



Public Service Commission

State of North Dakota

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January 26, 2011

Jeffrey W. Fleischman, Director
OSM Casper Field Office
P.O. Box 11018
150 East "B" Street, Room 1018
Casper, WY 82602-5004

RE: Request for Authorization to Proceed for 2011 Columbus Phases 11 and 12, Beulah/Zap Phase 12, and Exploratory Drilling Projects in North Dakota.

Dear Mr. Fleischman:

Please find enclosed documentation to support our Request for Authorization to Proceed with the 2011 Columbus Phases 11 and 12, Beulah/Zap Phase 12, and Exploratory Drilling Projects.

Updated environmental assessments for the Columbus highwall reduction and Beulah drilling and grouting projects are attached. These projects are continuations of previous reclamation work in these areas. We believe the Exploratory Drilling Project meets the criteria of Section 5-11-05 of the Federal Assistance Manual (FAM) as a Categorical Exclusion. A Categorical Exclusion Determination form and project plan summary is attached for that project. Also attached is an eligibility determination letter for the Columbus and Beulah Projects.

We have requested concurrence for these projects from the State Historical Society of North Dakota, U.S. Fish and Wildlife Service, North Dakota Parks and Recreation Department, and the North Dakota Department of Health. Any outstanding responses to these requests for concurrence will be forwarded to you as we receive them. Because no off-site pit dewatering is planned and all runoff from areas to be affected at the Columbus Phase 11 and 12 project sites will flow into abandoned mine pits, consultation with the Army Corps of Engineers is not needed.

The State Historical Society (SHPO), in a response dated December 21, 2010 (see attachment), recommended a Class III Cultural Resource Survey for the Columbus

1 AM-11-41 Filed 01/26/2011 Pages: 54
Request for authorization to proceed sent to OSM
Public Service Commission

1 AM-11-28 Filed 01/26/2011 Pages: 54
Request for authorization to proceed sent to OSM
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1 AM-11-29 Filed 01/26/2011 Pages: 54
Request for authorization to proceed sent to OSM
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1 AM-11-27 Filed 01/26/2011 Pages: 54
Request for authorization to proceed sent to OSM
Public Service Commission

Mr. Jeffrey Fleischman
January 26, 2011
Page 2

Phase 11 and 12 projects. We are currently in the process of procuring this survey and expect it to be completed and to receive SHPO concurrence for this project on or about May 10, 2011. We will forward the SHPO letter of concurrence as soon as we receive it. In the meanwhile, your review of the other documents regarding the Columbus project would be greatly appreciated

A public meeting to discuss the 2011 Columbus projects was held January 13, 2011. The Beulah/Zap Project is a continuation of previous reclamation work and a public meeting was held at Beulah on January 29, 2009. No public meeting will be held for the exploratory drilling project, as it is investigative in nature and will encompass multiple sites. However, affected property owners or controllers will be contacted and consents for right-of-entry will be executed before any work begins.

If additional information is needed or you have any questions, feel free to call Bill Dodd at 701-328-4101 or me at 701-328-2251.

Sincerely,

A handwritten signature in black ink, appearing to read "Jim Deutsch", written in a cursive style.

James R. Deutsch
Director
Reclamation and AML Divisions

Enclosures

List of Attachments

1. Standardized Environmental Assessment for Columbus AML Project (January 2011)
2. Standardized Environmental Assessment for Beulah/Zap AML Project (January 2011)
3. Abandoned Mine Lands Categorical Exclusion Determination for Exploratory Drilling Project.
4. Project Location Maps for 2011 Columbus and Beulah/Zap Projects
5. Project Plan Summary for Exploratory Drilling Project.
6. Requests for Concurrence for 2011 projects and responses received to date
 - ND State Historical Society
 - ND Department of Health
 - ND Parks & Recreation Department
 - U.S. Fish and Wildlife Service
7. Eligibility Determination for 2011 Projects
8. AMLIS Summaries for Columbus and Beulah/Zap Sites.

