

STATE OF NORTH DAKOTA

PUBLIC SERVICE COMMISSION

Coteau Properties Company
Permit NACT-1801
Application

Case No. RC-18-408

PERMIT TO ENGAGE IN
SURFACE COAL MINING AND RECLAMATION OPERATIONS

February 17, 2021

Based on the application for **Surface Coal Mining Permit Number NACT-1801** submitted by Coteau Properties Company for the Freedom Mine on December 26, 2018, and as revised through January 12, 2021, and all information and documentation contained therein, the North Dakota Public Service Commission (Commission) finds that the application meets all applicable requirements of Chapter 38-14.1 of the North Dakota Century Code (NDCC) and Article 69-05.2 of the North Dakota Administrative Code (NDAC). Based on the information set forth in the application or from that otherwise available and known by the applicant, the Commission finds that:

Finding No. 1. The permit application is accurate and complete and complies with the requirements of NDCC Chapter 38-14.1 and NDAC Article 69-05.2 [NDCC 38-14.1-21(3)(a)].

The applicant verified that all information included in the permit application is true and correct to the best of their knowledge. Permit NACT-1801 will allow for continued surface coal mining and reclamation operations on 5272.142 acres of land for the Freedom Mine in Mercer County, North Dakota. Permit NACT-1801 consolidates five existing permit areas at Freedom Mine and converts those previous paper permits into one electronic permit. The five previous permits consist of Permits NACT-8102, NACT-8203, NACT-8401, NACT-8503, and NACT-8601. With the approval of Permit NACT-1801, all permits at the Freedom Mine are now provided in electronic format. Only reclamation activities remain to be conducted within the NACT-1801 permit area and all coal mining is complete. However, haulroads, stockpiles, sedimentation ponds, the shop/office complex, blasting storage area, coal handling facilities and other features used to support mining activities in other permit areas at the Freedom Mine, are located within the NACT-1801 permit area. Commission staff conducted completeness and technical reviews to ensure that the required information was provided, and the mining and reclamation plans meet all applicable requirements. The Reclamation Division sent completeness and technical review letters to the applicant on January 31, August 9, and October 25, 2019; January 28, August 7, October 26, and December 9, 2020, and on January 4, 2021. Responses to each letter were received and appropriate changes were made to the application to address the concerns that were noted. The applicant provided evidence that it has the right to disturb the surface of applicable lands within the proposed permit area. The applicant has these rights based on coal and surface leases, copies of which are included in the application. The Commission concludes that the application is now accurate and complete.

The applicant published the required notices in the Beulah Beacon and Bismarck Tribune and the Commission sent notices to all surface owners that will be affected by Permit NACT-1801 and to numerous local, state, and federal agencies. No objections or requests for an informal conference were received on this application and no major issues were raised during the review of this application.

Several tracts within the proposed permit area have been released from reclamation liability bond and will not be disturbed by the applicant. Within Permit NACT-1801, three separate tracts totaling about 640 acres contained coal interests owned by the United States of America and those tracts have been mined and reclaimed. Federal Mine Plan Approval has been previously obtained for these federal coal tracts.

Finding No. 2. The applicant has demonstrated that reclamation as required by NDCC Chapter 38-14.1 and NDAC Article 69-05.2 can be accomplished under the reclamation plan contained in the permit application [NDCC 38-14.1-21(3)(b)].

Coal removal is complete within the permit area. Several areas within Permit NACT-1801 are used to support mining activities in other permit areas at the Freedom Mine, including soil and overburden stockpiles, access roads and haulroads, water management structures, coal handling facilities, and Coteau's shop/office complex. Reclamation of disturbed areas will be carried out using reclamation procedures that have been successful in the past and satisfy the requirements of the North Dakota law and rules. Reclamation methods and practices that will be used by the applicant have proven effective in the past. Similar lands have been surface-mined and successfully reclaimed at the former Indian Head and Glenharold Mines in Mercer County using comparable reclamation methods. Successful reclamation practices have also been ongoing at the Freedom Mine for several decades.

The applicant has demonstrated that sufficient soil materials are available to meet the soil redistribution requirements of NDAC 69-05.2-15 and the revegetation requirements of NDAC 69-05.2-22. The application includes information on sources of non-sodic glacial till material that may be selectively handled to cover sodic spoils or potentially used as other suitable strata to supplement subsoil materials in order to achieve the required respread thickness over sodic spoil material. The actual soil removal volumes and expected respread depths will be calculated annually and presented in an annual soils handling plan prepared by the applicant. Most of the areas in Permit NACT-1801 that have been disturbed by mining activities have been reclaimed to their post mining land use, with the exception of those areas used to support mining activities.

