Public Service Commission
State of North Dakota

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January 25, 2011

Mr. Allen D. Klein
Regional Director
Western Regional Coordinating Center
Office of Surface Mining
1999 Broadway, Suite 3320
Denver, CO 80202-3050

RE: State Recommendation Letter for Revision No. 8 to Permit NACT-0201

Dear Mr. Klein:

Enclosed are portions of the Secretarial Decision Document prepared by the Reclamation Division for the mine plan approval associated with the approval of Coteau Properties Company's (Coteau) Revision No. 8 to Surface Coal Mining and Reclamation Permit No. NACT-0201. This revision includes plans to mine the majority of the federal coal tracts located south of County Road 26, totaling approximately 2,580 acres, within Permit NACT-0201 at the Freedom Mine. The Bureau of Land Management issued Federal Coal Lease NDM 91535 to Coteau on June 1, 2006, for the entire 5,333.56 acres of federal coal within Permit No. NACT-0201. The federal coal tracts were included in the original permit application, but were not approved for mining since Coteau did not have the required lease. Revision 8 added detailed mine plans for most of the federal coal tracts located south of County Road 26.

Mine plan approval by the Department of the Interior is required before the federal coal can be mined as approved in Revision 8 to Permit NACT-0201. Revision 8 was approved by the Commission on January 12, 2011. Coteau filed a Resource Recovery and Protection Plan for all of the federal coal within Permit NACT-0201 with the BLM's Billings office in August 15, 2008, and it was approved on May 6, 2009. One hundred percent of the coal interest for the tracts in Lease NDM 91535 is federally owned and the surface is under private ownership.

A condition was attached to the Commission's original April 14, 2004 permit approval prohibiting any overburden or coal removal from the federal coal acreage until mine plan approval is granted by the Department of the Interior. However, Coteau is allowed to conduct surface disturbance on some of the federal coal tracts to the extent necessary for mining on adjoining non-federal coal tracts.

Enclosed are copies of the Commission's January 12, 2011 permit revision approval form, the detailed written findings required under North Dakota's regulatory program, the supplemental report to be used to determine NEPA compliance, and a chronology of events that summarizes the processing of Revision 8 to Permit NACT-0201. The bond amount for this permit was not increased because the current bond amount is adequate to cover the estimated reclamation costs for the worst case in this bond area that includes Permit NACT-0201 and others at the Freedom Mine. Also, enclosed is a DVD containing Permit NACT-0201 that includes all of the changes and updates made with Revision 8.

We recommend that the Secretary approve the mine plan for the federal coal that will be mined under Lease NDM 91535 south of County Road 26 as approved in Revision No. 8 to Surface Coal Mining Permit No. NACT-0201 for the Freedom Mine.

If you have any questions, please contact this office.

Sincerely,

James R. Deutsch
Director
Reclamation Division

Enclosures

cc: Jeffrey Fleischman, OSM-Casper
Bob Postle, OSM-Denver
Gene Hay, OSM-Denver
Joe Friedlander, Coteau Properties Company

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STATE OF NORTH DAKOTA

PUBLIC SERVICE COMMISSION

Coteau Properties Company
Revision No. 8, Permit NACT-0201
Approval

Case No. RC-10-71

REVISION OF PERMIT TO ENGAGE IN SURFACE COAL MINING AND RECLAMATION OPERATIONS

January 12, 2011

Based on the application for **Revision Number 8 to Permit Number NACT-0201 received March 22, 2010,** and all information and documentation contained therein, the North Dakota Public Service Commission finds that:

1. The revision application submitted on March 22, 2010, is complete and accurate and the applicant has complied with the requirements of Chapter 38-14.1 of the North Dakota Century Code and Article 69-05.2 of the North Dakota Administrative Code.

2. The applicant has received a federal lease covering 5,333.56 acres of federal coal within the permit area; however, Commission approval of mining and reclamation plans for the federal coal tracts is limited to the following federal coal tracts: Lots 3 and 4 and S½NW¼ of Section 2; Lots 1 and 2, S½NE¼ and S½ of Section 4; Lots 1 through 7, S½NE¼, SE¼NW¼, E½SW¼ and SE¼ of Section 6; N½NE¼, SE¼NE¼, NW¼ and N½SW¼ of Section 8, all within T144N, R88W; and the N½NE¼, SW¼NE¼, W½ and NW¼SE¼ of Section 26; N½N½, SE¼NE¼, SW¼, E½SE¼ and SW¼SE¼ of Section 34, all within T145N, R88W. As required by Special Condition No. 1 for Permit NACT-0201, no coal removal on these tracts may occur until the U.S. Department of the Interior approves the federal mine plan pursuant to 30 CFR 746.11. Until that mine plan is approved, surface disturbances on the federal coal tracts must be limited to those activities that are needed for carrying out mining on the adjoining tracts where the coal interests are privately owned.

3. Performance bonds in the total amount of $102,000,000 are currently sufficient for the proposed mining and reclamation operations in the consolidated bond area for the Freedom Mine that include Permit NACT-0201.

4. The Commission's other findings that were made when the permit was issued remain applicable to the revised operation and reclamation plans.

Revision Number 8 to Permit Number NACT-0201 is hereby granted to The Coteau Properties Company to extend mining onto most of the federal coal tracts located south of County Road 26 within the existing permit area, modify operations and reclamation plans to include this additional mining, and to update other information and plans in this permit as described in the revision application received March 22, 2010.

The approved revision is subject to the requirements of Chapter 38-14.1 of the North Dakota Century Code, Article 69-05.2 of the North Dakota Administrative Code, the conditions of the approved permit, and any additional or revised permit conditions listed on attached PSC Reclamation Form - 3. Pursuant to Section 38-14.1-23 of the North Dakota Century Code and Article 69-05.2 of the North Dakota Administrative Code, this revision was found to be a significant alteration to the previously approved permit.

PUBLIC SERVICE COMMISSION

Kevin Cramer	**Tony Clark**	**Brian P. Kalk**
Commissioner	**Chairman**	**Commissioner**

SMCRA PERMIT FINDINGS

The Coteau Properties Company
Freedom Mine

Surface Coal Mining and Reclamation Operations

Revision No. 8 to Permit No. NACT-0201

Prepared by
North Dakota Public Service Commission
Reclamation Division
January 2011

BACKGROUND – The Coteau Properties Company (Coteau) submitted Permit Application No. NACT-0201 to the North Dakota Public Service Commission (Commission) on June 4, 2002, and it was approved by the Commission on April 14, 2004, with an initial permit term of five years. The first renewal of this permit was approved by the Commission on April 13, 2009, extending the permit term another five years, until April 14, 2014. Although numerous federal coal tracts were included in the permit area, no mining of these tracts was proposed with the original permit application or when the permit was renewed. Only surface disturbances on these tracts were proposed in support of mining on private and state owned coal tracts. The surface of all federal coal tracts is privately owned and leased by Coteau.

On March 23, 2010, Coteau filed the application for Revision No. 8 to Permit NACT-0201. With this revision application, Coteau provided the federal coal lease for 5,333.56 acres of federal coal in Permit NACT-0201 and requested approval to mine a number of federal coal tracts located south of County Road 26. The federal coal tracts proposed for mining are the following: Lots 3 and 4 and S½NW¼ of Section 2; Lots 1 and 2, S½NE¼ and S½ of Section 4; Lots 1 through 7, S½NE¼, SE¼NW¼, E½SW¼ and SE¼ of Section 6; N½NE¼, SE¼NE¼, NW¼ and N½SW¼ of Section 8, all within T144N, R88W; and the N½NE¼, SW¼NE¼, W½ and NW¼SE¼ of Section 26; N½N½, SE¼NE¼, SW¼, E½SE¼ and SW¼SE¼ of Section 34, all within T145N, R88W. No additional lands were added to the permit area as part of the application for Revision 8, the total acreage within Permit NACT-0201 remained at approximately 17,052. The mining of federal coal tracts as proposed by Revision No. 8 constitutes a mine plan modification that requires approval by the U.S. Department of Interior.

Based on information in the approved permit and the application for Revision No. 8 to Permit Number NACT-0201 submitted by Coteau on March 23, 2010, and as revised through December 13, 2010, or from that otherwise available and known by the applicant, the Commission finds that:

Finding No. 1. The permit revision 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 primary purpose of Revision 8 is to extend mining onto federal coal tracts as well as provide more detailed operations and reclamation plans through 2030 in the southern portion of Permit NACT-0201. In addition to mining the federal coal tracts, Revision 8 also updates the extended mine plan, reclamation plans, including notable changes to the proposed post-mining topography, and other information in the permit. The applicant verified that all information included in the revision application and original permit is true and correct to the best of their knowledge. Commission staff conducted completeness and technical reviews of the revision application to ensure that the required information was provided and mining and reclamation plans meet all applicable requirements. The Reclamation Division sent completeness and technical deficiency letters to the applicant on April 9, July 28, October 15, and December 2, 2010. Responses to each letter were reviewed and changes to the application were made to address the concerns that were noted. The Commission finds that this significant revision application is now accurate and complete. Coteau published the required notices in newspapers and the Commission sent notices to the affected surface owners in the permit area and to numerous local, state and federal agencies. Advisory committee members also reviewed portions of the application and comments were received from several agencies. No objections or requests for an informal conference were received on this application.

Federal Coal Lease No. NDM 91535 was issued to The Coteau Properties Company effective June 1, 2006, covering 5,333.56 acres of federal coal within Permit NACT-0201. These federal coal tracts are located in: Lots 3 and 4 and S½NW¼ of Section 2; Lots 1 and 2, S½NE¼ and S½ of Section 4; Lots 1 through 7, S½NE¼, SE¼NW¼, E½SW¼ and SE¼ of Section 6; N½NE¼, SE¼NE¼, NW¼ and N½SW¼ of Section 8, all in the T144N, R88W; E½ of Section 12, T144N, R89W; and Lots 1 and 2, S½NE¼ and SE¼ of Section 4; N½ of Section 10; all of Section 14; all of Section 22; N½NE¼, SW¼NE¼, W½, and NW¼SE¼ of Section 26; E½NE¼, SW¼NE¼, SE¼NW¼, and S½ of Section 28; N½N½, SE¼NE¼, SW¼, E½SE¼, and SW¼SE¼ of Section 34, all in the T145N, R88W.

As part of the application for Revision No. 8 to Permit NACT-0201, Coteau has added mining and reclamation plans to most of the federal coal tracts located south of County Road 26. Although the federal coal lease covers 5,333.56 acres of federal coal within Permit NACT-0201, Commission approval of mining and reclamation plans for the federal coal tracts as part of Revision No. 8 is limited to the following federal coal tracts: Lots 3 and 4 and S½NW¼ of Section 2; Lots 1 and 2, S½NE¼ and S½ of Section 4; Lots 1 through 7, S½NE¼, SE¼NW¼, E½SW¼, and SE¼ of Section 6; N½NE¼, SE¼NE¼, NW¼, and N½SW¼ of Section 8, all within T144N, R88W; and the N½NE¼, SW¼NE¼, W½, and NW¼SE¼ of Section 26; N½N½, SE¼NE¼, SW¼, E½SE¼, and SW¼SE¼ of Section 34, all within T145N, R88W. As required by Special Condition No. 1 for Permit NACT-0201, no coal removal on these tracts may occur until the U.S. Department of the Interior approves the federal plan mine pursuant to 30 CFR 746.11.

On August 15, 2008, Coteau submitted a Resource Recovery and Protection Plan (R2P2) to the Bureau of Land Management within the U.S. Department of the Interior for tracts under Federal Coal Lease No. NDM 91535. A memorandum from the Bureau of Land Management dated May 6, 2009, recommended approval of this R2P2. Coteau either owns the surface or has the appropriate surface leases to conduct surface coal mining activities on the federal coal tracts. Therefore, Coteau currently also has the legal right to disturb the surface of those federal coal tracts that are proposed for mining by Revision 8 (those tracts located south of County Road 26).

However, before overburden and coal removal is allowed to begin on the federal coal tracts, the Department of the Interior needs to approve a mining plan for those federal coal tracts proposed for mining by Revision 8 as required by 30 CFR 746.11. Special Condition No. 1 attached to the original permit prohibits any overburden removal from the federal coal tracts as described above until Coteau receives the required federal mining plan approval. Until that mining plan is approved, surface disturbances on the federal coal tracts will be limited to those activities that are needed for carrying out mining on the adjoining tracts where the coal interests are privately owned.