STANDARDIZED ENVIRONMENTAL ASSESSMENT

**Columbus
Abandoned Mine Lands Project
ND031
Burke County, North Dakota**

Prepared by

North Dakota Public Service Commission

In Cooperation With

**United States Department of Interior
Office of Surface Mining Reclamation and Enforcement
Casper Field Office**

(January 2011)

Section I Introduction

A. Need for the Action

The principal objective of the Public Service Commission is to reclaim potentially hazardous portions of a surface mine located within Sections 20, 21, 28, and 29, T162N, R93W approximately four miles southeast of Columbus, North Dakota, population 151. The surface mine contains dangerous highwalls near roads. The surface mine is 1,280 acres in size.

To our knowledge, there have been two instances of death attributable to the abandoned mine. The first occurred in the late 1960s when a vehicle went off an abandoned haul road killing the driver. The second happened in the late 1970s when a person drowned in a water-filled abandoned surface mine pit after falling off a steep highwall. The potential for additional deaths or injuries is inherent due to the location of the abandoned mine.

B. Project Background

The Columbus Problem Area is composed of an extensive surface coal mine located in Burke County, Sections 19, 20, 21, 22, 27, 28 and 29, T162N, R93W, and Sections 14, 23 and 24, T162N, R94W. This AML site is characterized by dangerous highwalls near roads and other AML hazards.

The Columbus AML site is within three miles of the corporate limits of Columbus, North Dakota, and encompasses approximately 1,280 acres. Mining was conducted from the 1920s to the 1960s. Current land use of the area is designated as agricultural (grazing land). Anticipated land use of the area will remain agricultural (grazing land).

Section II

Description of the Proposed Project and Alternatives

The proposed reclamation project for this site will be beneficial to the general public and the requirements of federal and state law for reclamation. Besides the elimination of a hazard to the general public, as well as the landowners, parameters with other beneficial effects are land use, vegetation, wildlife and topography.

The plan of action for the proposed reclamation activity will be to backfill hazardous highwalls with material from adjacent spoil piles. Erosional drainage channels, which flow over the steep dangerous highwalls, will be repaired and reestablished to a nonerosive slope.

To the degree possible, topsoil will be salvaged from the disturbed areas and respread once the earthwork has been completed. Approximately 12,000 feet of hazardous highwalls would be eliminated through proposed reclamation operations in 2011. The reclaimed areas will be fertilized, seeded and mulched. Revegetation would be done with a seed mixture compatible to the quality of available plant growth material.

Options or alternatives include backfilling, fencing of hazard areas, or no action. Backfilling is the preferred option. The no action option does not solve the AML problems at the site and fencing is not considered as a viable option. The proposed reclamation activities should have no long term adverse effects on the environment. Any temporary disruption of wildlife habitat will be a short term effect.

The approved North Dakota Abandoned Mine Lands State Reclamation Plan identifies backfilling as an effective reclamation technique.

Section III Existing Environmental Documents

OSM-EIS-11. Approval of State and Indian Reclamation Program Grants under Title IV of the Surface Mining Control and Reclamation Act of 1977 was published by the Office of Surface Mining in November 1983. This EIS describes and analyzes the environmental impacts that were expected to result from approval of State or Tribal Grants. It focuses on the adverse and/or beneficial impacts and standard reclamation activities associated with eight major categories of abandoned coal mine problems in the United States.

The environmental concerns of the proposed project are addressed in an Environmental Impact Statement (EIS) prepared by the Office of Surface Mining Reclamation and Enforcement entitled "Approval of State and Indian Reclamation Program Grants Under Title IV of the Surface Mining Control and Reclamation Act of 1977": (OSM-EIS-11, November 1983). Please reference the following documents for further information:

Chapter III, Affected Environmental Rocky Mountain/Northern Great Plains Region:

Section 3.5.2.2, Adverse Impacts Related to Highwalls, pp. III-24, Subsections 3.5.2.2.1, 3.5.2.2.12, pp. III-24 to III-26.

Chapter IV, Environmental Consequences Rocky Mountain/Northern Great Plains Region:

Section 4.2.2, Impact Common to Remedial Actions, pp. IV-3 to IV-7; and,

Section 4.3.2 Reclamation of Highwalls, pp. IV-11, Subsection 4.3.2.1, pp. IV-11 to IV-12.