The proposed postmining topography that is shown for the reclamation that remains for the permit area meets the requirements of NDCC 38-14.1-24(3) and NDAC 69-05.2-21-02. The average postmining slope proposed for the mining disturbance area is less than the average pre-mine slope in this area. No thin overburden exists within this permit area. The reclaimed lands will be capable of supporting the premine uses, or higher or better uses, that existed prior to mining. The predominant pre-mining land uses in the permit area are cropland (3,433 acres), native prairie (1,405 acres) and tame pastureland (51 acres). Lesser amounts are used for shelterbelts, fish and wildlife habitat (wetlands), farmsteads, industrial, roads, and recreation. The acreage of each postmining land use will be somewhat similar to the pre-mine conditions; however, the cropland acreage will decrease by 137 acres, native prairie will decrease by 28 acres, and tame pastureland will decrease by 43 acres. The acreage of shelterbelts will increase by 13 acres, developed

water resources will increase by 10 acres, wetlands will increase by 23 acres, industrial land use will increase by 148 acres, and roads will increase by 13 acres. Coteau Properties Company and Coteau/DGC are the major landowners within the permit area. Private property not owned by Coteau or Coteau/DGC within the permit area totals 318.6 acres.

Three variances from the three-year contemporaneous reclamation requirements of NDCC 38-14.1-24-14 are requested for overburden stockpiles located in the S1/2NW1/4 of Section 19, SW1/4SE1/4 of Section 19, and N1/2NW1/4 of Section 30, T145N, R87W. These piles will be used for final reclamation of the bond released DGC ash pit located in the SE1/4 of Section 19 and are no longer used to support Coteau's mining activities.

Eleven (11) standard conditions are attached to the permit approval.

Finding No. 3. Based on the assessment of the probable cumulative impacts of all anticipated mining in the area, the proposed operation has been designed to prevent material damage to the hydrologic balance outside the permit area [NDCC 38-14.1-21(3)(c)].

An assessment of the probable cumulative hydrologic impacts (CHIA) of all anticipated mining in the area has been made as required by NDCC 38-14.1-14(1)(o). The Commission finds that the proposed operation has been designed to maintain the quantity, quality, and hydrologic regime of surface and ground water systems in the area. The cumulative effects of all existing and proposed mining operations should not damage the hydrologic balance outside the permit area. The most recent detailed cumulative hydrologic impact assessment was filed with Revision No. 18 to Permit NACT-0201 and includes those areas contained within Permit NACT-1801. The described CHIA, dated October 20, 2015, is on file with the Commission.

Finding No. 4. Lands within the permit area are not within an area designated unsuitable for surface coal mining operations, nor within areas under study or administrative proceedings under a petition to have an area designated as unsuitable for surface coal mining operations [NDCC 38-14.1-21(3)(d)].

None of the lands in Permit NACT-1801 have been designated unsuitable for surface coal mining operations pursuant to NDCC 38-14.1-05, nor are they within an area under study or administrative proceedings under a petition to have an area designated as unsuitable for surface coal mining operations.

Finding No. 5. The proposed mining operations will not interrupt, discontinue, or preclude farming on alluvial valley floors that are irrigated or naturally sub-irrigated or materially damage the quantity or quality of water in surface or underground water systems that supply these alluvial valley floors [NDCC 38-14.1-21(3)(e)].

Based on an examination of the geologic and geomorphic characteristics, soils, land use, and the water quality and quantity of streams occurring within or adjacent to the permit area, it has been determined that there are no alluvial valley floors within or adjacent to the permit area. Drainage systems within and adjacent to the permit area were previously evaluated for alluvial valley floor potential with submittal of each of the individual consolidation permits that make up Permit NACT-1801 and Commission staff determined that these drainages do not have the characteristics to be considered an alluvial valley floor. Detailed alluvial valley floor investigation reports and findings are on file with the Commission.

Finding No. 6. In cases where the mineral estate has been severed from the surface estate, the applicant complied with the requirements of NDCC 38-18 [NDCC 38-14.1-21(3)(f)].