The permit area contains a large number of cultural resource sites of which some have been identified as having special significance to Native Americans. Commission staff, in cooperation and coordination with the applicant, State Historical Society, Office of Surface Mining (OSM) and Bureau of Land Management (BLM) participated in a series of meetings prior to and during the review of this application to consult with three Indian Tribes and other interested parties and agencies. A Cultural Resource Management Plan has been approved by the State Historical Society and with the concurrence of OSM and BLM. The management plan consists of data recovery from some sites prior to disturbance, avoiding some sites, the long-term preservation of others, and the establishment of a trust for Native American cultural education. The federal coal lease includes a special stipulation that prohibits mine related disturbance of 2 cultural resource areas located on federal coal. One tract is approximately 4 acres in size and is located in the NW¼ of Section 14 and the other is approximately 81 acres in size and is located in the NE¼ of Section 22, both in T145N, R89W.

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)].

Revision 8 includes plans for mining some of the federal coal tracts currently within the permit area and updates the mining and reclamation sections of the permit accordingly. Coal removal plans are provided for most of the federal coal tracts located south of County Road 26 that are included in Federal Coal Lease No. 91535. Other areas will be used for support activities including soil and overburden stockpiles, water management structures and other associated disturbance. 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. 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 reclaimed lands will be capable of supporting the premine uses, or higher or better uses, than existed prior to mining. The predominant premining land uses in the permit area are native grassland and cropland. Lesser amounts are used for tame pastureland, shelterbelts, woodlands, roads, and fish and wildlife habitat (wetlands). Some areas are also used for industrial purposes and several occupied farmsteads are located in the permit area. The breakdown of postmining land uses will be similar to the premine conditions.

The proposed permit area contains five ‘fen’ wetlands, which are unique features to this region. Three fen wetlands are located in the southwestern part of the permit area and the other two located in the northern part. A fen wetland is a type of wet meadow or alkaline bog that is primarily fed by ground water constantly flowing to the surface. The 5.2 acres of fen wetlands in the permit area are located along drainages and these wetlands, along with their ground water sources, will likely be destroyed by the mining operations. The special combination of landscape position, shallow aquifer, underlying geology and soils is so unique to fen wetlands that recreating these conditions is not technically feasible.

Therefore, the applicant will address the loss of fen wetlands through mitigation by increasing the size of a wetland complex on reclaimed land in Permit NACT-9001 that is currently owned by the applicant. A total of 36 acres of seasonal wetlands will be added to the wetland complex and 40 acres of additional native grassland will be established near the wetland. These changes were made to the reclamation plan in Permit NACT-9001 with Revision No. 17. In order to ensure this wetland complex and native grassland is protected long-term, the applicant has committed to either placing a protective covenant in the deed at the time the land is conveyed to another party to prohibit wetland drainage or grassland conversion to cropland; granting a conservation easement prior to the disposal of the land to an entity that will ensure the same long-term protection; or convey the land to an entity that will ensure the same long-term protection. Special Condition No. 3 that is attached to Permit NACT-0201 requires one of these actions be taken as a condition of the Commission's approval to allow the disturbance of the fen wetlands and associated ground water sources.

With regard to the reclamation schedule, the applicant has demonstrated that more than 180 days will be needed to complete rough grading following coal removal from the area that will be mined from 2009 to 2020. The variance is needed due to the pit length and cycle time for truck/shovel and dragline stripping. Variances from the 180-day requirement are allowed by NDAC 69-05.2-21-01(2) and the Commission approves the applicant's request for this variance. The applicant has also requested a variance from the four spoil peak grading requirement for areas where the spoil peaks will be covered with prebench fill in order to meet the postmining topography. A maximum of six spoil peaks may exist in these situations. This variance request has been justified and the Commission approves it as allowed by NDAC 69-05.2-21-01(2).

No variances from the three-year reclamation requirement (completion of all reclamation work through the initial seeding) were requested at this time. If a variance is needed in the future, additional details with the appropriate justification will have to be provided by the applicant before a variance can be approved. Variances from the three-year reclamation requirement are allowed by NDCC 38-14.1-24(14).

Finding No. 3. Based on the assessment of the probable cumulative impact 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)].

The Reclamation Division has made an assessment of the probable cumulative hydrologic impacts of all anticipated mining in the area of the Freedom Mine as required by NDCC 38-14.1-14(1)(o). The Commission finds that operations proposed in the application for Permit NACT-0401 have 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 materially damage the hydrologic balance and water availability within or near the proposed permit area.

The cumulative hydraulic impact assessment (CHIA) was last updated when Permit NACT-0401 was approved. This was the last significant addition of acres to the Freedom Mine that required an update to the CHIA. Permit NACT-0401 added 5,710 acres to the Freedom Mine in the northeast portion of the mine. This area includes acreage in all existing and foreseeable operations of the Freedom Mine, and all ground and surface water systems that logically may be affected by the cumulative effects of all Freedom Mine permits and other mining operations.

The assessment area is an established lignite mining district that includes abandoned surface and underground mines as well as active, large scale surface mines. Freedom Mine operations are covered by Permits NACT-8102, NACT-8203, NACT-8401, NACT-8503, NACT-8601, NACT-9001, NACT-9101, NACT-9501, NACT-0201 and NACT-0401. The other surface mining operation located north of the Knife River, Indian Head Mine, ceased operation and has been in final reclamation since May, 1992. The last active mining at Indian Head Mine was located about 3 miles south of the Freedom Mine area. Beulah Mine of Dakota Westmoreland Corporation is located south of the Knife River, about 8 miles south of the permitted area of Freedom Mine.

The Freedom Mine permits all contain detailed descriptions of regional and mine area geology, ground and surface water hydrology. Additionally, Freedom Mine has mine-wide ground and surface water monitoring plans still on paper media that are bound as 7 separate volumes. These volumes are indexed as a part of each mining permit.

Cumulative hydrologic impact assessments were prepared for all the Freedom Mine permits, and many of the more recent ones have had the same assessment areas as this determination. The neighboring surface lignite mines, Indian Head Mine and Beulah Mine, have made assessments of probable hydrologic consequences that serve to confirm the findings of Coteau Properties Company and the Reclamation Division's conclusions concerning probable hydrologic consequences and their cumulative impacts.

Material damage to the hydrologic balance by mining is here defined for the purpose of cumulative impact assessment as permanent and unmitigated degradation of the hydrologic environment outside permit areas, in excess of regulatory standards, which significantly affects beneficial economic uses of water resources, including maintenance of environmental and wildlife values.

The hydrologic standards used to assess the probable cumulative impacts of mining in this area and North Dakota coal producing areas in general are derived from four sources: 1) the baseline state as documented in all permit applications and in the appropriate county ground water studies (for Freedom Mine, the Mercer and Oliver Counties Ground Water Study, N.D. Geol. Surv. Bull. 56, pts. I-III), 2) the probable hydrologic consequences and hydrologic reclamation plan in all relevant permits, 3) NDAC 69-05.2-16 Performance standards - Hydrologic balance, and 4) NDAC 33-16-02 Standards of Water Quality for State of North Dakota. These sources also provide the performance standards and environmental parameters that will be used to evaluate final bond release applications for individual tracts of permitted land.

The State Department of Health's, Standards of Water Quality for State of North Dakota, establishes parameter-specific standards for water quality in surface and ground water, and NDAC 69-05.2-16-04(1)(g) makes them part of the hydrologic performance standards for mining operations. These standards are consistent with the federal Safe Drinking Water Act of 1974, the established North Dakota anti-degradation policy, and they accommodate situations where preexisting water quality exceeds the standards. The rules basically require that discharges into the waters of the state not cause concentrations of substances in the receiving water body to exceed the established limits.

The ground water database for Freedom Mine has been acquired from over 300 monitoring wells that have been monitored for water levels and sampled for water quality since the early 1980’s. Scientific investigations, ranging from study of fundamental ground water

questions to landowner complaints about specific water wells or surface water bodies, has served to verify the geologic and hydrologic data which have been acquired by Coteau Properties Co. and other mine operators since the mid-1970's. These data are compared and used in analysis along with data which have been acquired by diverse, independent sources such as the U.S. Geological Survey, North Dakota Geological Survey, State Water Commission, State Health Department, private well drilling contractors, and consultants performing water well certifications. No inconsistencies attributable to careless or improper data acquisition on the part of mine operators or their contractors have been discovered by this close scrutiny. In addition to technical use, data are periodically audited by the Reclamation Division for completeness of acquisition, and monitoring sites are checked during mine inspections.

The PSC Abandoned Mine Lands Division lists 24 inactive lignite mines in the assessment area. All but 5 of these were very small mines that operated for local use prior to 1950 and had maximum production of less than 1,000 tons per year. At the larger old sites with underground workings, collapse has caused localized safety problems. The Dakota Collieries Mine was wholly a surface mine started in 1922 and the predecessor to Indian Head Mine. Old workings of this mine are in the permitted and adjacent areas of current Indian Head Mine permits. The Dakota Star, later Truax-Traer, Mine operated entirely as a strip mine from 1940 to 1967, and this old mine site is included in and adjacent to the area permitted under NACT-9101. Evidence from over 20 years of hydrologic analysis and monitoring by mines and power plants in the assessment area indicates that effects of these old mine sites on surface and ground water are localized and are not significant factors in the hydrologic regime.

The permit area is within the Missouri Slope physiographic area that is characterized by glaciated terrain of moderate relief, stream dissected bedrock and intermittent streams. Over much of this portion of the Knife River drainage, ground moraine is thin, glacial features are few and bedrock topography controls landforms away from larger stream channels.

The geologic formations of significance to the study area are the Coleharbor Formation and the Sentinel Butte Formation. The lithology of the Coleharbor Formation includes Quaternary age till, gravel, and sand. The Sentinel Butte Formation is Paleocene in age and consists of interbedded silts, clays, sands, and lignites of non-marine origin.

Hydrostratigraphic units of concern in the general mine area, include shallow lignite aquifers in the Paleocene bedrock and two glaciofluvial channel fill systems, termed the Beulah Trench and Renner Trench. All have been utilized as private water supplies. The permit area is bounded on the east and west by these glaciofluvial channel fill systems and their broad valleys. The uppermost bedrock aquifer of significance in the area is the Beulah Lignite Bed, the only lignite to be mined in the proposed permit area. Two localized units, the Insert Interval of thin lignite and below it a sand, occur below the Beulah Bed in the western Freedom Mine permit areas. In the east mine area, the Spaer Bed is the next aquifer below the Beulah Bed. Deeper lignites and sands of the Sentinel Butte Formation have local potential as aquifers in the general area. This bedrock sequence is dissected by surface drainages or is truncated unconformably against Pleistocene sediments filling the glaciofluvial channels and their tributaries. Permit NACT-0401, Section 2.3.1.1, Geomorphic Reference Map, shows most of the cumulative assessment area, permit boundaries, topography, Beulah Bed cropline and major geomorphic features relevant to hydrology.

All the shallow aquifers are recharged directly, to some degree, by infiltration of precipitation or snowmelt and downward movement of water from overlying units, and they discharge at outcrop or subcrop areas and by downward movement of water to deeper strata through aquitards. In general, the same hydrogeologic relationships apply to the lignite-bearing sediments at Freedom Mine as at other active and abandoned mines in the assessment area; however, aquifers in the adjacent glacial trenches are also significant recharge and discharge areas for units below the Beulah Bed.

The Beulah Trench, a recognizable topographic feature, bounds the west side of the Freedom Mine area with till and fluvial clastic sediments 250-350 feet thick. The deeper sediments in this channel constitute the Antelope Creek Aquifer and are hydrologically connected to some degree with similar sediments in the valleys of Spring Creek, Antelope Creek and Knife River. A comparable glaciofluvial channel, the Renner Trench, roughly parallels the Beulah Trench about 2 to 3 miles to the east and bounds the east side of mining in the permit area.

Mining operations within the general mine plan area will remove the Beulah Bed and its hydrologic functions. In mined-through areas, this lignite aquifer will be replaced with a single pit-bottom saturated zone within a volume of mixed, unconsolidated sediment that is deposited as mine spoil during overburden removal by dragline or backfilling with truck and shovel. The water quality in this saturated zone has mineralization about 1.5 to 2 times higher than in the undisturbed Beulah Bed and more comparable to ion concentrations found in localized saturated zones in the undisturbed clastic bedrock. Given the lower transmissivity of the spoil material and the low degree of deterioration of water quality, no diminution of ground water quality in adjacent undisturbed hydrostratigraphic units is anticipated, and no deterioration of adjacent undisturbed aquifers by waters from reclaimed spoil has been recorded by the monitoring program.

The Beulah and Renner Trenches receive flow indirectly from the Beulah lignite at outcrop springs and seeps, and where the aquifer subcrops directly against shallow sediments. The Beulah Bed under natural conditions, unlike the deeper bedrock aquifers, is not fully saturated over much of the Freedom Mine area and is a minor source of recharge for the trench systems. Springs and seeps along its cropline generally have low discharge volumes except in structural lows. Water quality at springs and seeps may be locally influenced by recharge near the cropline and commingling discharge from small, water-bearing units in clastic sediments including materials altered by natural lignite burns, regionally termed "scoria".