Section IV Site Specific Review

A. Cultural or historic resource values (the Archaeological Resources Protection Act of 1979; the Archaeological and Historic Preservation Act of 1974; the National Historic Preservation Act of 1986, as amended; the Antiquities Act of 1906, Executive Order 11593, concerning the protection and enhancement of the cultural environment; the American Indian Religious Freedom Act of 1978; the Historic Sites Act of 1978; and OMB Circular A-102).

A letter was sent October 20, 1994, to the North Dakota State Historical Society requesting comments concerning the cultural resources of this site. The State Historical Society reviewed this site and signed off a letter dated November 21, 1994, indicating that it did not constitute a historical or culturally significant site. However, the North Dakota State Historical Society was contacted recently on December 16, 2010, requesting any new comments concerning the cultural resources of this site. In a response dated December 21, 2010, the SHPO recommended a Class III (pedestrian) survey of the site with recommendations regarding portions of the site deemed eligible for nomination to the National Register of Historic Places.

B. Water quality values (Clean Water Act, as amended)

There are no streams present on or near the proposed project area. Reclamation efforts at the Columbus project areas will have no adverse effect on water quality.

C. Wetlands values (Clean Water Act, Executive Order 11990, and Army/EPA Memorandum of Agreement (MOA) Concerning the Determination of Mitigation under the Section 404(b) (1) Guidelines)

No wetlands are located within the Columbus project areas.

D. Flood values (Executive Order 11988)

The project areas are not contained within an identified floodplain.

E. Wildlife (Endangered Species Act and Fish and Wildlife Coordination Act)

1. The Fish and Wildlife Service and the North Dakota Parks and Recreation Department were contacted on December 16, 2010, requesting any comments regarding the proposed reclamation plan for the project site. A response from the North Dakota Parks and Recreation Department dated December 30, 2010, recommended that any impacted areas be

revegetated with species native to the project area. A response from the Fish and Wildlife Service dated December 20, 2010, indicated that the project as described will have no significant impact on fish and wildlife resources.

2. There has been no other sensitive wildlife identified in the proposed project area.

F. Prime and unique farmland values (Farmland Protection Policy Act)

There has been no prime farmland identified on the proposed project site.

G. Recreational resource values (Wild and Scenic Rivers Act, Clean Air Act)

There are no lands in the proposed project area classified as Wilderness Area or lands being studied for wilderness designation.

There are no lands in the proposed project area identified as areas of critical environmental concern.

There are no lands in the proposed project area included in the Wild and Scenic River category.

There are no parks or areas of critical ecological or aesthetic concern found in the proposed project area.

H. Air quality (Clean Air Act)

The proposed project area is not in or near a Class I air quality region.

There are no conditions on the existing site of the proposed project that affect air quality of the nearby area.

I. Socioeconomic factors

There will be no adverse socioeconomic effect from the reclamation of this site.

J. Political factors

Meetings between the North Dakota Public Service Commission and local governing entities are ongoing and will continue throughout project completion. County officials and landowners have expressed interest in reclamation of the proposed areas. A public meeting was held on January 13, 2011, in Columbus, ND and only one person attended. The general public was notified in advance of the meeting by newspaper notice.

K. Existing Vegetative Cover

The highly sodic and clayey nature of the spoil precludes the growth of most graminoid species. A few areas of saltgrass, brome grass and crested wheatgrass are found in the low areas between spoil piles.

L. Threatened and Endangered Plant Species

No threatened or endangered plant species have been identified within the project area.

M. Anticipated date of Reclamation

Reclamation work for Columbus (1) began in June 1988 and was completed in September 1988.

Reclamation work for Columbus (2) began in May 1995 and was completed in October 1995.

Reclamation work for Columbus (3) began in May 1997 and was completed in September 1997.

Reclamation work for Columbus (4) began in June 2000 and was completed in October 2000.

Reclamation work for Columbus (5) began in June 2003 and was completed in September 2003.

Reclamation work for Columbus (6) began in August 2004 and was completed in October 2004.

Reclamation work for Columbus (7) began in June 2006 and was completed in August 2006.