The applicant included copies of the necessary leases and other documents in the permit application demonstrating compliance with the North Dakota Surface Owner Protection Act, North Dakota Century Code Chapter 38-18. This documentation included copies of the notice that was given to surface owners before the application was filed with the Commission.

Finding No. 7. Lands within the permit area are not subject to the prohibitions or limitations of NDCC 38-14.1-07 except for areas that receive specific approvals after complying the applicable review procedures of NDAC Chapter 69-05.2-04 [NDAC 69-05.2-10-03(6)(a)].

Lands in the permit area are:

- a) Not on any lands within the boundaries of units of the North Dakota Park System, the National Park System, the National Wildlife Refuge Systems, the National System of Trails, the National Wilderness Preservation System, the National Wild and Scenic Rivers System, including study rivers designated under Section 5(a) of the Wild and Scenic Rivers Act, and national recreation areas.
- b) Not on any federal lands within the boundaries of any national forest.
- c) Not within three hundred feet of any publicly owned park or places included in the State Historic Sites Registry or the National Register of Historic Places. Several cultural resource surveys and inventories of the area being permitted were conducted. All sites that were identified have been properly tested and evaluated. Several historic and prehistoric sites were identified, and several prehistoric sites have been determined to be eligible for listing on the National Register of Historic Places. The field work for eligible sites was completed several decades ago and the mitigation reports have been accepted by the State Historical Society and the sites have been cleared for disturbance. All other eligible sites were either avoided or mitigated. A cultural resource management plan and data recovery plan was developed for the remaining eligible sites with input from the State Historical Society. The Coteau Properties Company has committed to reporting, testing, and mitigating, if necessary, any previously unrecorded archeological, cultural, or historical materials that may be discovered as a result of mining related activities.
- d) Within one hundred feet of the outside right-of-way line of public roads. However, no additional road closure or disturbances will occur within 100 feet of the outside right-of-way of any public road unless the road authority, Mercer County, has temporarily vacated the road right-of-way or granted permission to conduct mining operations within 100 feet of the road right-of-ways. Several public roads, section line roads and trails were located within the permit area and were mined through and subsequently reclaimed and relocated with approval from Mercer County, including County Road 26, which is a major farm to market road that bifurcates previous Permit NACT-8503 from east to west between Sections 19 and 20 to the north and Sections 29 and 30 to the south in T145N, R87W. Several other public roads, section line roads and trails were closed and relocated during active mining and reclamation operations and will

be re-opened to public access once all mining and reclamation operations have been terminated. An approved alternate public road (County Road 15) has been reopened to the public that spans a distance of three miles from east to west and is located along the northern boundary of Permit NACT-1801. The approvals previously obtained for temporary public road closures, alternate road relocations, and operations within 100 feet of the rights-of-way within and adjacent to the consolidation permit area are included in Permit NACT-1801.

- e) Not within three hundred feet of any public building, school, church, community, or institutional building.
- f) Not within one hundred feet of any cemetery in accordance with NDCC 38-14.1-07.

Finding No. 8. With respect to prime farmland within the permit area, the postmining land use for the pre-mining prime farmland is cropland, the reclamation plans were reviewed by the Natural Resources Conservation Service, then known as the Soil Conservation Service, and their suggestions were considered, operations were conducted in compliance with NDAC 69-05.2-26 and NDCC 38-14.1, and the applicant has the technological capability to restore the productivity on reclaimed lands [NDAC 69-05.2-10-03(6)(c) and NDCC 38-14.1-21(6)].

The applicant provided prime farmland reclamation plans for consolidation Permits NACT-8102, NACT-8203, NACT-8401, NACT-8503, and NACT-8601 that satisfied the requirements of NDAC 69-05.2-09-15 and the performance standards of NDAC 69-05.2-26. The Natural Resources Conservation Service, then known as the Soil Conservation Service, reviewed each permit's prime farmland reclamation plan and deemed them adequate to restore productivity of the prime farmland. The reclamation methods used by the applicant have proven to be successful in the past; therefore, the Commission finds that the applicant has the technological capability to restore the productivity of reclaimed land to a level that is equal to or greater than non-mined prime farmland in the surrounding area under equivalent management practices. The applicant segregated prime and non-prime farmland topsoil for stockpiling or immediate redistribution, but mixed prime and non-prime farmland subsoil as allowed by NDAC 69-05.2-09-15(5). Each landowner received the same acreage of reclaimed prime farmland as was present prior to mining and the postmine land use of the reclaimed prime farmland is cropland.