Ground water movement through shallow silts and clays in the Freedom Mine area is generally slow and downward and serves to recharge lignite and sand aquifers. Water movement in the lignites and sands is predominantly lateral. Recharge in western North Dakota is infrequent and only occurs during spring runoff and intense precipitation events, since potential evapotranspiration exceeds precipitation over most of the year. Plant uptake is a significant consumer of precipitation during the growing season. In general, low-gradient ephemeral and intermittent drainages and wetlands tend to be effective ground water recharge areas because of snowmelt concentration and retention, while well-drained uplands are less effective recharge sites. Tracts of reclaimed spoil have reduced infiltration capacity compared with the soils and parent materials they replace due to destruction of rock and soil structure and material compaction. Mining and the resultant reclaimed spoils, which characteristically occupy uplands in the assessment area, will alter areas that were less effective recharge sites in the premining state. Recharge to undisturbed aquifers

should approximate the premining recharge rate since land use, runoff, retention and infiltration on the postmining topography should approximate that of the premine topography.

Coteau Properties Company has an established ground water monitoring plan and a policy of periodically certifying private wells that, together, should detect any changes in ground water quality or quantity which occur as the result of mining. A total of 36 wells and springs have been identified inside the proposed permit area or located within a distance of one mile of the permit boundary. Six of these wells are operable and in use and three are shallow and likely to be impacted by mining. The probable hydrologic consequences sections of each of the Freedom Mine permits, including NACT-0201, discuss the specific locations and landowners of wells that may be affected by mining. Should any adverse affects occur, Coteau Properties Company is committed in the permit to replacing water supplies. Adequate replacement sources do exist and are discussed in the individual permits and this application. In all Freedom Mine permits, about 36 operable wells have been or will be mined through in the course of operations. Of the 24 mined through to date about 15 will be required to be replaced for the permitted postmining land use of the tract where they were located. Coteau Properties Company will probably apply for waivers to not replace the remaining 9 since they will not be needed for the postmining land use and not requested by landowners at time of final bond release application. Replacement wells are of better construction and generally significantly more productive than the premining wells they replace. Commonly a single replacement well can produce more water than several older premine wells on the same tract. Mining and reclamation is not expected to negatively affect availability of postmining ground water resources in the Freedom Mine area.

In general, the Spaer Lignite Bed, which is below and hydraulically separated from the Beulah Lignite, is a source of shallow water that will not be affected by mining. The ability of the Spaer Bed to supply water quantities suitable for modern uses is variable over the area. The glaciofluvial aquifers are potential replacement sources for destroyed wells near them, and the deeper Fox Hills sandstone is a regional aquifer which is available over the entire area. A rural water system, utilizing Lake Sakakawea water, while not established at this time, is likely for northern Mercer County in the foreseeable future. This source may be a preferred option for replacing or re-establishing some household water supplies with water of improved quantity and quality from that which was available prior to mining and which is still used in many rural homes in northern Mercer County. On-site surface and ground water resources, rather than rural system water, will remain the appropriate postmining supplies for livestock and similar agricultural uses in water system areas because of their more favorable cost and accessibility.

Coteau Properties Company and the other operators in the assessment area have responded quickly and positively to landowner concerns about water supply problems and have cooperated fully with PSC investigations of water complaints. Complaints and inquiries relative to the effects of mining on wells increased throughout North Dakota's coal mining areas in the late 1980’s and early 1990’s during a drought period but declined with wetter conditions of the mid 1990’s. Complaints are typically few in number and concerned with water quantity. Most, after investigation, have been found to be unrelated to mining, but operators have responded quickly with appropriate remedies in instances where diminution by mining was evident. In the assessment area, there has been no evidence to date of improperly designed or executed mining operations, reclamation activities or hydrologic monitoring causing permanent damage to the hydrologic regime not addressed in

probable hydrologic consequences assessments and hydraulic reclamation plans of approved permits.

The Knife River has its headwaters in west-central North Dakota near Fairfield, ND and drains predominantly agricultural lands throughout its length over a drainage basin of 2,240 square miles, as measured at Hazen, ND. Seasonal variations in flow for the Knife River and its tributaries are primarily influenced by snowmelt runoff and summer thunderstorms. Base flows are generally very low and periods of no flow occur on most streams, including the Knife River.

The Freedom Mine area is drained by small ephemeral streams that flow generally into the Beulah and Renner Trenches and the headwaters of Coal Creek. Within the trenches, most flow is received by branches of Antelope Creek and continues southward to the Knife River, but an area at the north end of the west mine area, covered by Permits NACT-9001, NACT-9501, and this permit application drain to unnamed ephemeral drainages which enter Lake Sakakawea. Mine disturbance involves only a small area on the headwaters of drainages contributing to Lake Sakakawea, and no adverse effects to the lake are anticipated considering the small contributing area and its control by NDPDES during mining and reclamation. Monitoring of surface water quality in Lake Sakakawea is included in the Freedom Mine surface water monitoring plan, and the U.S. Geological Survey maintains monitoring sites on the lake.

There are no other large bodies of standing water in the assessment area, and surface water use is largely of ponds on smaller drainages for livestock watering. Freedom Mine and other mining operations in the area have had no effects on these uses to date which have not been addressed by the hydraulic reclamation plans of permits. All permitted operations are committed to replacing or supplementing any supplies that are diminished by mining. In general, Freedom Mine and other North Dakota lignite mines tend to increase the acreage of surface water bodies in mining areas through wetland mitigation and conversion of sedimentation ponds to permanent ponds.

Agriculture is a significant activity in the assessment area in terms of economic importance and hydrologic impact. It is a historically established cultural activity and its environmental effects are considered part of the baseline state of the area. The Major Land Resource Area 54 in which Mercer County is grouped within the USDA-SCS inventory system has water erosion of soil from cropland averaging 3.6 tons/acre/year while statewide losses average 2.1 t/ac/yr; however, losses to wind erosion are less than the statewide average. In 1977-1980, the U.S. Geological Survey gauging stations on Spring Creek at Zap and Knife River at Hazen reported mean Total Suspended Solids values of 90 mg/l and 144.05 mg/l and average sediment discharge loads of .26 and .19 tons/acre/year, reflecting the acreage under cultivation in the contributing drainages. Extensive soil conservation and water quality preservation practices are mining permit requirements, and all surface water leaving the Freedom Mine and other mining permits in the assessment area must meet NDPDES daily average and maximum values of 35 mg/l and 70 mg/l, respectively. Freedom Mine and other active operations in the area are required to maintain cleaner surface water discharges than are typical for natural surface waters in Mercer County.

One landowner complained that sedimentation pond discharges interfere with utilization of cropland in an adjacent area between the east and west mine areas of Freedom Mine. However, Coteau Properties Co. has maintained a practice of monitoring the natural drainageways downstream from their sedimentation ponds for cropping activities within

headwater drainageways that may be adversely affected by sedimentation pond discharges. The mine notifies potentially affected and concerned landowners of releases and schedules pond discharges to minimize impacts on seeding or harvesting operations within drainageways. Practices employed by Coteau to minimize economic impact to farmers choosing to crop through natural drainageways are outlined in the permits. Interference of sedimentation pond discharges with cropping operations in natural headwater drainageways is an infrequent and temporary economic impact between competing uses. The conflict can be solved through communication with landowners and considerate timing of sedimentation pond releases by mining companies and regulatory authorities, and appropriate agricultural management practices by landowners.

Cities in the assessment area along the Knife River obtain their municipal water supplies from wells completed in the Knife River alluvial aquifer system. Water wells serving the communities of Golden Valley and Zap are up-gradient from any potential hydrologic impacts of mining in the assessment area. Portions of the Knife River Aquifer available to the communities of Beulah and Hazen have indirect hydrologic connections with the surface and ground water systems at active mines in the assessment area, but there has been no evidence from cumulative ground water, surface water and NDPDES monitoring that modern mining operations have affected surface or ground water resources of the Knife River valley. The Freedom Mine has an established surface water monitoring program that is adequate to detect any changes which might occur in water quantity or quality as a result of mining activity.

All surface water flow passing through the NDPDES points of active mines in the assessment area currently represents about 3% of the annual flow of the Knife River at Hazen, ND. The contribution of mine-controlled water to the total flow of the Knife River varies with precipitation patterns as well as with mining activity. The decrease in NDPDES discharges from mining operations was proportionately greater than the decrease in total Knife River flow during the drought years of the late 1980's and early 1990's. NDPDES discharge reports show about 179 acre feet of water discharged off Freedom Mine in 1990 which increased to 1,507 acre feet in 1994. This increase was due, in part, to expansion of mining operations into the east mine area. About 176 acre feet of water was discharged from Beulah Mine in 1989 compared with 757 acre feet in 1994, without that mine undergoing any significant expansion of its surface water management system. The Knife River flowed 44,830 acre feet at the U.S. Geological Survey gauging station at Hazen in 1989 compared with a flow of 67,530 acre feet in the 1994 water year. Municipal and other industrial discharges, in total, average about 160 acre feet per year in the assessment area.

Several ponds will probably be approved to remain as permanent structures after mining at Freedom Mine and the other operations. This practice will probably make a very small contribution to ground water recharge and to reducing peak flows on tributary streams to Knife River in the assessment area. Since permanent impoundments must meet needs of postmining agricultural and wildlife uses to be approved, their function and impact will be comparable to premining water retention features. Interception of storm runoff and ground water by the total surface water management system during operations and reclamation will result in a net reduction in peak flows from controlled drainage areas. Changes in peak flows on Antelope Creek and the Knife River will be insignificant since only a small portion of the contributing areas of these drainages will be controlled by mine sedimentation ponds retained as permanent structures. Ground water produced from active pits makes a very small addition to the volume of surface water flows. The shallow aquifers affected by pit operations are, under natural conditions, hydrologically connected to the channels of

glaciofluvial and modern streams and provide a small amount of spring flow and ground water recharge to them. Proposed and existing Freedom Mine operations should produce no significant temporary or permanent diversions of water from the surface or ground water flow systems of Antelope Creek or Lake Sakakawea.

In 1998 with Revision 10 to NACT-9101 and appropriate applications to other state, county and federal agencies, Coteau Properties Company proposed and received approval to divert the flow in East Antelope Creek through a regraded 45 acre impoundment, termed Harmony Lake, located at the final mining highwall in the N½ of Sections 16 and 17. The lake and its associated 640 acre tract were designed as a sport fishery and recreation area to be managed by the North Dakota Game and Fish Department. Harmony Lake appropriates 70 acre feet, more or less, of the estimated total 326 acre feet of East Antelope Creek annual runoff to replace evaporative losses, and pass the remainder through its principal spillway back into the creek. Most flow, approximately 55%, occurs from spring snowmelt events. A few exceptionally heavy rainfall events and spring flow contribute most of the remainder, and the stream is in no-flow or low-flow conditions most of the year. Pools are persistent throughout most years and are livestock water sources at a few locations along the creek. One downstream landowner objected to the impoundment and water appropriation fearing that it would eliminate the pools as a livestock water source. Coteau presented data indicating that local spring and seep flows seem to be primarily responsible for maintaining standing water in downstream East Antelope Creek pools over long periods of no or low flow. Also, Coteau committed to a program of surface water monitoring and analysis of downstream pools and fundamental hydrologic properties of Harmony Lake and East Antelope Creek that will continue until the hydrologic controls on downstream pools are documented and the effects, if any, of the lake on downstream resources are determined. Conditional Water Permit 05262 issued by the State Water Commission recognizes downstream senior appropriators and can require releases, by pumping if necessary, to provide adequate water for downstream users. To date, flows have passed through the principal spillway each spring and downstream pools have been maintained, evidently by ground water base flow, as predicted.

Potential effects on wetlands in the proposed permit area and adjacent areas are addressed and plans for wetland replacement are detailed in the permit application. Impacts to springs, wells or stock dams are not anticipated other than to those in or adjacent to the permit area as discussed in the application. The Freedom Mine permits review in detail such features as may be destroyed or affected by mining and give plans for appropriate mitigation or replacement. Alternate water sources and appropriate courses of action are available, and Coteau Properties Company is committed to take remedial or corrective action if unforeseen impacts occur.

The relative scarcity of water in North Dakota, the reclamation rules taken collectively, and the very limited degradation of water quality by surface coal mining in the coal-bearing strata of North Dakota imparts special emphasis on water quantity, more properly the conservation of flow systems and hydrostatic heads, in adjacent areas of permits. Lowering of potentiometric surfaces near mine pits by ground water flow into pits is generally recognized in mining permits as a probable hydrologic consequence of mining. Where hydrostatic head loss is due only to mine pit inflows, nearly full recovery of shallow aquifers after pit closure and reclamation has been documented at several North Dakota mines and can be logically expected in the normal North Dakota surface mine setting. Recovery to approximate premining conditions is a reasonable standard for water quantity in undisturbed strata near reclaimed mine pits and is expected at Freedom Mine.