Reclamation work for Columbus (8) began in June 2007 and was completed in September 2007.

Reclamation work for Columbus (9) began in June 2008 and was completed in May 2009.

Reclamation work for Columbus (10) began in October 2009 and was completed in November 2009.

Reclamation performance period for Columbus Phases 11 & 12 is scheduled to begin in June 2011 and be completed in November 2011.

N. Estimated Construction Cost

The construction cost for the Columbus (1) project was \$113,630.08.

The construction cost for the Columbus (2) project was \$270,868.80.

The construction cost for the Columbus (3) project was \$325,474.50.

The construction cost for the Columbus (4) project was \$187,499.86.

The construction cost for the Columbus (5) project was \$174,469.02.

The construction cost for the Columbus (6) project was \$162,556.00.

The construction cost for the Columbus (7) project was \$238,050.00.

The construction cost for the Columbus (8) project was \$249,638.14.
The construction cost for the Columbus (9) project was \$1,197,998.47.
The construction cost for the Columbus (10) project was \$70,003.01.

It is estimated that construction cost for the Columbus Phase 11 & 12 projects will be \$2,500,000.

O. Off-site Borrow and Disposal Areas

There will be no off-site borrow or disposal area concerns relative to this project. If off-site borrow or disposal issues arise, applicable environmental regulations will be addressed through the North Dakota Department of Health.

P. Noise Pollution

Project work will be conducted no closer than 5,000 feet from the nearest residential or commercial population. Noise pollution problems are not anticipated; however, if problems arise, remedial action measures will be addressed through the North Dakota Department of Health.

Section V

Consultations

The State Historical Preservation Officer has been contacted with reference to any cultural or historical values present at or near the project site.

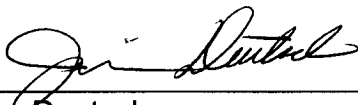
The United States Fish and Wildlife Service has been contacted with reference to identification of threatened or endangered animal species on the proposed project site.

The Planning and Natural Resources Division of the North Dakota Parks and Recreation Department has been contacted with reference to identification of threatened, endangered or rare plant species or communities.

A letter was also sent to the North Dakota Department of Health requesting concurrence for this project.

Section VI

Preparers



Jim Deutsch
Director - AML Division
ND Public Service Commission

STANDARDIZED ENVIRONMENTAL ASSESSMENT

Beulah/Zap AML Area
ND000014
Mercer County
North Dakota

Prepared by

North Dakota Public Service Commission

In Cooperation With

United States Department of the Interior
Office of Surface Mining Reclamation and Enforcement
Casper Field Office

(Updated January 2011)

Section I Introduction

A. Need for the Action

The principal objective of the Abandoned Mine Lands (AML) Division of the North Dakota Public Service Commission (Commission) regarding this project is to reclaim potentially hazardous portions of underground mines located beneath and adjacent to North Dakota Highway 200 and several Township roads and residential areas which are located near Beulah/Zap, North Dakota.

To our knowledge there have been no instances of death attributable to the abandoned mines in the Beulah/Zap AML Area. However, the presence of abandoned surface and underground mines are a serious hazard to the public and landowners. Several instances of damage to commercial and residential structures, farm equipment and loss of livestock have resulted from abandoned mine land problems.

B. Project Background

This Environmental Assessment (EA) for the Beulah/Zap Mining Area is a consolidation of several previous EA's for individual project sites within the area. It also has been modified periodically to add additional acreage where abandoned mine lands have presented hazards. The Beulah/Zap AML Area includes portions of Townships T144N, R87W; T144N, R88W; and, T144N, R89W, in Mercer County, as illustrated on the map at the end of this document. More than 15 major reclamation projects and several smaller emergency, maintenance, and exploratory drilling projects have been conducted by the AML Division, within this area. These projects have included remote backfilling abandoned underground mine workings, regrading subsidence features and extinguishing coal refuse fires. These projects were conducted near roads, residential and commercial property, and on agricultural lands. Although much work has been done to remedy AML problems within this area, there are more AML problems and, consequently, work remains to be done within the Beulah/Zap AML Area.