Finding No. 9. The operations will not affect the continued existence of listed and proposed threatened or endangered species or result in the destruction or adverse modification of listed or proposed designated critical habitats [NDAC 69-05.2-10-03(6)(d)].

Surface coal mining and reclamation activities will not jeopardize or adversely affect the continued existence of any currently listed threatened or endangered species or species proposed for listing, or any proposed or designated critical habitat. No proposed or designated critical habitat exist within or adjacent the permit area.

The USFWS Information for Planning and Consultation (IPaC) web site identifies five threatened or endangered species and piping plover designated critical habitat along the Missouri River and Lake Sakakawea in Mercer County. The five federally listed species are: The Northern Long Eared Bat (*Myotis septentrionalis*), Piping plover (*Charadrius melodus*), Red Knot (*Calidris canutus rufa*), Whooping Crane (*Grus americana*) and Pallid Sturgeon (*Scaphirhynchus albus*).

Permit NACT-1801 consolidates five previous permitted areas where mining has been completed and all reclamation has been completed on affected areas that are not being used to support mining occurring elsewhere. Support activities in Permit NACT-1801 include mine haul roads, sediment ponds, stockpiles, a coal loading facility and the shop / office complex.

The permit area is in the whooping crane bi-annual migration corridor, but mining and reclamation activities are not likely to adversely affect this species. The likelihood of whooping cranes presence in or adjacent the permit area is very low because desirable stop-over roosting habitat, wetland mosaics, does not exist in the area. Whooping crane feeding sites are often found adjacent to roosting sites and away from roads and human disturbance. Wetlands in and adjacent to the permit area are primarily associated with reconstructed wetlands and ephemeral linear drainages. The permit area contains a 14-acre reconstructed wetland and a few smaller, generally less than 4 acres, reclaimed and undisturbed wetlands. A 68-acre reclaimed wetland is located approximately ½ mile north of the permit area in the S1/2 of Section 6, T145N, R87W but no whooping crane sightings have ever been documented at this wetland. Thus, the Commission finds that suitable whooping crane wetland stop-over habitat does not exist within or adjacent to the permit area.

Suitable natural habitat for the Piping plover did not exist in the permit area prior to mining but barren areas associated with mine haul roads and sediment ponds could potentially be utilized by piping plover. If the species is observed utilizing barren habitat in the permit area, regulations require that the mining company notify the USFWS and ND PSC and a plan will be developed to ensure for the protection of the species. Piping plover designated critical habit is located approximately 4 miles north of the permit area along Lake Sakakawea. No suitable or designated critical habitat occurs in or immediately adjacent the permit area.

The Red Knot could potentially migrate through the area and utilize wetlands in and adjacent the permit area while traveling between breeding grounds in the Canadian Arctic and several wintering areas, including the southeast United States. There have been no Red Knot sightings in or adjacent the permit area. Potential habitat exists along the Missouri River and Lake Sakakawea located approximately 18 miles east and 4 miles north, respectively.

The Northern Long Eared Bat was listed threatened April 2, 2015 with a final 4(d) rule published January 14, 2016. The Northern Long Eared Bat's range includes all of North Dakota. There is no known habernacula in Mercer County but this may be because of a lack of adequate survey data. There are no hardwood draws or forest in the permit or adjacent area. Sparsely vegetated reclaimed field windbreaks could provide suitable summer habitat for the Northern Long Eared Bat. If any trees are disturbed, the protocol established with the Key to the Northern Long Eared Bat 4(d) Rule for Non-Federal Activities will be followed. Incidental take of the Northern Long Eared bat is prohibited if it occurs as a result of removing a known occupied maternity roost tree or removing trees within 150 feet of a known occupied maternity roost tree during the pup season from June 1 through July 31 or as a result of removing trees from within 0.25 mile of a hibernaculum at any time of the year.

The Pallid sturgeon is a bottom-oriented larger river obligate fish. Habitat in Mercer County consists of the Missouri River and Lake Sakakawea which are located

approximately 18 miles east and 4 miles north, respectively. There is no Pallid sturgeon habitat in or adjacent to the permit area.