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 within the permit area 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 operation will not interrupt, discontinue, or preclude farming on alluvial valley floors that are irrigated or naturally subirrigated 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, and the water quality and quantity of streams occurring within or adjacent to the permit area, it has been determined that no alluvial valley floors occur within or adjacent to the permit area.

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)].

For the area included within Permit NACT-0201, the applicant included leases and other documents in the permit application demonstrating compliance with the North Dakota Surface Owners Protection Act, NDCC 38-18. This documentation included the notice that was given to all surface owners within the permit area before the application for revision was filed with the Commission.

Finding No. 7. Lands within the permit area are not within areas subject to the prohibitions or limitations of NDCC 38-14.1-07 unless the area met the application review procedures of NDAC 69-05.2-04-01.1 [NDAC 69-05.2-10-03(6)(a)].

Lands to be permitted are:

a) Not within the boundaries of units of the North Dakota State Park System, the National Park System, the National Wildlife Refuge System, 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 federal lands within the boundaries of any national forest.

c) Not within three hundred feet of any publicly owned park or places in the State Historic Sites Registry or the National Register of Historic Places.

   A cultural resource survey and inventory of the entire permit area has been completed (Ethnoscience 1999). All sites that were identified have been properly tested and evaluated. A total of 40 prehistoric sites and one historic farmstead were identified as being significant and eligible for listing on the National Register of Historic Places. The Cultural Resource Management Plan for the West Mine Area (WMA) was accepted by the State Historical Society on July 28, 2003. One site, 32ME1486, was determined to be significant as a Traditional Cultural Property. This site will be protected by fencing and no disturbance will be allowed within a two hundred foot radius of feature as

approved in the management plan. The remaining sites will be either mitigated through data recovery, avoided, or preserved. The approved management plan also includes the establishment of an Indian Cultural Education Trust. The purpose of the trust will be to hold certain lands containing cultural resource sites for their protection and preservation and generate income for educational activities for Native Americans that advance knowledge about previous inhabitants of the area and their traditions.

In addition, a programmatic agreement was developed and signed by government agencies for the consultation process that was used to receive comments from several Indian Tribes on cultural resource matters involving the proposed permit area. In accordance with the National Historic Preservation Act (NHPA) Section 106 rules, the Bureau of Land Management, Office of Surface Mining, State Historical Society, and the Commission, in coordination with the applicant, consulted with the appropriate Indian Tribes on cultural resource matters.

The applicant 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 any public road. However, Mercer County has granted approval to operate within 100 feet of the outside right-of-way for the following section-lines: both sides of County Road 15 between the SE¼ of Section 11 and SW¼ of Section 12; west side of County Road 15 between Sections 13 and 14; the west side of County Road 15 between Sections 23 and 24; the west side of County Road 15 between the NW¼NW¼ of Section 25 and the NE¼NE¼ of Section 26; the west side of County Road 26A crossing Section 25; both sides of the east-west section line between the SE¼ of Section 11 and the NE¼ of Section 14; both sides of the section line between the NE¼ of Section 26 and the SE¼ of Section 23, T145N, R88W; and, the west side of County Road 26A crossing Sections 30, 31, and a portion of 32, T145N, R87W. Mercer County has also approved the temporary closure of the following section line right-of-ways: the east-west section line between Sections 14 and 23; the east-west section line between Sections 25 and 36; the north-south section line between Sections 25 and 26; the north-south section line between Sections 35 and 36, T145N, R88W; the east-west section line between Section 36, T145N, R88W and Sections 3 and 4, T144N, R88W; the east-west section line between Section 31, T145N, R87W, and Sections 2 and 3, T144N, R88W; the north-south section line between Section 36, T145N, R88W and Section 31, T145N, R87W; the north-south section line west of County Road 26A between Sections 31 and 32, T145N, R87W; the east-west section line road west of County Road 26A between Sections 30 and 31, T145N, R87W; the north-south section line west of County Road 26A between Section 25, T145N, R88W and Section 30, T145N, R87W; the north-south section line between the NW¼ of Section 3 and the NE¼ of Section 4, T144N, R88W; and, the north-south section line north of the railroad between Sections 2 and 3, T144N, R88W. Mercer County's approval process includes public notice with the opportunity for public hearing and a written finding that the interests of the public and affected landowners will be protected. This approval process meets the requirements of NDAC 69-05.2-04-01.3.

NDAC 69-05.2-04-01.3(4) requires that copies of the road authority's approval documents, including the written findings, be provided to the Commission. Special Condition No. 4 to the original permit requires the applicant to provide these documents to the Commission within thirty days from the road authority's approval date.

e) Not within three hundred feet of any public building, school, church, community, or institutional building. The permit area contains or is within five hundred feet of several occupied dwellings; however, the applicant has committed not to conduct any mining activities within five hundred feet of these dwellings unless approved by the owner of the dwelling.

   The coal removal areas within this permit will come within five hundred feet of farm buildings. However, before the coal removal areas come within five hundred feet of any farm building, the applicant will pay the owner of the farm building the fair market value of the building or the entire costs of moving the farm building to a location where the coal removal area will not come within five hundred feet of the building as required by the Surface Owner Protection Act, NDCC Section 38-18-07(2). The applicant has committed to adding the appropriate documentation demonstrating compliance with this provision into Section 1.5 of the permit.

f) Within one hundred of feet of cemeteries. However, the applicant will not conduct any mining activities within one hundred feet of the cemeteries in accordance with NDCC 38-14.1-07. A two hundred foot buffer zone will be maintained around an unmarked Native American burial site (Cultural Resource Site 32ME108) located in the SE¼ of Section 14, T145N, R88W as approved in the Cultural Resource Management Plan. Two possible white burial sites are located in the NE¼ of Section 26, T145N, R88W (Cultural Resource Site 32ME204) and the SW¼ of Section 6, T144N, R88W (Cultural Resource Site 32ME727). The applicant is currently conducting background investigations of these sites. If human graves exist, the applicant will relocate the graves in accordance with state disinterment and reinterment laws and rules. Until the existence of the two graves is confirmed and relocated, a one hundred foot buffer will be maintained around the possible grave sites.

Finding No. 8. With respect to prime farmland, the postmining land use will be cropland, the reclamation plan was reviewed by the Natural Resource Conservation Service and any of their suggestions were considered, operations will be 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 38-14.121(6)].

The applicant provided a prime farmland reclamation plan with the original submittal of Permit NACT-0201. The plan satisfies the requirements of NDAC 69-05.2-09-15 and the performance standards of NDAC Chapter 69-05.2-26. The Natural Resource Conservation Service has reviewed the prime farmland reclamation plan and has determined that prime farmland matters are adequately addressed and that the plan is adequate to restore the productivity of the prime farmland. The reclamation methods that will be used by the applicant have been 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 nonmined prime farmland in the surrounding area under equivalent management practices. Prime farmland performance standards apply to 1,058.7 acres of cropland that have been identified as prime farmland by the Natural Resource Conservation Service soil survey for Mercer County. Each landowner will receive the same acreage of reclaimed prime farmland as was present prior to mining and the postmine land use of the reclaimed prime farmland will be cropland.

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

Surface coal mining and reclamation activities will not affect the continued existence of threatened or endangered species or result in the destruction or adverse modification of their critical habitats. (Refer to the comment in the U.S. Fish and Wildlife Service's July 29, 1999 letter on the applicant's premine fish and wildlife inventory plan.) Piping plovers (*Charadrius melodus*), a federal threatened species, were observed on reclaimed wetlands and sediment ponds within Permits NACT-9001 and NACT-9101 in 1997. This species inhabits barren sand and gravel shorelines along the Missouri River and prairie alkali lakes. Due to abnormally high water levels on the river in 1997, piping plovers temporarily moved to other areas. The change in habitat from river to reclaimed wetlands and sediment ponds occurred only in 1997 and the birds have since not been observed at the Freedom Mine. Mine staff report sightings to the Commission, which notifies the U.S. Fish and Wildlife Service and State Game and Fish Department. Otherwise, no other federal threatened, endangered or candidate species were observed within or contiguous to the proposed permit area and the permit area does not contain any areas specifically designated as critical habitat for threatened or endangered species. The whooping crane could occur as an occasional migrant through the area. Habitats required for the black-footed ferret, least tern, pallid sturgeon and western prairie fringed orchid were not found in, or adjacent to the permit area. The gray wolf has been only occasionally sighted in North Dakota. The Dakota skipper butterfly and Sprague's Pipet (candidate species) have not been observed on or adjacent the permit area. The greater sage-grouse (candidate species) is restricted to the southwest corner of the state of North Dakota.

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

The applicant has paid all reclamation fees required by 30 CFR subchapter R. The Office of Surface Mining's Applicant Violator System office in Lexington, Kentucky, was queried to verify that all fees have been paid.

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

The applicant has satisfied the requirements for approval of a cropland postmining 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 precropland mixture. The postmining topography and soils are suitable for cropland in the areas that will be cropped.

Finding No. 12. All existing structures that will be used to support mining activities within the permit area comply with the requirements of NDCC 38-14.1-24 and NDAC 69-05.2-09-04 [NDAC 69-05.2-10-04].

No existing structures in the permit area will be used to support mining activities. However, some haul roads, sedimentation ponds, and other facilities that are presently within Permits NACT-8102, NACT-8203, and NACT-8503 will support mining in the permit area. These previously permitted structures have been found to meet the applicable design and performance standards of NDCC 38-14.1-24 and NDAC 69-05.2.

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 conduct mining activities within or near intermittent stream channels, but these activities will not violate applicable water quality standards or adversely affect the quantity and quality of the water and other environmental resources of the stream. The applicant will not conduct mining activities within or near any perennial stream [NDAC 69-05.2-16-20].

Small intermittent streams occur within the permit area and the applicant will conduct mining activities within or near these channels. The lower three-quarters of one stream within the permit area, West Antelope Creek, have long periods of intermittent flow. Short duration and low-volume intermittent flow also occurs in several small first to third order unnamed headwater streams that generally function as ephemeral drainages. Other than small pools that serve as water sources for livestock and wildlife, these small streams have no unique or critical values to separate them from the more common ephemeral drainages in the stream network. They will be impacted through removal by mining of shallow water-bearing units that provide some or all of their ground water base flow. The applicant has addressed in detail the location of these stream segments, the probable effects of mining on them, and plans for their water supply replacement and reclamation. In consultation with the North Dakota Department of Health and State Water Commission, the Commission has determined that the proposed mining activities will not violate North Dakota water quality standards or produce significant adverse effects on streams within and downstream of the permit area.

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

There are no plans included in the permit application to use any experimental practices that may be allowed under NDAC 69-05.2-27-02.

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 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 which 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 Health also verified that the applicant has no unabated violations with regard to air and water environmental protection standards.

Finding No. 19. Performance bonds totaling $102,000,000 are sufficient for the proposed surface coal mining operations in the consolidated bond area that includes this permit [NDAC 69-05.2-12-07].

The Commission previously determined that a total bond amount of $100,343,439 is sufficient to cover the required reclamation, restoration, and abatement work in the consolidated bond area for the Freedom Mine that includes Permit NACT-0201. A self-bond guaranteed by Basin Electric Power Cooperative in the amount of $91,800,000 and a collateral bond in the amount of $10,200,000 are currently in effect. It should be noted that, if the annual update of variable costs in the Commission's policy for calculating reclamation cost estimates for setting bond amounts shows a significant increase, permittees are required to increase their bond amounts accordingly.

SUPPLEMENTAL REPORT

Coteau Properties Company
FREEDOM MINE

Surface Coal Mining and Reclamation Operations
Permit Application No. NACT-0201
Revision No. 8

Prepared By
North Dakota Public Service Commission
Reclamation Division
November 2010

I. DESCRIPTION OF PROPOSED MINING AND RECLAMATION OPERATIONS

A. Proposed Operations, Location, and History

Coteau Properties Company (Coteau) submitted Permit Application No. NACT-0201 to the North Dakota Public Service Commission (Commission) on June 4, 2002. Permit NACT-0201 was approved by the Commission on April 14, 2004, with an initial term of five years. Although numerous federal coal tracts were included in the permit area, no mining of these tracts was proposed with the original permit application. Only surface disturbances on these tracts were proposed in support of mining on adjacent private and state owned coal tracts. The surface of all federal coal tracts is under private ownership.