The Beulah/Zap AML Area is located near the cities of Beulah (population 3,363) and Zap (287). More than 50 coal mines have been located within 20 miles of Beulah and Zap, making this one of the most heavily mined areas in the state. The area immediately around Beulah is affected principally by one large abandoned underground coal mine, the Knife River Coal Mine. This mine began as the Black Diamond Mine around 1915 and continued under several different owners as the Beulah Coal Mine and the Knife River Coal Mine. In 1953, the underground mining operation was abandoned and the Knife River Coal Mine continued as a surface (strip) mine at locations both north and south of Beulah.

The Knife River Coal Mine operated beneath an area including more than 1,500 acres. There were also several other small local mines, but most of the AML problems in and around Beulah are a result of subsidence of the Knife River Coal Mine. The mine had fairly shallow overburden, ranging from 40 to 100 feet, and a relatively thick coal seam of up to 20 feet. Subsidence of the mine workings have frequently resulted in sudden collapse of deep sinkholes with steep sides that create a severe hazard to the public and landowners. In fact, sinkholes have surfaced directly underneath residences, businesses and roadways in and near Beulah. Some of the earliest AML reclamation work in North Dakota was

conducted by OSM in the early 1980s to stabilize undermined residences at the Sun Valley Trailer Court in Beulah. A summary of major non-emergency and emergency projects conducted by the AML Division near Beulah since 1983 is contained in the following table.

Year	Description	Cost
1983	Sinkhole surface grading	\$126,443
1983	Slurry, remote backfilling and surface grading	\$577,578
1984	Slurry, remote backfilling along Highways 200, 49, and 21	\$362,451
1984-86	Slurry, remote backfilling along Highway 200 and surface grading	\$1,154,487
1985	Sinkhole surface grading	\$126,443
1986	Slurry, remote backfilling along Highway 200	\$83,697
1986	Sinkhole surface grading	\$102,010
1992	Pressure grout beneath Eagles Club and Sun Valley Court; 11,969 cubic yards	\$629,260
1993	Pressure grout beneath Roughrider RV Sales; 18,108 cubic yards	\$493,335
1994	Emergency sinkhole filling near KHOL Radio Station	\$3,600
1996	Emergency sinkhole filling near Al Serhenko residence	\$1,075
1997	Beulah/Zap Phase 1, pressure grout beneath Manny's Sports, Black Diamond Lounge, and Hook, Line and Sinker gas station; 6,746 cubic yards	\$469,150
1997	Emergency sinkhole filling near Curt Michaelson residence	\$1,387
1998	Beulah/Zap Phase 2, pressure grout beneath Black Diamond parking lot and several occupied residences; 6,205 cubic yards	\$311,812
1998	Emergency sinkhole filling near Della Bauer residence	\$1,045
1999	Beulah/Zap Phase 3, pressure grout beneath KHOL Radio Station and Co. Hwy 21; 4,961 cubic yards	\$307,348
2000	Emergency sinkhole filling near KHOL Radio tower and G & F property	\$1,817
2000	Beulah/Zap Phase 4, pressure grout beneath Schmidt Addition and Co. Hwy 21; 4,876 cubic yards	\$349,911
2001	Emergency sinkhole filling inside Garner Sailer's machine shed	\$3,223
2001	Beulah/Zap Phase 5, pressure grout beneath Hwy 200 and Co. Hwy 21; 5,399 cubic yards	\$314,840
2002	Emergency coal refuse fire suppression in Beulah city limits	\$1,528
2002	Beulah/Zap Phase 6, pressure grout beneath Hwy 200; 3,800 cubic yards	\$251,861
2003	Beulah/Zap Phase 7, pressure grout beneath Hwy 200; 4,650 cubic yards	\$276,278
2004	Emergency sinkhole filling near Curt Michaelson residence and G & F property	\$2,050
2004	Beulah/Zap Phase 8, pressure grout beneath Mercer Co. Hwy. 13 near Zap; 3,508 cubic yards	\$248,579
2004	Emergency drillhole filling near Bison Auto	\$245
2005	Beulah/Zap Phase 9, pressure grout beneath Mercer Co. Hwy. 13 near Zap; 3,824 cubic yards	\$282,182
2005	Emergency coal refuse fire suppression	\$2,500
Year	Description	Cost
2006	Beulah/Zap Phase 10, pressure grout beneath Mercer Co.	\$299,383