On December 15, 2020, the US Fish and Wildlife Service announced that listing the Monarch butterfly as threatened or endangered is warranted but precluded by higher priority listing actions. The Monarch butterfly is now a Candidate under the Endangered Species Act (ESA). While Candidate species are not legally protected under the ESA, it is within the spirit of the ESA to consider this species as having significant value and worth protecting. The eastern population of Monarch butterflies migrate through North Dakota and feed exclusively on various species of milkweeds. The Coteau Properties Company has been encouraged to plant pollinator plots at the Freedom Mine as recommended by the North Dakota Game and Fish Department.

The USFWS is in the process of removing the Interior Least Tern from the list of threatened and endangered wildlife due to recovery. Accordingly, the prohibitions and protections provided by the ESA will no longer apply to the Interior Least Tern effective February 12, 2021.

On February 9, 2021, the USFWS concurred with the finding that the surface coal mining and reclamation activities in Permit NACT-1801 will not jeopardize or adversely affect the continued existence of any currently listed threatened or endangered species or species proposed for listing or any proposed or designated critical habitat.

Finding No. 10. The applicant has paid all reclamation fees required by 30 CFR subchapter R [NDAC 69-05.2-10-03(6)(e)].

The applicant has paid all reclamation fees required by 30 CFR subchapter R. Records maintained by the Office of Surface Mining's Applicant Violator System indicate that all fees have been paid.

Finding No. 11. The applicant has satisfied the requirements for approving cropland as a post-mining land use [NDAC 69-05.2-10-03(6)(f)].

The applicant has satisfied the requirements for approval of a cropland post-mining land use under NDAC 69-05.2-22-01. Areas reclaimed to cropland will either be seeded directly to crops commonly grown in the area or to a tame grass/legume pre-cropland mixture. The post-mining topography and soils are suitable for cropland in the areas that will be cropped.

Finding No. 12. No existing structures will be used to support mining activities within the permit area and the requirements of NDAC 69-05.2-09-04 do not apply to the permit area [NDAC 69-05.2-10-04].

No existing (pre-mine) structures in the permit area will be used to support mining activities. Design information for the support structures already constructed by Coteau Properties Company in the previously permitted areas that make up Permit NACT-1801 are included in this permit.

Finding No. 13. No drill holes, boreholes or wells will be retained for other uses [NDAC 69-05.2-14-03].

The applicant has not proposed to retain any drill hole, borehole, or well for other uses.

Finding No. 14. No spoil in the permit area is known to cause toxic mine drainage [NDAC 69-05.2-16-11].

The chemical characteristics of the overburden materials in the permit area are such that they do not produce toxic mine drainage. The analysis of overburden samples included in the permit application do not reveal any substances that would cause any chemical reactions or physical effects that are likely to kill, injure, or impair biota commonly present in the area.

Finding No. 15. The applicant will not conduct mining activities within or near perennial and intermittent stream channels that violate applicable water quality standards or adversely affect the quantity and quality of the water and other environmental resources of the stream [NDAC 69-05.2-16-20].

All mining activities within Permit NACT-1801 are complete and in reclamation status except for removal of overburden and SPGM stockpiles, sediment ponds, haulroads, and other mining support features. There are no perennial streams within the permit area. A small reach of West Antelope Creek is the only intermittent stream within or adjacent to the permit area and is located at the southwest corner of Permit NACT-1801 in the S1/2 of Section 30, T145N, R87W. Mining and reclamation operations avoided West Antelope Creek. No additional sediment ponds or other surface water features are proposed for construction in Permit NACT-1801.

Mining activities did not cause or contribute to the violation of applicable state and federal water quality standards and did not adversely affect the water quality of West Antelope Creek.

Finding No. 16. The applicant does not propose to use any experimental practices in the federal coal tract areas [NDAC 69-05.2-27-02].

There are no plans included in the application to use any experimental practices that may be allowed under NDAC 69-05.2-27-02. Federal coal tracts located within Permit NACT-1801 have been mined and reclaimed, and no experimental practices were conducted on those tracts.

Finding No. 17. The applicant does not control and has not controlled surface coal mining and reclamation operations with a demonstrated pattern of willful violations [NDAC 69-05.2-10-03(4)].

Commission records, and those in the Office of Surface Mining's Applicant Violator System, do not show that the applicant, nor any affiliated company, controls and has controlled surface coal mining and reclamation operations with a demonstrated pattern of willful violations of NDCC 38-14.1 or of other states' laws that are based on P.L. 95-87 (the Federal Surface Mining Control and Reclamation Act), of such nature, duration, and with such resulting irreparable damage to the environment as to indicate an intent not to comply with the provisions of these laws.