Federal Coal Lease No. NDM 91535 was issued to The Coteau Properties Company effective June 1, 2006, covering 5,333.56 acres of federal coal within Permit NACT-0201. These federal coal tracts are located in: Lots 3 and 4 and S½NW¼ of Section 2; Lots 1 and 2, S½NE¼ and S½ of Section 4; Lots 1 through 7, S½NE¼, SE¼NW¼, E½SW¼ and SE¼ of Section 6; N½NE¼, SE¼NE¼, NW¼ and N½SW¼ of Section 8, all within T144N, R88W; E½ of Section 12, T144N, R89W; and Lots 1 and 2, S½NE¼ and SE¼ of Section 4; N½ of Section 10; all of Section 14; all of Section 22; N½NE¼, SW¼NE¼, W½ and NW¼SE¼ of Section 26; E½NE¼, SW¼NE¼, SE¼NW¼ and S½ of Section 28; N½N½, SE¼NE¼, SW¼, E½SE¼ and SW¼SE¼ of Section 34, T145N, R88W.

On March 23, 2010, Coteau filed the application for Revision No. 8 to Permit NACT-0201. With this revision, Coteau provided the federal coal lease for 5,333.56 acres of federal coal in Permit NACT-0201 and proposed to mine a number of federal coal tracts located south of County Road 26. The federal coal tracts approved for mining are located in Lots 3 and 4 and S½NW¼ of Section 2; Lots 1 and 2, S½NE¼ and S½ of Section 4; Lots 1 through 7, S½NE¼, SE¼NW¼, E½SW¼ and SE¼ of Section 6; N½NE¼, SE¼NE¼, NW¼ and N½SW¼ of Section 8, all within T144N, R88W; and the N½NE¼, SW¼NE¼, W½ and NW¼SE¼ of Section 26; N½N½, SE¼NE¼, SW¼, E½SE¼ and SW¼SE¼ of Section 34, T145N, R88W. No additional lands were added to the permit area as part of the application for Revision 8, the total acreage within Permit NACT-0201 remained at approximately 17,052. The mining of the federal coal tracts as proposed in Revision No. 8 constitutes a federal mine plan that requires federal approval. Revision No. 8 was approved by the Commission on January 12, 2011.

The Freedom Mine is an existing surface coal mine located in all or portions of Sections 2, 3, 4, 5, 6, 7, and 8, T144N, R88W; Sections 1 and 12, T144N, R89W; Sections 5, 6, 7, 8, 9, 15, 16, 17, 18, and 21, T145N, 86W; Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19, 20, 29, 30, 31, and 32, T145N, R87W; Sections 1, 2, 3, 4, 9, 10, 11, 12, 13, 14, 15, 16, 21, 22, 23, 24, 25, 26, 27, 28, 33, 34, 35, and 36, T145N, R88W; Sections 30, 31, 32, 33, 34, 35, and 36, T146N, R87W; and, Sections 14, 15, 16, 22, 23, 24, 25, 26, 27, 34, 35, and 36, T146N, R88W, all in Mercer County. There are about 47,926 acres permitted at the Freedom Mine. The mine area extends about 14 miles from east to west and 12 miles north to south. It is located about four miles north of the City of Hazen, seven miles north of the City of Beulah, and about 85 miles northwest of Bismarck, North Dakota.

The applicant has owned and operated the Freedom Mine since 1978. The production history at the mine ranges from about 625,000 tons in 1983 to 15.6 million tons in 1995. Production is expected to remain at approximately 15.0 million tons per year for the remainder of the current permit term.

In the current mine operation, coal is removed from two distinct mine areas, separated by the Renner and Beulah Trenches. The East Mine Area includes Permits NACT-9101 and NACT-0401. The West Mine Area includes Permit NACT-0201. Coal removal has been completed from the Mine Area 4 which includes Permits NACT-8102, NACT-8203, NACT-8401, NACT-8503, NACT-8601, NACT-9001, and NACT-9501. Mine Area 4 is bounded east and west by the Renner and Beulah Trenches, respectively. Coal from all pit areas is hauled directly to the coal handling facility in Section 24 in Permit NACT-8102. From there it is conveyed to Basin Electric Power Cooperative's Antelope Valley Generation Station (AVS), and the Dakota Gasification Company's Coal Gasification Plant (DGC). AVS and DGC are both located directly south of the Freedom Mine's office/shop facility. Coal is also hauled by rail to Basin Electric's Leland Olds Generating Station near Stanton, ND.

Surface ownership in this permit area is mostly private with some state ownership and the coal ownership is split among private, federal and state. The federal coal tracts approved to be mined as part of Revision 8 are located in Lots 3 and 4 and S½NW¼ of Section 2; Lots 1 and 2, S½NE¼ and S½ of Section 4; Lots 1 through 7, S½NE¼, SE¼NW¼, E½SW¼ and SE¼ of Section 6; N½NE¼, SE¼NE¼, NW¼ and N½SW¼ of Section 8, all within T144N, R88W; N½NE¼, SW¼NE¼, W½ and NW¼SE¼ of Section 26; and, N½N½, SE¼NE¼, SW¼, E½SE¼ and SW¼SE¼ of Section 34, all within T145N, R88W. The surface of these tracts is under private ownership. Mining of these federal coal tracts is proposed to begin in 2011 (second permit term) with mining to be projected to be completed in 2029 (fifth permit term). Coteau has been issued Federal Coal Lease No. NDM 91535 for these tracts as well as all other federal coal tracts within Permit NACT-0201. Special Condition No. 1 attached to Permit NACT-0201 prohibits coal removal from any of these tracts until the appropriate federal mine plans are approved by the Department of the Interior.

Once Coteau submitted the lease application for the federal coal tracts located in Permit NACT-0201, the BLM completed an Environmental Impact Statement (EIS) for the proposed leasing action. The critical elements that were identified in the scoping process and subsequently addressed in the EIS included cultural resources including Native American concerns, threatened and endangered species, air quality,

water quality, prime and unique farmland, invasive non-native species, wetlands and riparian zones, and environmental justice. The BLM considered 3 leasing options and approved the option which issued the lease while incorporating a preservation component for certain prehistoric cultural resources located within and adjacent to the permit boundary.

On August 15, 2008, Coteau filed the Resource Recovery and Protection Plan with the BLM Billings office, with copies to the Commission, for the federal coal tracts within Permit NACT-0201 that are proposed to be mined. These tracts are included in Federal Lease No. NDM 91535. The Commission forwarded copies of this plan to OSM's Denver and Casper offices. The BLM approved the Resource Recovery and Protection Plan on May 6, 2009.

As noted above, the Commission approved Revision No. 8 to Permit NACT-0201 on January 12, 2011. A chronology of events related to the application for Revision No. 8 to Permit NACT-0201 is attached.

B. Summary Description of the Surface Mining and Reclamation Operations

Permit NACT-0201 was approved by the Commission on April 14, 2004. The total acreage of the permit is 17,052 acres. Development work in this permit area began in 2005 with the construction of the highway overpass and associated temporary highway bypass. Once the highway overpass was in place, development work such as pond and road construction began in this permit area. Limited coal removal began in 2006 and coal removal has been completed from approximately 220 acres during the first permit term. Nearly 1,500 acres were disturbed by mining related activities during the first permit term.

Mining and coal removal activities began with a series of boxcut pits dug along the coal cropline in the southeast portion of the permit area (Section 25, T145N, R88W and Sections 30 and 31, T145N, R87W). Mining will progress to the west/southwest across the southern portion of the permit area (south of County Road 26). Mining activities are expected to begin in the northern portion of the permit area (north of County Road 26) in 2021. Coal removal from this permit area is projected to be completed by 2035.

The federal coal tracts were included in the original permit application; however, the original permit did not include plans for mining these tracts as they had not yet been leased. On June 1, 2006, Coteau received Federal Coal Lease No. NDM 91535 for all the federal coal tracts within Permit NACT-0201. The Resource Recovery and Protection Plan (R2P2), covering all federal coal tracts within this permit area, was submitted to the BLM and Commission on August 15, 2008. BLM recommended approval of the R2P2 on May 6, 2009. Royalty reductions have also been approved for the federal coal tracts located south of County Road 26 (those tracts that will be mined in the next 20 years).
Coteau submitted the application for Revision 8 to Permit NACT-0201 on March 23, 2010. This revision included plans for mining most of the federal coal tracts in the southern portion of the permit area (south of County Road 26). This revision was approved on January 12, 2011. With the approval of Revision 8 and subsequent approval of the federal mine plan, coal removal from the federal tracts can begin.

Coal removal from the federal tracts will begin in the NE¼ of Section 26, T145N, R88W in 2011. The federal coal tracts approved for mining in Revision 8 will be mined from 2011 through 2028. The remaining federal coal tracts located in Permit NACT-0201 will be mined from 2021 through 2035. Approximately 1,502 acres of the 2,580 acres of federal coal tracts approved for mining in Revision 8 will actually be mined. Of the 5,334 acres of federal coal covered by Lease NDM 91535, approximately 2,981 acres will actually be mined. Areas of federal coal that will not be mined are due to lack of recoverable coal being located on portions of the tracts (outside the recoverable coal cropline) or due to deep cover over the coal (not mineable due to economic reasons) or setbacks from the permit boundary, cultural resource sites, county roads, or overhead transmission lines. Support facilities such as ponds, diversions, haul roads, and soil stockpiles will be constructed on areas outside the coal cropline including federal coal tracts to the extent possible.

No new facilities (ponds, haul roads, etc.) will be constructed in the area proposed to be mined in Revision 8. Existing structures located in Permit NACT-0201 and other permit areas which will be used to support mining operations in the proposed permit area include haulage and access roads, ponds, coal handling facilities and the office/shop complex. Facility locations are shown on Plates 3.1.3, Pit Layout and Facilities, and 3.3.2, Surface Water Management Plan.

The Freedom Mine is primarily a single-seam stripping operation; however, the coal seam (Beulah Bed) that will be mined is split in parts of the permit area. In the eastern part of the permit area, the Beulah Bed is a single seam and splits into two seams in the western portion of the permit area. The interburden thickness between the lower and upper Beulah Beds in these areas generally ranges from less than a foot in the eastern and northern portions of the mine to as much as 24 feet in the southwestern portion of the permit area. Overburden depths to the Beulah Bed within the permit area range from 30 feet along the cropline adjacent to the Beulah Trench to over 200 feet near the western edge of the permit area. The coal seam ranges from 17 to 22 feet in thickness, with a weighted average thickness of approximately 18 feet throughout the proposed permit area.

After all surface water control structures are in place, mining and reclamation operations typically occur in a sequence of seven events: suitable plant growth material (SPGM) removal, overburden removal, coal removal, overburden replacement, final grading, SPGM replacement, and revegetation. SPGM removal is accomplished in two separate lifts. Topsoil and subsoil are then either stockpiled for future respreading or directly respread on areas ready to receive these materials. Once suitable plant growth material is removed, a truck/shovel fleet is utilized to remove overburden material for the first several years of mining in the Revision 8 area. A walking dragline may be utilized in the last years of mining in the Revision 8 area. After the coal is removed, the next pit is stripped and this material is deposited into the empty pit. The resulting spoil piles are leveled to postmining topography elevations. Once grade approval is obtained for these leveled areas, suitable plant growth material is respread, and the area is tilled, seeded, and mulched.

II. DESCRIPTION OF THE AFFECTED ENVIRONMENT WITHIN ITS RESOURCE SETTING

The following information is provided for the entire NACT-0201 Permit Area. The federal coal tracts in Lease NDM 91535 have environmental resources that are similar to the remainder of the permit area.

A. Topography

The mine site is located in a mixed grass prairie region of the Northern Great Plains and consists of a flat to very steep topography. The east side of the permit area is dominated by the level to nearly level Beulah Trench and the topography rises abruptly to the west of the Beulah Trench and topography becomes more gently rolling in the western portion of the permit area.

Maximum relief across the permit area is about 440 feet. Elevations range from about 1,848 feet in the SW¼ of Section 8, T144N, R88W, to 2,285 feet in the NW¼ of Section 36, T145N, R88W. About 9% of the surveyed area has slopes of 3% or less and about 15% of the surveyed area has slopes of 15% or greater. The average slope of the permit area is approximately 9.5%.

There are no important fragile lands as defined by 30 CFR 762.5 containing natural, ecologic, scientific and aesthetic resources or natural systems in the permit and adjacent areas.

B. Geology

The geologic units to be disturbed by mining include the Coleharbor and Sentinel Butte Formations. The Coleharbor Formation of Pleistocene Age occurs as a thin veneer of overburden generally less than 45 feet thick. Lithologically the Coleharbor Formation within the mine plan area is a glacial pebble-loam (till) or poorly stratified clastic sediments filling glaciofluvial channels.