	Hwys. 13 & 20 near Zap; 3,552 cubic yards	
2007	Emergency sinkhole filling on Mike Eslinger and G & F property	\$5,040
2010	Emergency grouting and sinkhole filling near KDKT Radio Tower	\$24,000
2010	Beulah/Zap Phase 11, pressure grout beneath Mercer Co. Hwy. 13 and Hwy. 200; 6,870 cubic yards	\$696,356

Two operating lignite mines, the Dakota Westmoreland Corporation's Beulah Mine, and the Coteau Properties Company's Freedom Mine are located near Beulah and Zap. North American Coal Company's former Indian Head Mine was located near Zap, but mining ceased at this mine in the early 1990's and all reclamation bonds have been released.

Current land uses in the Beulah/Zap AML Area include residential, commercial, agricultural, wildlife management areas and roadways. Post-construction land uses in the area have and will remain the same.

Section II

Description of the Proposed Project and Alternatives

AML Reclamation work has been done at several sites within the Beulah/Zap AML Area. Most of this work included remote backfilling underground mine workings to stabilize the surface from the dangerous effects of mine collapse. Surface grading of subsidence features has also been conducted extensively in the past and is expected to continue in this area for the foreseeable future. The major reclamation emphasis in the future will be the protection of residential areas, businesses, public roads and farmsteads from the effects of subsidence and collapse of underground mine workings. Exploratory drilling has been conducted to determine the extent and condition of underground mine workings beneath roads and structures.

Plans for remaining phases of the Beulah/Zap project series, include pressurized grout remote backfilling and associated work near Beulah and Zap at the following locations all in Mercer County:

- U.S. Highway 200 right-of-way extending eastward approximately 1¼ miles from the intersection of Highways 200 and 49, along the lines between Sections 12 and 13, T144N, R88W and Sections 7 and 18, T144N, R87W;
- Mercer County Highway 21 north of the junction with U.S. Highway 200 along the east edge of Section 12, T144N, R88W;
- 60th Avenue Southwest between Section 12, T144N, R88W and Section 7, T144N, R87W; and,
- The Curt Michaelson Farmstead in the NE¼ of Section 12, T144N, R88W.

The 2011 Beulah/Zap Phase 12 AML Project will be a continuation of work performed in 2010 to stabilize undermined segments of State Highway 200 near Beulah, and possibly other road segments and residential areas near Beulah.

The general procedure for reclamation of collapsing underground mined workings in “high use” areas includes rotary drilling and pressurized grout remote backfilling. Drilled holes that intercept mining voids or rubble will be cased from ground surface to the top of the void/rubble zone with 3" Inside Diameter (I.D.) Schedule 40 PVC pipe. Casing of the holes allows mine inspection with the borehole camera, and protects the integrity of the borehole from formation failure. Cased void holes may be used as injection holes for pressure grout injection.

The preferred method for reclamation of underground mined workings beneath roads and structures is pressurized grout remote backfilling. Pressurized grout remote backfilling is a method of filling in the mine rooms and tunnels with a grout mixture of cement, flyash, water, sand and various other admixtures. Grout is pumped under pressure, through drilled holes, directly into the mine workings. When injected, this material sets up and stabilizes the overburden to prevent collapse of the mine workings.

Backfilling of the mine usually commences systematically with injection holes spaced approximately every ten feet depending on mine specific conditions. Drilling rigs with directional drilling capabilities may be utilized for inaccessible areas such as under houses, roadways and miscellaneous utilities. The relatively close spacing of drill holes is essential because accurate mine maps are not available for all areas. Haul tunnels in this mining area were typically ten feet wide. Drill holes spaced any more than ten feet apart may miss the target mined workings. It is anticipated that confirmation holes will be cored between the injection holes.

Pressurized grout remote backfilling is the preferred method because when mine workings have collapsed, pressure is required to penetrate the rubble and differential void levels.