Finding No. 18. Neither the applicant, nor any affiliated companies, have unabated violations or unpaid civil penalties [NDAC 69-05.2-10-03(1)].

Commission records, and those in the Office of Surface Mining's Applicant Violator System, do not indicate that the applicant, nor any affiliated companies, have any unpaid civil penalties or unabated violations of NDCC 38-14.1 or any other federal or state laws, rules, or regulations pertaining to air or water environmental protection. Staff at the North Dakota Department of Environmental Quality also verified that the applicant has no unabated violations with regard to air and water environmental protection standards.

Finding No. 19. Performance bonds in the amount of \$146,000,000 are sufficient for the proposed surface coal mining operations in the consolidated area that includes this permit [NDAC 69-05.2-12-07].

The Commission has determined that existing collateral and self-bonds totaling \$146,000,000 is sufficient at this time to cover the required reclamation, restoration, and abatement work for the disturbances proposed and remaining in this permit area and others in the consolidated bond area at the Freedom Mine.

Subject to the right of any person with an interest that is or may be adversely affected to request a formal hearing under NDCC 38-14.1-30, **Surface Coal Mining Permit Number NACT-1801** is hereby granted to Coteau Properties Company to engage in surface coal mining and reclamation operations, on the following described areas subject to the applicable requirements of the original permit and conditions, Chapter 38-14.1 of the North Dakota Century Code, and the rules promulgated there under. (Attached is a copy of the metes and bounds description of lands included in the permit area.)

LOCATION					
<u>MINE</u>	<u>ADDRESS</u>	<u>SECTIONS</u>	<u>TOWNSHIP</u>	<u>RANGE</u>	<u>COUNTY</u>
Freedom	Beulah	12, 13, 24	145N	88W	Mercer
		7, 8, 17, 18			
		19, 20, 29, 30	145N	87W	Mercer

Total – 5272.142 Acres

PUBLIC SERVICE COMMISSION

 Randy Christmann Commissioner	 Julie Fedorchak Chair	 Brian Kroshus Commissioner
--	---	---

Section 1.2.2 - Metes and Bounds Description for Permit Area NACT-1801

NACT-1801 PERMIT BOUNDARY

A tract of land located in T145N, R87W and R88W of the 5th P.M., Mercer County, North Dakota, having all bearings and distances based on the North Dakota State Plane Coordinate System, South Zone, 1927 N. A. D., G.P.S. Real Time Kinematic survey.

All bound calls supersede any metes within this description. Tract described as follows:

Beginning at the northwest corner of said Section 12, T145N, R88W; thence S88°10'18"E a distance of 2638.11' to the north 1/4 corner of said Section; thence S88°09'43"E a distance of 2645.26' to the northeast corner of said Section; thence S00°59'00"W a distance of 2639.88' to the east 1/4 corner of said Section; thence S00°58'08"W a distance of 2604.40' to the southeast corner of said Section; thence S89°16'39"E a distance of 1026.40' on the south line of Section 7, T145N, R87W, 5TH P.M.; thence N77°57'15"E a distance of 1022.74'; thence N89°59'35"E a distance of 607.98'; thence N00°54'36"E a distance of 1074.14' on north-south 1/4 line to the center of said Section; thence S89°24'28"E a distance of 2630.98' on east-west 1/16 line to the south 1/16 corner of said Section ; thence N00°50'56"E a distance of 1313.68' on east line of said Section to the east 1/4 corner ; thence N00°50'41"E a distance of 2639.29' on east line of said Section to the northeast corner; thence S88°55'31"E a distance of 1318.78' on the north line of Section 8, T145N, R87W, 5TH P.M. to the west 1/16 corner of said Section; thence S88°55'31"E a distance of 195.35' on north line of said Section; thence S00°52'49"W a distance of 110.71'; thence S31°42'34"E a distance of 764.24'; thence S44°23'40"E a distance of 118.61'; thence S37°42'53"E a distance of 161.20'; thence S20°58'38"E a distance of 370.05'; thence S21°48'48"E a distance of 416.80'; thence S89°46'05"E a distance of 228.40' to the north-south 1/4 line of said Section; thence S00°52'48"W a distance of 953.45' on the north-south 1/4 line of said Section to the center 1/4 corner; thence S88°56'00"E a distance of 2643.36' on the east-west 1/4 line to the east 1/4 corner of said Section; thence S01°03'33"W a distance of 2631.85' to the southeast corner of said Section; thence S01°08'14"W a distance of 2637.34 ' to the east 1/4 corner of Section 17, T145N, R87W, 5TH P.M.; thence S01°08'04"W a distance of 2630.73' to the southeast corner of said Section; thence S01°02'28"W a distance of 2638.79' to the east 1/4 corner of Section 20, T145N, R87W, 5TH P.M.; thence S00°53'20"W a distance of 2638.78' to the southeast corner of said Section; thence S00°45'58"W a distance of 2638.60' to the east 1/4 corner of Section 29, T145N, R87W, 5TH P.M.; thence S00°45'53"W a distance of 2638.51' to the southeast corner of said Section; thence N88°52'43"W a distance of 2632.18' to the south 1/4 corner of said Section; thence N89°01'50"W a distance of 2628.71' to the southwest corner of said Section; thence N89°02'11"W a distance of 2635.70' to the south 1/4 of Section 30, T145N, R87W, 5TH P.M.; thence N89°02'09"W a distance of 1317.86' to the west 1/16 corner of said Section; thence N00°49'39"E a distance of 1317.22' to the southwest 1/16 corner of said Section; thence N00°49'39"E a distance of 223.76' on the north-south 1/16 line of said Section; thence