The non-marine Sentinel Butte Formation of Paleocene Age consists of interbedded sands, silts, clays, and lignites. The coal seam to be mined is the Beulah Bed which is overlain by thin seams generally averaging less than 2 feet thick, including the Schoolhouse and Twin Buttes Beds. The thickness of the Beulah Bed generally ranges from 10 to 18 feet thick. The total overburden thickness within the permit area varies from 20 to 200 feet. The dip of the Beulah Bed in this area is variable in direction and generally 10 to 20 feet per 1,000 feet. Texturally the overburden in the mining area is highly variable with depth and across the surface, from relatively coarse loamy sands to fine textured clays. Values of pH are almost all basic (pH greater than 7.0). Both glacial and sedimentary bedrock materials include some portions with high electrical conductivities and/or high sodium adsorption ratios. The chemical quality of the overburden could be an impediment to successful reclamation if sufficient soil material is not replaced over the graded spoil.
There are no areas of unstable geology in the permit and adjacent areas.

C. Climate

The climate of west-central North Dakota is typically a semi-arid continental type with temperatures having a wide range of values. Cold and dry air masses from the polar regions intensify winters in the area. Warm and moist air masses from the Gulf of Mexico dictate most precipitation characteristics. The temperature extremes for the area can range from -40°F to over 100°F. January daily minimums are about 1°F with daily maximum temperatures near 21°F. July daily low temperatures average 55°F with highs near 85°F. A change of 50°F within a 24-hour period can be noted with the passage of arctic cold fronts in winter or with the sudden development of warm, strong westerly winds generally occurring in late winter or spring. The length of the growing season also varies from year to year; however, the average length is near 120 days for the region. Average precipitation is about 17.2 inches/year at Beulah, with most occurring in the form of showers and thunderstorms in the months of April through September. The prevailing winds are northwesterly and average about 10 mph.

D. Hydrology

The hydrology of the permit and adjacent areas is discussed in the Commission's cumulative hydrologic impact assessment and is included as supporting documentation for Finding No. 3. This assessment covers that portion of Mercer County, North Dakota within the drainage basin of the Knife River from Coyote Creek to downstream of the mouth of Coal Creek about 5 miles east of Hazen. Unnamed drainages flowing into Lake Sakakawea in T146N, R87W and T146N, R88W are also included. This area includes all existing and foreseeable operations of the Freedom Mine, and the report summarizes the hydrogeologic setting of all ground and surface water systems which may be logically affected by Permit NACT-0201 and other mining operations.

E. Soils

The soils of the proposed permit area formed in calcareous glacial till, glacial outwash, local alluvium, and in-situ weathered bedrock. The majority of the soils are in the Mollisol order and represent the following great groups: Haplustols (Amor, Arnegard, Bowdle, Falkirk, Farnuf, Parshall, Ringling, Searing Shambo, Straw, Vebar, Wabek, and Wanagin soils), Argiustolls (Bowbells, Grail, Regent, Savage, and Williams soils), Argiaquolls (Parnell), Argialbolls (Tonka soils), Calciustolls (Zahl soils), Natraquolls (Harriet soils), and Natrustolls (Belfield, Daglum, Dogtooth, Janesburg, Miranda, and Rhoades soils). Other significant soils in the proposed permit area include Entisols in the Ustorthent great group (Cabba and Cohagen soils).

The soils within the proposed permit area exhibit a wide range of chemical and physical characteristics. A Professional Soil Classifier has identified the location and extent of topsoil and subsoil quality materials based on the chemical and physical characteristics pursuant to NDAC 69-05.2-08-10(1)(a) and (b). Many of the soils on 0 to 9 percent slopes are suited to agricultural production; however, some of the soils in these slope ranges are poorly suited to crop production due to sodic or saline conditions or gravelly or channery subsoils. The steeper soils are best suited to hayland, pastureland, or native grassland. Most of the soils have an agricultural capability subclass classification of "s" or "e", indicating the

main limitation is the shallow, stony and/or sodic conditions or the risk of erosion. Much of the permit area does not have 5 feet of suitable plant growth material available due to the abundance of sodium affected soils, saline soils, and the soils with gravelly, channery, and soft sedimentary bedrock materials within 5 feet.

In much of the permit area, the amount of topsoil and subsoil available to a depth of 5 feet will not be sufficient to meet the projected respread depth needed for maximum postmining production. The permit applicant has identified additional subsoil quality materials (below 5 feet) and other suitable strata quality materials that will be used to supplement any projected subsoil deficit. Most landowners have adequate topsoil, subsoil, deep lift subsoil and other suitable strata to respread the projected required depth. If sufficient material is not available, and soils mixing agreements have been secured, additional excess subsoil, deep lift subsoil, or other suitable strata may be utilized from one landowner to another. If no mixing agreements are secured, all available material will be salvaged and respread for any single landowner as required by NDAC 69-05.2-14-04(4)(a)(2)(a).

Of the 1,058.7 acres of prime farmland identified in this permit area, some will be disturbed by coal removal or spoil placement. A portion of the remaining acreage of prime farmland will be disturbed by associated disturbances such as haul roads, sedimentation ponds, and soil stockpiles.

F. Land Use and Vegetation

The prevailing land use in and around the proposed permit area is agricultural, including cropland and native grassland. The permit area is zoned for agricultural use by Mercer County and Coteau has obtained a conditional use permit from the Mercer County Commission for coal mining and associated disturbances. Premining land uses and approximate acreages in the proposed permit area are as follows:

Land Use	Acreage	% of Area
Cropland (incl. hay)	5,084	29.8
Native Grassland	10,227	60.0
Tame Pastureland	831	4.8
Wetlands (Seasonal Semi-permanent and Fen)	232	1.4
Shelterbelts	36	0.2
Developed Water Resources (Stockponds)	13	0.1
Woodlands	372	2.2
Industrial, Roads & Farmsteads	257	1.5
Total	**17,051**	**100.0**

Primary crops grown within the permit area have been wheat, oats, barley, corn for silage, sunflowers, and hay crops. Range sites include: silty, thin upland, overflow, sandy, claypan, clayey, thin claypan, shallow to gravel, wet meadow, saline lowland, shallow, and closed depression. NRCS production estimates for these sites varied from 700 lbs/ac (thin claypan) to 4,000 lbs/ac (wet meadow). Disturbed temporary wetlands (30.9 acres) located within the permit area will be replaced as a result of the mechanical recontouring process, and by differential settling of the spoil material. Seasonal (237.9 acres), semi-permanent (2.5 acres) and fen (5.25 acres) wetlands are located within the permit area. The

seasonal and semi-permanent wetlands are associated with intermittent drainages, spring seeps and some are prairie pothole basins. The remaining acreage is comprised of gravel and scoria pits, shelterbelts, woodlands, tame pastureland, and stockponds. There are several farmsteads (active and abandoned). County roads and a railroad corridor are located within the permit area.

No rare or endangered plants were identified on the permit area. Several potentially poisonous plant species (based on North Dakota State University's Cooperative Extension Bulletin A-471, Plants Which May Be Poisonous) including chokecherry, cocklebur, horsetail, locoweed, night shade, poison ivy and sweetclover were identified on the proposed permit area. State-listed noxious weeds (NDCC 63-01.1) found included absinth wormwood (Artemisia absinthum) and Canada thistle (Circium arvense).

G. Wildlife

Habitat types that are found within and adjacent to the permit area include cropland, grassland (native and tame pasture), woodlands, wetlands, shelterbelts, scoria pits, and stockponds. All of this acreage has historically been used strictly for agricultural purposes.

Native grassland, woodlands and wetlands are the most important habitat types within the permit area. Native grassland, which occupies about 60% of the permit area, has been managed with variable levels of grazing intensity. Nearly all of the native grassland is grazed by cattle and those areas with relatively flat slopes, low areas and sites adjacent to water sources receive the most grazing pressure. Steeply sloping areas and upland sites away from water sources are typically in better ecological condition. Heavy grazing pressure generally reduces the ecological condition which has an adverse effect on populations of wildlife. Low shrub communities not associated with tall shrubs and trees were not considered woodlands and the acreage is considered native grassland. The woodlands and linear wetlands within the permit area are generally surrounded by native grassland. These habitat types are important to wildlife because they provide food, cover and water for wildlife.

Remaining habitat types include cropland, tame pastureland, shelterbelts, stockponds, occupied and unoccupied farmsteads, scoria pits, and county roads and trails. Shelterbelts can be important habitat for some species of wildlife and the value varies with age, density and condition of the shelterbelt plantings. The cropland has minimal habitat value, although it is a seasonal food source.

H. Cultural Resources

The prehistoric cultural milieu of the mine plan area can be divided into four major periods: Paleo-Indian (11,500 years B.P. (before present) to 8.000 B.P.); Archaic or Foraging (8000 B.P. to about 1 A.D.); Plains Woodland (l A.D. to 900 A.D.); and Plains Village (900 A.D. to 1860 A.D.). A period known as the Plains Nomadic is also linked to the period from 1 A.D. to the Historic.

The historic occupation of the mine area vicinity (Euro-American) is characterized by four major developments: 1) exploration and development of the fur trade, 2) development of a military frontier, 3) homesteading and development of agriculture, and 4) development of the coal industry.

A cultural resource survey and inventory of the NACT-0201 permit area has been completed (Ethnoscience 1999). A total of 244 sites, 194 prehistoric and 50 historic, were identified. All sites inventoried were tested and evaluated. Forty one sites (40 prehistoric and 1 historic) were found to be significant in terms of national register criteria (36 CFR 60.4). One prehistoric site (32ME1486) was determined be a Traditional Cultural Property (TCP). There is one known Native American burial site located within the permit area.

Prior to issuing the lease for the federal coal tracts in Permit NACT-0201, the BLM completed an Environmental Impact Statement (EIS) for the proposed leasing action. Although the EIS addressed various environmental and socio-economic concerns, the EIS mainly focused on cultural resources including Native American concerns. The BLM considered 3 leasing options as follows: Alternative A which would have issued the lease without any further protection for cultural resources other than those required by state laws and regulations, Alternative B which would have rejected the lease application (no action), and Alternative C which would issue the lease while providing added protection for cultural resources. Alternative C was adopted and the federal coal lease was issued.

Various Native American Tribes with an ancestral connection to the permit area were consulted throughout the review process. Many agencies were involved in the review of the cultural resources of the permit area and the subsequent development of a West Mine Area Cultural Resource Management Plan. These agencies included the Bureau of Land Management (BLM), Office of Surface Mining (OSM), North Dakota State Historical Society (SHS), and the North Dakota Public Service Commission (PSC). In addition, a programmatic agreement was signed by the various tribes and government agencies.

The West Mine Area Cultural Resource Management Plan was approved by the North Dakota State Historic Society, in April 2005, with the concurrence of OSM and BLM. The management plan consists of data recovery from some sites prior to disturbance, avoiding some sites, the long-term preservation of others, and the establishment of a trust for Native American cultural education.

I. Transportation

Several county roads and section line trails are located within or near the permit area. Asphalt paved roads in or near the permit area include: North Dakota State Highway 1806 (Lewis and Clark Trail), located approximately 2 miles north of the permit area; State Highway 200, located approximately one-half to one mile south of the south permit boundary; County Road 21, located approximately one-half mile east of the east permit boundary; County Road 26A, which crosses a portion of the permitted area on the eastern edge of the permit area and adjacent Permit NACT-8503; County Road 26, an east-west road that bisects the central portion of the permit area; County Road 21 located approximately one-half mile east of the southeast corner of the permit area; County Road 15, located on the northeastern permit boundary; and, County Road 13 located approximately one mile west of the west permit boundary. Major improved county roads include County Road 7, located along the southern permit boundary. Several unnamed gravel county roads traverse portions of the permit area. A few section line trails also traverse portions of the permit area; however, many are inaccessible due to steep terrain or are fenced with the adjacent areas making them inaccessible.

A mine overpass has been constructed over County Road 26A in the SE¼ of Section 30, T145N, R87W in Permits NACT-8503 and NACT-0201. Traffic was temporarily rerouted during the construction of this overpass. No major roads will be closed or rerouted as a result of mining activities in this permit area; however, many of the unnamed county roads and section lines will be either temporarily closed or have mining activities within 100 of the outside right-of-way.

Prior to disturbances within 100 feet, closure or relocation of any road rights-of-way, Coteau has, or will have, obtained the appropriate approvals from the Mercer County Commission and the PSC. The Mercer County approval process includes public notice and opportunity for public hearing. Coteau has included a list of the county approvals and a schedule of section line closings in Permit NACT-0201. Coteau has included plans to provide continued access for landowners living in the area.

