread thickness. The topsoil respread depths were in general agreement with the approved respread thickness. Shortly after respreading subsoil and topsoil, areas within the tract were seeded to the post-mine land use of tame pasture in 1985, 1986, 1987, and 1989. A seed mixture containing crested wheatgrass, pubescent wheatgrass, and alfalfa was used on the area seeded in 1985 and a mixture of crested wheatgrass and pubescent wheatgrass was used for the other seeding dates. Total seeding rates were similar at approximately 40 pure live seeds per square foot.

After vegetation established, the tract was managed as tame pasture and cut and baled annually through 2014. In the spring of 2015, the operator Brian Dresser, with approval from the surface owner Mary Dresser, chemically burned down the tame pasture and no-till seeded the field to canola, effectively changing the land use to cropland. The surface owner submitted a new land owner preference statement requesting a land use change to cropland and agreed in writing to use the tame pastureland vegetation data collected in 2009-2013 to prove reclamation success of this tract that is now being annually cropped. BNI submitted a permit revision to change the post mine land use to cropland/hayland and the revision was approved February 16, 2016.

Hayland and tame pasture land uses are both seeded to grasses and legumes. Hayland is cropland that is managed for perennial hay production and typically contains more than 25% alfalfa while tame pasture is expected to have less than 25% alfalfa and is used for livestock grazing or hay production. The revegetation success of hayland is evaluated using only productivity (yield) while tame pastureland is evaluated using productivity (yield) and ground cover. The revegetation performance standards for productivity on hayland and tame pastureland are calculated the same way using forage suitability groups. Since the bond release tract contained over 25% alfalfa, the hayland standard was used.

BNI was required to demonstrate that the productivity of the reclaimed hayland has been restored to the pre-mine level on the bond release tract. BNI calculated an unadjusted yield standard for reclaimed hayland using Natural Resource Conservation Service (NRCS) suitability groups for the soil types that were present prior to mining. The unadjusted hayland standard was calculated to be 1.42 tons/acre. Annual county yield data reported by the North Dakota Agricultural Statistics Service was used to adjust the yield standard for the hayland to account for the annual variability in growing conditions.

Yields from the reclaimed hayland were compared to the adjusted standard to evaluate reclamation success. Hay production on the reclaimed lands met or exceeded the adjusted standard for all of the years data was collected as shown in Table 1 below. Therefore, we have concluded that the productivity requirements have been met.

Table 1. Production measurements for the reclaimed haylands in the SE¼ of Section 35.

Year	Unadjusted Standard t/ac	Adjusted Standard t/ac	Reclaimed Yield t/ac
2009	1.42	1.55	2.64
2010	1.42	2.03	2.15
2011	1.42	2.03	2.48
2012	1.42	1.11	1.63
2013	1.42	1.51	2.10

Basal cover was also measured and the percent cover exceeded the fixed standard value of 73% in all of the years that measurements were taken. The percent cover on the reclaimed hayland from 2009 through 2013 ranged from 90.2% to 98.9%. This amount of cover indicates stability from erosion and these areas should not be contributing suspended solids to runoff flowing offsite.

The bond release application included documentation that Oliver County has accepted the reconstructed county road between Sections 35 and 36 back into the county road system. However, during reconstruction of the county road, an overpass was installed to allow traffic to cross over BNI's primary haulroad and this overpass must be removed when the primary haulroad is reclaimed. Approximately 1.7 acres that includes the right of way along the northeast side of the bond release tract was deleted from the bond release application to allow equipment access for the removal and reclamation of the overpass in the future. The portion of right of way along the county road that is included in the bond release application is well vegetated with grass and alfalfa.

General Information

The formal final bond release inspection was conducted on June 24, 2015. Six representatives from the Reclamation Division and BNI representatives Stephanie Paavola, Karene Hall, and Derrick Placek participated on the inspection. Mary Dresser the Section 35 landowner, Brian Dresser the farmer/operator, and representatives from the Oliver County Soil Conservation District, Oliver County Highway Department, and the Oliver County Commission were invited but did not attend the inspection.

The newspaper notice for this final bond release application was published in the Center Republican, the official county newspaper, once a week for four consecutive weeks from June 4, 2015 to June 25, 2015. No objections or written comments were received on the bond release application.

The bond release tract is included in the consolidated bond area covered by Surety Bond #400JR4173, Surety Bond 1069618, and Collateral Bond CB-9702-3 that includes Permit BNCR-8106 and several other permits at the Center Mine. BNI is not requesting any monetary reduction in the bond amount since the current bond amount for the consolidated bond area is needed to cover the worst-case reclamation condition.

If approved at the January 31, 2018 Commission meeting, the bond release will become effective on March 2, 2018, unless a formal hearing is requested by an interested party.

Attached are the motion and award form for your consideration.

Figure 1. Bond Release No. 8 to Permit BNCR-8106



Attachments