N18°04'10"W a distance of 386.22'; thence S71°55'50"W a distance of 350.00'; thence N18°04'10"W a distance of 350.00'; thence N71°55'50"E a distance of 350.00'; thence N18°04'10"W a distance of 2518.87'; thence N89°01'53"W a distance of 156.85'; thence N00°58'07"E a distance of 151.17'; thence N89°01'53"W a distance of 98.11' to the west line of said Section; thence N00°58'07"E a distance of 500.00' to the northwest corner of said Section; thence N00°57'57"E a distance of 294.19' on the east line of Section 24, T145N, R88W, 5TH P.M.; thence N26°08'08"W a distance of 368.23'; thence S80°24'07"W a distance of 636.29'; thence N88°50'29"W a distance of 116.98'; thence N29°01'47"W a distance of 799.99'; thence N61°13'20"E a distance of 379.45'; thence N00°00'10"E a distance of 489.54'; thence N21°10'37"E a distance of 96.54'; thence S88°28'21"E a distance of 64.63'; thence S75°56'13"E a distance of 190.50'; thence N79°22'45"E a distance of 72.36'; thence N38°54'13"E a distance of 68.68'; thence N24°58'17"E a distance of 791.19'; thence N47°41'15"E a distance of 43.63'; thence N74°13'31"E a distance of 95.14'; thence N49°10'06"E a distance of 88.78'; thence N12°06'47"E a distance of 68.64'; thence N12°24'46"W a distance of 326.56'; thence N09°07'26"W a distance of 399.59'; thence N67°21'19"W a distance of 73.80'; thence N66°56'55"W a distance of 79.77'; thence N78°05'11"W a distance of 79.07'; thence S51°36'57"W a distance of 1643.71'; thence S69°15'51"W a distance of 554.22'; thence N19°53'03"W a distance of 561.73'; thence N00°58'15"E a distance of 144.98'; thence N35°40'17"W a distance of 301.56'; thence N00°58'16"E a distance of 157.98'; thence N89°01'49"W a distance of 79.99'; thence N36°54'09"W a distance of 45.60'; thence N89°01'40"W a distance of 124.71'; thence N41°18'30"W a distance of 100.01'; thence N00°58'22"E a distance of 203.76'; thence N45°58'30"E a distance of 30.00'; thence S89°01'45"E a distance of 188.77'; thence N00°58'13"E a distance of 193.66'; thence N80°08'20"E a distance of 1372.75'; thence N01°00'36"E a distance of 985.18' to the south line of Section 13, T145N, R88W, 5TH P.M.; thence N88°43'02"W a distance of 519.32' on the east-west line of said Section ; thence N00°57'07"E a distance of 15.07'; thence N88°43'02"W a distance of 575.35'; thence N00°57'07"E a distance of 285.06'; thence N88°43'02"W a distance of 144.99'; thence N00°57'07"E a distance of 3146.29'; thence N45°58'26"E a distance of 141.43'; thence S89°02'00"E a distance of 599.12'; thence S59°22'42"E a distance of 96.64'; thence with a curve turning to the left with an arc length of 83.83', with a radius of 161.95', with a chord bearing of S74°12'28"E, with a chord length of 82.90'; thence S89°02'15"E a distance of 12.33'; thence N15°45'50"W a distance of 134.72'; thence N24°44'46"W a distance of 747.85'; thence S41°18'42"W a distance of 884.06'; thence N89°02'00"W a distance of 58.35'; thence S00°57'07"W a distance of 970.78' to the east-west 1/4 line of Section 13, T145, R88W, 5TH P.M.; thence N88°34'59"W a distance of 2189.28' on the east-west 1/4 line of said Section; thence N01°00'32"E a distance of 61.84'; thence N88°59'38"W a distance of 63.14'; thence N01°00'59"E a distance of 70.95'; thence N88°59'02"W a distance of 330.03' to the west line of said Section; thence N00°57'13"E a distance of 2511.15' to the northwest corner of said Section; thence N00°57'20"E a distance of 2641.41' to the west 1/4 corner of Section 12, T145N, R88W, 5TH P.M.; thence N00°57'12"E a distance of 2640.37' on the west line of said Section to the point of beginning.