J. Esthetics

The permit area and adjacent area have no unusual scenic qualities and are similar to surrounding areas. The main body of Lake Sakakawea is located approximately 4 miles north of the north permit boundary with a bay extending south within 2 miles of the north permit boundary. The east side of the permit area is dominated by the level to nearly level Beulah Trench and the topography rises abruptly on the west side of the Beulah Trench and topography becomes more gently rolling in the western portion of the permit area. Intrusions by man include Basin Electric's Antelope Valley Station electrical generating plant and Dakota Gasification's Coal Gasification Plant, located south of the permit area, other existing mining operations also located east and south of the permit area, gravel and scoria pits, orphaned spoils, and farming and ranching activities. Sounds are from mining and coal utilization activities, gravel and scoria removal activities, traffic on the county roads, airplanes, agricultural activities, wildlife and wind.

K. Socioeconomics

The City of Beulah (population 2891) is located about three miles south of the southeast corner of the permit area. This city serves as the local agricultural and commercial center for the area in and around the Freedom Mine. Hazen (population 2200) is located about eight miles east of the east southeast corner of Permit NACT-0201. Stanton is the county seat but Beulah is the largest city in Mercer County. During the late 1960's and during the 1970's, these communities experienced rapid population increases due to the development of power plants, the coal gasification plant, and coal mines. At that time, many improvements were made in public facilities, and other community services including education, health care, and fire protection.

III. ENVIRONMENTAL IMPACTS OF THE PROPOSED OPERATIONS

Environmental impacts of mining operations on the federal coal tracts proposed by Revision No. 8 will include mining of about 1,502 acres of federal coal located south of County Road 26. However, this disturbance and Coteau's plans for reclamation are similar to those for the entire permit area. Therefore, the following discussion outlines the environmental impacts to the entire NACT-0201 permit area.

A. Topography and Geomorphology

No significant long-term impacts should occur on the topography and geomorphology of the permit area. Coteau's mine plan will create a postmining topography that is similar to the original contour of the area. Sharp peaks, outcroppings of scoria, clay or stony hills with little or no topsoil will be eliminated and all premining drainage patterns will be reconstructed during the reclamation of the permit area. Coteau's reclamation plan will result in an increase in the number of acres of land with slopes less than 6% and decrease the number of acres with slopes of greater than 6%. This general reduction in gradient will help to minimize the short- and long-term effects that erosion will have on reclaimed areas and drainageways.

Short-term impacts will occur on the topography and geomorphology of the permit area during mining activities. Erosion may occur until the disturbed areas are revegetated. Until vegetation can be successfully established on reclaimed areas to bring erosion rates down to premining levels, Coteau will implement a surface water control plan. A system of sedimentation ponds and diversions will be constructed to control sediment deposition on permit and off permit areas. This surface water management plan will be in effect until successful revegetation of all the reclaimed areas is achieved.

B. Air Quality

The applicant employs fugitive dust control measures as an integral part of its current operations. Fugitive dust generated from operations in this permit area is not expected to result in any adverse air quality impacts. The primary sources of fugitive dust will result from windblown sources and from traffic on haul roads. The primary methods to be used to reduce dust emissions include:

1. Controlling dust from access and haul roads by watering,

2. Minimizing the area of disturbance by restricting operations to that acreage necessary to accommodate production needs, and

3. Stabilizing disturbed areas as soon as possible after operations are completed through replacement of suitable plant growth material, seeding and mulching.

Four dust collection area control systems are located at the truck dump and coal handling facilities in the N½ of Section 24, T145N, R88W, to collect dust from various crushing and transfer locations. The applicant has an Air Pollution Control Permit to Operate as required by the North Dakota State Department of Health. This permit required Coteau to operate an ambient air quality monitoring program and meteorological monitoring programs through June 30, 1995. The principal pollutant monitored was particulate matter (PM_{10}).

C. Hydrology

A Cumulative Hydrologic Impact Assessment (CHIA) for mining within the proposed permit area is included as supporting documentation for Finding No. 3. The impacts to the ground and surface water regimes from mining within the proposed permit area are discussed therein.

D. Soils and Overburden

Information on the proposed methods of suitable plant growth material identification and handling was provided in the permit application. The permittee has committed to salvage all available topsoil and a sufficient amount of subsoil and other suitable strata to adequately respread all disturbed areas. Wetland topsoil will be segregated from non-wetland topsoil during removal and respread. Coteau has also indicated that they will segregate the poorer quality native grassland topsoil from cropland topsoil to the extent possible.

The total amount of suitable plant growth material to be replaced will be based on the quality of the graded spoil surface pursuant to NDAC 69-05.2-15-04(4)(a)(2). The majority of the permit area is projected to require 48 inches of suitable plant growth material. For a significant portion of the permit area, the amount of suitable plant growth material available for salvage and respread is not sufficient to meet the projected respread thickness of the disturbed area. In those instances where the amount of suitable plant growth material available for respread does not meet the required respread thickness based on the graded spoil quality for a particular landowner, then mixing agreements, where applicable, will be used to obtain additional subsoil or other suitable strata from landowners that have an excess of these materials. If the mixing agreements do not exist, then all of the suitable plant growth material removed from that particular landowner's property will be uniformly redistributed.

Coteau has identified additional subsoil quality materials (below 5 feet) and other suitable strata quality materials that will be used to supplement any projected subsoil deficit. The same volume of topsoil and subsoil that was removed from areas of associated disturbance will be respread on these areas. Coteau submits an annual soils handling plan to the Commission for approval. This annual plan includes a current and projected soil inventory as well as the annual soil removal and respread plans.

An examination of the overburden drill hole data indicates that some spoil material may be excessively sodic and therefore considered toxic. Sampling the graded spoil will identify any toxic spoil areas existing after grading and a sufficient non-toxic cover will be provided.

All prime farmland areas disturbed by coal removal or spoil placement are subject to the special soil handling plans. Topsoil from prime farmland areas disturbed by coal removal or spoil placement will be removed, stockpiled, and respread separately. Prime subsoil will be mixed with non-prime subsoil, as the subsoil characteristics of the prime and non-prime subsoil are very similar. If available a total of 48 inches of soil materials will be replaced on reconstructed prime farmlands that have been disturbed by coal removal or spoil placement. If the amount of subsoil and other suitable strata is not sufficient to provide for a total respread thickness of 48 inches, the subsoil will be respread to the average depth as was removed from the prime farmland areas. The areas designated for respreading prime soils will have a postmining concave configuration similar to the premining condition. This should ensure restoration of productivity. The same volume of topsoil and subsoil removed from prime farmland areas affected by associated disturbances will be respread on the reclaimed prime farmland areas.

Scarification with a disc or a chisel plow may be used to promote adhesion between graded spoil and subsoil in steep or shallow respread areas. This serves to minimize slippage and promote water infiltration. The respread of suitable plant growth material will be of uniform thickness with a topography that promotes effective surface drainage.

E. Vegetation

Seeding will be performed during the first normal period for favorable planting conditions. Prior to seeding, a firm seedbed will be established. Postmining land use seed mixtures utilized are dependent on postmining land use. The following mixtures will be used at rates expressed in pounds of pure live seed (PLS) per acre:

1. Native Grassland

Species/Variety	PLS #/acre
Western Wheatgrass/Rodan or Rosanna	2
Slender Wheatgrass/Revenue or Primar	1
Green Needlegrass/Lodorm	2
Blue Grama (ND, SD, MT, WY, or NE source)	2
Sideoats Grama/Killdeer	8
Switchgrass/NDG-965-68 or Nebraska 28	3
Little Bluestem/Blaze or Camper	5
Total PLS #/acre	**23**

2. Cropland (Pre-cropland mix)

Species/Variety	PLS #/acre
Pubescent Wheatgrass/Mandan 759	4
Intermediate Wheatgrass/Oahe, Greenar, or Chief	4
Western Wheatgrass/Rodan or Rosanna	4
Green Needlegrass/Lodorm	2
Alfalfa/Travois or Ladak	6
Total PLS #/acre	**20**

3. Tame Pastureland

Species/Variety	PLS #/acre
Pubescent Wheatgrass/Mandan 759	8.5
Alfalfa/Travois or Ladak	0.5
Total PLS/acre	**9.0**

4. Stabilization of Stockpiles, Ditches, Embankments

Species	PLS #/acre
Slender Wheatgrass	10
Western Wheatgrass	2
Pubescent Wheatgrass	5
Tall Wheatgrass	5
Total PLS #/acre	**22**

5. Wildlife Mix (for seeding perimeter of wetlands)

Species/Variety	PLS #/acre
Tall Wheatgrass/Alkar or Orbit	10
Pubescent Wheatgrass/Mandan 759	4
Switchgrass/Dakota	1
Big Bluestem/northern variety	5
Alfalfa/Ranger or Vernal	4
Yellow Sweetclover	½
Total PLS #/acre	**24.5**

All disturbed woodlands and shelterbelts will be replanted on reclaimed areas within the permit area. The reclaimed shelterbelt acreage will be reduced to approximately ½ of the premine size but the tree and shrub spacing will be doubled to create dense shelterbelt plantings. The reclaimed woodlands will be planted to a diverse mixture of native shrub and tree species including: Chokecherry(20%), Buffaloberry (20%), Silverberry (15%), Woods Rose (5%), American Plum (20%), Green Ash (10%), Boxelder, and Cottonwood (5%). These species will generally be planted in or adjacent to reconstructed drainageways and along north and east facing slopes in reclaimed grasslands. Low shrubs, western snowberry, will be planted by directly respreading "buckbrush sod" from undisturbed areas to reclamation areas or from bare root stalk at a ratio of approximately 1 acre for every 3 premining acres. Direct respreading patches of western snowberry has been successful in the past. Voluntary tree/shrub plantings will be considered as enhancement practices to other land uses, and will be evaluated subjectively as to their enhancement value.

Coteau generally begins small grain production on cropland areas following the completion of soil respread rather than planting these areas to a precropland mixture of grasses and legumes. Areas respread at a time unfavorable for seeding will be mulched and crimped. Herbicides will be used to control weeds if necessary. A portion of the premine cropland acreage was being managed as hayland premining and some cropland will be returned to perennial vegetation for hayland purposes after mining.

The mining and reclamation operations will not result in a substantial loss or reduction of long range productivity of the lands producing food and fiber products since reclamation practices proposed by the applicant are designed to restore the level of productivity to that which existed prior to mining.

F. Wildlife

Mining will disturb all habitat types within the permit area and the postmine acreage of each habitat type will be similar to what existed prior to mining. Any temporary loss of habitat will be partially mitigated by creation of stockpiles with dense cover to provide topographic relief and a food source. Sediment ponds will enhance water resources during mining and reclamation.

Coteau's reclamation plans have been designed to ensure no net loss of wetland acreage, minimize the farming hindrance wetlands create, and maximize the wildlife value of reclaimed wetlands. Acreages of seasonal and more permanent wetlands disturbed by mining will be replaced with reconstructed wetlands. The value of the fen wetlands that will be affected by mining, approximately 5.25

acres, will be replaced with the reclamation of an additional 36 acres of seasonal wetlands that is to be surrounded with an additional 40 acres of native grassland in Section 6 of Permit NACT-9001. This fen wetland mitigation plan was reviewed by a number of federal agencies and it includes a long term protective covenant for the replacement wetlands and surrounding reclaimed native grassland. Temporary wetlands will be replaced as a result of the mechanical recontouring process, and differential settling of spoil material. Premine woodlands will also be replaced on an acre for acre basis. Low shrub communities are recognized as having value to wildlife and the reclamation plan includes planting small patches of western snowberry in the reclaimed native grassland. Conservation tree and shrub plantings will enhance wildlife habitat, as well. These measures will be done in consultation with landowners, wildlife agencies, and the PSC.

Mining and reclamation operations will not create any barriers to wildlife migration routes. Coteau's large equipment is powered by 69KV power lines that are rarely a threat to raptors. No ponds containing toxic material will be created in the permit area. Herbicides may be used to control weeds, but use of insecticides has not been proposed. Winter feeding, limits on hunting, artificial habitats (nest boxes, islands, and platforms), and rock developments will enhance wildlife survival.

No habitat of unusually high value will be disturbed during mining and reclamation activities. Mining will not affect the continued existence of any threatened or endangered species. Mining is not expected to have any long-term adverse impacts on wildlife populations. Annual wildlife monitoring will document changes in wildlife populations. Attached is a copy of correspondence that the PSC received from the U.S. Fish and Wildlife Service in July 2010 indicating there will be no significant impacts to fish and wildlife resources as the result of the additional mining proposed by Revision No. 8 to Permit NACT-0201 and that no endangered or threatened species are known to occupy the project area.

G. Cultural Resources

A cultural resource survey and inventory of the NACT-0201 permit area has been completed (Ethnoscience 1999). All sites were tested and evaluated for significance and 41 sites were determined to be significant. One prehistoric site (32ME1486) was determined be a Traditional Cultural Property (TCP). There is one known Native American burial site located within the permit area.