A second option is gravity backfilling. Gravity backfilling consists of pouring a sand and water slurry from cement trucks down drilled holes. This method works well when mine voids are intact at the mine level. However, gravity backfilling will not penetrate the rubble and differential levels of mine workings that were encountered during exploratory drilling at this site.

A third alternative is "daylighting" or excavation of all underground mine workings. This would entail excavating all overburden down to the mined coal seam and backfilling it after all mining voids have been excavated. This method is not considered practical due to the extremely high cost of temporary relocation of public roads and structures and of deep excavation over a large area.

Other options include property buy-out, relocation or condemnation by a local political subdivision with demolition or removal of existing structures and utilities and relocation of the roads. Fencing would also be necessary to restrict access by pedestrians.

Another option would be no action. These last options do not solve the AML problems and therefore, are not considered viable options.

Section III Existing Environmental Documents

OSM-EIS-11. Approval of State and Indian Reclamation Program Grants Under Title IV of the Surface Mining Control and Reclamation Act of 1977 was published by the Office of Surface Mining in November 1983. This EIS describes and analyzes the environmental impacts that were expected to result from approval of State or Tribal Grants. It focuses on the adverse and/or beneficial impacts and standard reclamation activities associated with eight major categories of abandoned coal mine problems in the United States.

The environmental concerns of the proposed project are addressed in an Environmental Impact Statement (EIS) prepared by the Office of Surface Mining Reclamation and Enforcement entitled "Approval of State and Indian Reclamation Program Grants Under Title IV of the Surface Mining Control and Reclamation Act of 1977": (OSM-EIS-11, November 1983). Please reference the following documents for further information:

Chapter III, Affected Environmental Rocky Mountain/Northern Great Plains Region:

Section 3.5.3.2, Adverse impacts related to subsidence, PP III-29, Subsections 3.5.3.2.1, 3.5.3.2.2, 3.5.3.2.4, 3.5.3.3.3.

Chapter IV, Environmental Consequences Rocky Mountain/Northern Great Plains Region:

Section 4.3.3.3, Impacts of deep subsurface reinforcement treatment.

Section IV Site Specific Review

- A. Cultural or historic resource values (the Archaeological Resources Protection Act of 1979; the Archaeological and Historic Preservation Act of 1974; the National Historic Preservation Act of 1986, as amended; the Antiquities Act of 1906, Executive Order 11593, concerning the protection and enhancement of the cultural environment; the American Indian Religious Freedom Act of 1978; the Historic Sites Act of 1935; and, OMB Circular A-102).**

Reclamation activities will be conducted in a manner that should have no significant effect on cultural or historic resources. A letter was sent to the State Historical Society of North Dakota on December 16, 2010, requesting concurrence for the proposed 2011 project. A response was received on December 21, 2010, indicating that the State Historical Society concurs with the recommendation that "No Historical Properties will be Affected".

- B. Water quality values (Clean Water Act, as amended)**

There are several streams, drainages, wetlands, stockponds, or other bodies of water on or near the Beulah/Zap AML Area. Reclamation will be conducted in a manner that should have no significant effect on surface water quality or quantity. Ground water can be affected by pressurized grout remote backfilling. However, water contained in abandoned underground coal mines and coal seams is of poor quality and is not generally used for human consumption. The AML Division remains in continual consultation with the North Dakota Department of Health to monitor the performance and environmental aspects of the use of flyash-grout, especially as it concerns ground water. A letter was sent to the North Dakota Department of Health on December 16, 2010, requesting concurrence for proposed 2011 project sites. A response regarding surface and ground water effects was received on January 12, 2011, indicating no concerns regarding surface or ground waters affected by the proposed project.

- C. Wetlands values (Clean Water Act, Executive Order 11990, and Army/EPA Memorandum of Agreement (MOA) Concerning the Determination of Mitigation under the Section 404(b)(1) Guidelines)**

No reclamation activities are planned on or near wetlands within the Beulah/Zap AML reclamation project area.

- D. Floodplain values (Executive Order 11988)**

No planned project sites in the Beulah/Zap AML Area are within an identified floodplain.