Said tract of land contains an area of 5506.712 acres less 234.573 acres (Parcel A, B and C)

Total permitted area of land is 5272.142 acres.

PARCEL A

A tract of land located in the northeast 1/4 of Section 13, T145N, R88W of the 5th P.M., Mercer County, North Dakota, having all bearings and distances based on the North Dakota State Plane Coordinate System, South Zone, 1927 N. A. D., G.P.S. Real Time Kinematic survey.

All bound calls supersede any metes within this description. Tract described as follows:

Beginning at the northeast corner of said Section 13, T145N, R88W; thence S00°57'07"W a distance of 1372.14' on the east line of said Section; thence S46°08'33"W a distance of 1266.79'; thence S89°59'45"W a distance of 442.21'; thence N13°22'15"W a distance of 510.99'; thence N02°45'20"W a distance of 1604.71'; thence N14°55'21"E a distance of 194.24' thence S88°34'20"E a distance of 1524.21' on the north line of said Section to the point of beginning.

Said tract of land contains an area of 68.883 acres

PARCEL B

A tract of land located in Section 18, T145N, R87W and Section 13, T145N, R88W of the 5th P.M., Mercer County, North Dakota, having all bearings and distances based on the North Dakota State Plane Coordinate System, South Zone, 1927 N. A. D., G.P.S. Real Time Kinematic survey.

All bound calls supersede any metes within this description. Tract described as follows:

Beginning at the west 1/4 corner of said Section 18, T145N, R87W; thence N00°57'07"E a distance of 146.54' on the west line of said Section to the true point of beginning; thence N48°11'38"E a distance of 351.44'; thence S32°32'47"E a distance of 461.57'; thence S89°04'25"E a distance of 57.71'; thence S39°54'26"E a distance of 412.28'; thence S50°05'34"W a distance of 400.00'; thence N39°54'26"W a distance of 225.00'; thence S50°05'34"W a distance of 516.34' to the east line of Section 13, T145N, R88W; thence S50°05'34"W a distance of 657.20'; thence N39°54'26"W a distance of 225.01'; thence S50°05'34"W a distance of 349.13'; thence N09°28'56"W a distance of 465.42'; thence N48°11'38"E a distance of 1351.95' to the point of beginning.

Said tract of land contains an area of 27.740 acres.

PARCEL C

A tract of land located in the southwest 1/4 of Section 19, T145N, R87W of the 5th P.M., Mercer County, North Dakota, having all bearings and distances based on the North Dakota State Plane Coordinate System, South Zone, 1927 N. A. D., G.P.S. Real Time Kinematicsurvey.

All bound calls supersede any metes within this description. Tract described as follows:

Beginning at the south 1/4 corner of said Section 19, T145N, R87W; thence N89°02'41"W a distance of 2229.60'; thence N17°48'50"W a distance of 456.66'; thence N00°00'00"E a distance of 1957.78'; thence N90°00'00"E a distance of 1096.12'; thence N00°58'43"E a distance of 218.99'; thence S89°17'39"E a distance of 1316.11'; thence S01°01'13"W a distance of 2632.88' to the point of beginning.

Said tract of land contains an area of 137.950 acres.

General location map of Permit NACT-1801
Cross-hatched areas have received Final Bond Release