Various Native American Tribes (primarily the Three Affiliated Tribes, Fort Peck Tribes, and Standing Rock Sioux) with an ancestral connection to the permit area were consulted throughout the review process. Many agencies in addition to the tribes were involved in the review of the cultural resources of the permit area and the subsequent development of the West Mine Area Cultural Resource Management Plan including the Bureau of Land Management (BLM), Office of Surface Mining (OSM), North Dakota State Historical Society (SHS), and the North Dakota Public Service Commission (PSC). In addition, a programmatic agreement was signed by the various tribes and government agencies.

The West Mine Area Cultural Resource Management Plan was approved by the North Dakota State Historical Society with the concurrence of OSM and BLM. The management plan consists of data recovery from some sites prior to disturbance, avoiding some sites, the long-term preservation of others, and the

establishment of a trust for Native American cultural education. Approximately 1,720 acres and $200,000 would be conveyed to the North Dakota State Indian Cultural Education Trust. The purpose of the trust is to hold certain lands containing cultural resource sites for their protection and preservation to generate income for cultural educational activities for Native Americans through rent of the trust lands. The trust lands are scattered throughout the permit area and adjacent area and were selected to preserve the most sensitive cultural resource sites in the permit and adjacent areas. In addition to the sites protected by the trust lands, a number of other sites including Site 32ME1486 (Traditional Cultural Property) will be protected by avoiding mining disturbance within 200' buffer around sites (sites will be fenced). A number of sites will be mitigated through data recovery.

Coteau 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. In addition, Coteau conducts special cultural resource training for all mine employees.

Correspondence received from the State Historical Society (SHPO) regarding the approval of the cultural resource management plan and the additional mining proposed by Revision No. 8 to Permit NACT-0201 is attached.

H. Land Use

After the land has been mined and reclaimed, it will again be used primarily as agricultural land. Wetland acreage within this permit area will be replaced. No unusual environmental impacts are anticipated from the proposed mining operations. Postmining land uses include the following:

Land Use	Acreage	% of Area	Change in Acres from Premining
Cropland (incl. hay)	5122	30	+38.3
Native Grassland	10,284	60.3	+56.5
Tame Pastureland	560	3.3	-271.6
Wetlands (Seasonal and Semi-permanent)	232	1.4	-0.2
Shelterbelts	36	0.2	+0.3
Developed Water Resources (Stockponds)	21	0.1	+8.3
Woodlands	372	2.2	0
Industrial, farmsteads & roads	425	2.5	+168*
Total	**17,052**	**100.0**	

*** Acreage difference due to the way roads were classified different premining vs. postmining**

I. Transportation

No state highways or major county roads will be closed or relocated as a result of the mining activities in Permit NACT-0201. No long-term impacts will occur to the transportation system in the permit area. However, short-term impacts will occur to portions of several unnamed county roads and section line trails. Impact on the flow of traffic using these roads is expected to be manageable. Affected landowners have been contacted by Coteau and have had/or will have opportunities to comment to County Commissioners on all road closures, relocations or areas in which mining operations will be conducted within 100 feet of public roads.

J. Noise, Esthetics, and Safety

Noise associated with operations within this permit area should be similar to that currently occurring with other permitted areas.

Visually, the proposed mining operation will temporarily intrude upon the landscape normally viewed by the people in the surrounding area. However, after mining operations are completed the topography will be restored to conditions similar to the premine landscape.

Coteau will post the necessary signs as needed to minimize the possibility of unauthorized persons entering the mine area. They have also committed to providing safe access to landowners, local farmers, and to cemeteries in or near the permit area.

K. Socioeconomics

Currently (as of December 1, 2010) there are 303 full time, and 97 temporary employees at the Freedom Mine. The operations proposed by Revision No. 8 are not expected to affect employment levels.

IV. MAJOR ISSUES INVOLVING THE REVISION APPLICATION

No significant issues were raised during the review of the revision application.

CHRONOLOGY OF EVENTS

Coteau Properties Company
Application for Revision No. 8 to Permit NACT-0201
January 2011

Date	**Event**
June 4, 2002	The Public Service Commission received the application for Permit NACT-0201 from Coteau Properties Company.
April 14, 2004	Commission issues Permit NACT-0201 that allows Coteau to conduct mining and reclamation operations on 17,050.9635 acres. No mining of federal coal tracts is initially proposed.
April 2004	Bureau of Land Management (BLM) issues draft Environmental Impact Statement (EIS) for Coteau's application for Federal Coal Lease Application NDM 91535.
April 22, 2005	The West Mine Area Cultural Resource Management Plan is approved by the North Dakota State Historical Society with the concurrence of OSM and BLM.
December 2005	BLM issues its Record of Decision regarding the EIS for Lease Application NDM 91535. The decision was to issue the lease but to incorporate a preservation component for certain cultural resource features within the WMA.
January 2006	Programmatic Agreement regarding cultural resources in the West Mine Area is signed by various tribes and government agencies.
June 1, 2006	Coteau receives approval of Federal Coal Lease NDM 91535 for 5,333.56 acres from BLM effective June 1, 2006
August 15, 2008	Coteau filed copies of the Resource Recovery and Protection Plan with the Commission for the federal coal tracts proposed to be mined. Copies of this plan were sent to the BLM office in Billings on August 15, 2009, by Coteau.
April 13, 2009	Renewal No. 1 to Permit NACT-0201 is approved by the Commission, extending the permit term until April 14, 2014.
May 6, 2009	BLM office in Billings approves Resource Recovery and Protection Plan for all federal coal tracts within Permit NACT-0201.
March 22, 2010	The Commission received the application for Revision No. 8 to Permit NACT-0201. This revision proposes mining of federal coal tracts south of County Road 26, modifies the postmining topography, updates the pre- and post-mining probable hydrological consequences, updates postmining land uses and includes details for postmining wetlands and stockponds.

Permit NACT-0201
Chronology of Events
January 2011

April 9, 2010	Commission sent a completeness deficiency letter to Coteau.
April 26, 2010	Coteau submits additional information in response to the Commission's April 9th completeness review.
May 12, 2010	Commission sent letter to Coteau deeming application complete and copies of Revision 8 were sent to the ND Department of Health and State Water Commission.
May 20-June 10, 2010	Coteau published notice of the application for Revision 8 in the Hazen Star, Beulah Beacon, and Bismarck Tribune.
June 3, 2010	Commission notified surface owners and other interested parties of Coteau's application for Revision 8 and provided the opportunity to submit comments and/or objections.
June 6, 2010	Copies of Revision 8 were sent to ND Game and Fish Department and State Historic Society.
June 14, 2010	ND State Historic Society responded with no concerns.
June 28, 2010	ND Department of Health responded with no concerns.
July 1, 2010	State Water Commission responded with no concerns.
July 7, 2010	ND Game and Fish responded with no concerns.
July 12, 2010	Close of the public comment period. No objections received.
July 13, 2010	U.S. Fish and Wildlife Service responded with no finding of significant impact on fish or wildlife resources.
July 28, 2010	Commission sent Coteau a deficiency letter as a result of its technical review of Revision 8.
September 20, 2010	Commission received Coteau's response to the July 28th technical deficiency letter on Revision 8.
September 28, 2010	Copies of Revision 8 and Resource Recovery and Protection Plan are sent to OSM Casper and OSM Denver. Copies of Revision 8 sent to BLM Billings and Dickinson.
October 15, 2010	Commission sent Coteau a 2nd technical deficiency letter.
November 16, 2010	Commission received Coteau's response to the October 15th technical deficiency letter on Revision 8.
December 2, 2010	Commission sent Coteau a 3rd technical deficiency letter.
December 14, 2010	Commission received Coteau's responses to the December 2nd technical deficiency letter on Revision 8.

Permit NACT-0201
Chronology of Events
January 2011

January 12, 2011	The Commission approves Revision No. 8. Existing Permit Condition requires Mine Plan approval by the Department of the Interior before the federal coal tracts can be disturbed for mining.
January 25, 2011	The Commission submits the Federal Lands Decision Documents to OSM for review and approval.

STATE HISTORICAL SOCIETY OF NORTH DAKOTA

April 22, 2005

Mr. Joseph D. Friedlander
Environmental Manager
The Coteau Properties Company
Freedom Mine
204 County Road 15
Beulah, ND 58523-9475

NDSHPO Ref: 93-0209 BLM/OSM/PSC Coteau, Coteau West Mine Area Cultural Resource Management Plan (WMA CRMP), April 12, 2005, **WMA CRMP acceptance**

Dear Joe:

We have reviewed: ***"Coteau: A Cultural Resource Management Plan for the West Mine Area, Mercer County, North Dakota, Revision 1"*** (Revised, April 12, 2005) regarding the identification, evaluation, and treatment of Historic Properties affected by surface coal mining operations in the West Mine Area.

We find the WMA CRMP document acceptable, and we look forward to reviewing the products specified in it.

Thank you for the opportunity to review the project. If you have any questions please contact either Fern Swenson at (701) 328-3575 or Paul Picha at (701) 328-3574.

Sincerely,

Merlan E. Paaverud, Jr.
Director, State Historical Society of North Dakota
and
State Historic Preservation Officer (North Dakota)

c: Barry Williams, BLM

STATE HISTORICAL SOCIETY OF NORTH DAKOTA

June 14, 2010

FROM DIRECTOR - RECLAMATION DIV.

Date:_____

Action:_____

Info. Only:_____

Info & File:_____

Mr. James R. Deutsch
Director
Reclamation Division
Public service Commission
600 East Boulevard Avenue Department 408
Bismarck, North Dakota 58505-0840

ND SHPO Ref: 93-0209cp PSC Coteau Properties
PSC: Permit NACT-0201, Revision 8

Dear Jim:

We have received and reviewed: **Ref: Ref: 93-0209cq PSC Coteau Properties** PSC: Permit NACT-0201, Revision 8," and find it acceptable in regards to cultural resources as outlined in the document.

Thank you for the opportunity to review this project. Please include the ND SHPO reference number listed above in any further correspondence for this specific project. If you have any questions, please contact either Paul Picha at (701) 328-3574 or ppicha@nd.gov or Susan Quinnell at (701) 328-3576 or squinnell@nd.gov

Sincerely,

Merlan E. Paaverud, Jr.
State Historic Preservation Officer (North Dakota)
and
Director, State Historical Society of North Dakota

For more information you may contact the Public Service Commission at 701-328-2400.

PUBLIC SERVICE COMMISSION

Tony Clark	Kevin Cramer	Brian P. Kalk
Commissioner	Chairman	Commissioner

RECEIVED
JUL 15 2010
32090
NORTH DAKOTA
PUBLIC SERVICE COMMISSION

FROM DIRECTOR - RECLAMATION DIV.

Date:_____

Action:_____

Info. Only:_____

Info & File:_____

U.S. FISH AND WILDLIFE SERVICE

ECOLOGICAL SERVICES
ND FIELD OFFICE

Project as described will have no significant impact on fish and wildlife resources. No endangered or threatened species are known to occupy the project area. IF PROJECT DESIGN CHANGES ARE MADE, PLEASE SUBMIT PLANS FOR REVIEW.

7-13-10
Date

Jeffrey K. Towner
Field Supervisor

STATE OF NORTH DAKOTA

PUBLIC SERVICE COMMISSION

The Coteau Properties Company
Revision No. 8, Permit NACT-0201
Application

Case No. RC-10-71

NOTICE OF RECEIPT OF REVISION APPLICATION

June 2, 2010

The Coteau Properties Company has filed an application for Revision No. 8 to Surface Coal Mining Permit NACT-0201. This revision proposes to mine federal coal tracts within the existing permit area and updates other mining plans south of County Road 26. The revision also modifies the post-mining topography, surface water hydrology, post-mining land use, post-mining wetlands and post-mining stockponds for most lands south of County Road 26. No additional lands are being added to the permit with this revision and permitted acreage will remain at 17,050.96 acres. The federal coal tracts located south of County Road 26 that are proposed to be mined are located in all or portions of:

Sections 26 and 34, T145N, R88W, and Sections 2, 4, 6, and 8, T144N, R88W, Mercer County, ND.

The revision applications and surface coal mining and reclamation permit may be inspected at:

Public Service Commission
State Capitol
Bismarck, North Dakota 58505-0480

Mercer County Auditor
County Courthouse
Stanton, North Dakota 58571

You may submit written comments or objections on the proposed permit renewal and revision applications and their effects on the environment and on surface owners of the land in the permit area. You may request an informal conference with the Commission and the applicant on the renewal and revision applications. The reasons for requesting an informal conference must be stated in the request. Written comments, objections, or requests for informal conference must be made by July 12, 2010.

If there is an informal conference, you may request a formal administrative hearing on the Commission ruling on the applications. Your request for a formal hearing must be made within thirty days of the Commission ruling on the applications.

Written comments, objections, or requests for informal conferences should be addressed to the Public Service Commission, State Capitol, Bismarck, North Dakota 58505-0480.