- E. Wildlife (Endangered Species Act and Fish and Wildlife Coordination Act)**

No endangered or threatened species are known to occupy the project area as described. A letter was sent to the United States Fish and Wildlife Service on December 16, 2010, requesting concurrence for proposed 2011 project sites. A response was received from the United States Fish and Wildlife Service on December 21, 2010, indicating that the project as described will have no significant impact on fish or wildlife resources. No endangered or threatened species are known to occupy the project area.

F. Prime and unique farmland values (Farmland Protection Policy Act)

There are prime farmlands within the Beulah/Zap AML Area. Reclamation will be conducted as to not destroy the integrity or utility of prime farmland.

G. Recreational resource values (Wild and Scenic Rivers Act, Clean Air Act)

There are no lands in the Beulah/Zap AML Area classified as Wilderness Areas or lands being studied for wilderness designation.

There are no lands in this area identified as areas of critical environmental concern.

There are no lands in this area included in the Wild and Scenic Rivers category.

There are no parks or areas of critical ecological or aesthetic concern in this area.

H. Air quality (Clean Air Act)

The Beulah/Zap AML Area is not in or near a Class I air quality region.

I. Socioeconomic factors

Factors such as noise, traffic control and dust suppression will be addressed in the Information for Bidders packages and may be a contingency bid item.

Commercial, residential, farming and ranching operations are prominent proximal to the project sites. Reclamation will be conducted in a manner that minimizes any disruption to these socioeconomic factors.

J. Political factors

Portions of the Beulah/Zap AML Area are under zoning jurisdictions of Mercer County, the City of Beulah, several township authorities, and the State of North Dakota, as well as private ownership. Meetings between the North Dakota Public Service Commission and all governing and private entities are ongoing and will continue throughout project(s) completion. Public meetings have been held on November 25, 1996, December 9, 1999 and January 28, 2009, in Beulah to discuss reclamation plans in the Beulah/Zap AML Area. Notices were mailed to landowners, governmental authorities, and other interested parties; and public service announcements were made in local newspapers and on radio stations.

K. Existing Vegetative Cover

Existing vegetation varies with land use within the Beulah/Zap AML Area. It includes cropland, tame grass and legume pastures, native grasslands, road ditches, driveways, parking lots and yards. Cropland and tame grasses are predominant and include: wheat, oats, barley, corn, sunflowers, alfalfa, crested wheatgrass, and smooth brome grass. Shelterbelts are commonly located within cropland and may contain several tree and shrub species including: Siberian Elm, Russian Olive, Colorado Blue Spruce, Caragana, and others. Native grasslands may include species such as wheat grasses, green needlegrass, blue grama, and big bluestem as well as forbs such as western snowberry,

buffaloberry, chokecherry and wild plum. Most of the planned reclamation work will be done in parking lots, beneath buildings, and on road rights-of-way.

L. Threatened and Endangered Plant Species

To the best of our knowledge, no threatened or endangered plant species have been identified within the project area. Letters requesting consultation regarding the presence of known rare, threatened or unique plant species in the project area have been sent to the Natural Heritage Program of the North Dakota Parks and Recreation Department. The most recent one sent on December 16, 2010, concerned reclamation at several areas near Beulah and Zap. The only federally-listed threatened or endangered plant in North Dakota is the Western Prairie Fringed Orchid (*Platanthera praeclara*). Known locations of this plant are within moist, tall grass prairie and sedge meadows of the Sheyenne National Grasslands in the southeastern corner of the state. This plant has not been seen and is not likely to inhabit the Beulah/Zap AML Area. U.S. Fish & Wildlife Service, Bismarck, ND (North Dakota's Federally Listed Endangered, Threatened and Candidate Species - 1995) listed several other former candidate species which remain of management concern. These include Hayden's Yellow-Cress (*Rorippa calcina*), Wolf's Spike-Rush (*Eleocharis wolfii*), Dakota Wild Buckwheat (*Eriogonum visheri*) and Handsome Sedge (*Carex formosa*). None of these species has a present or historically recorded range within the Beulah/Zap AML Area. A letter confirming this was received on January 5, 2011, from the North Dakota Parks and Recreation Department.

M. Anticipated dates of Reclamation

Reclamation within the Beulah/Zap AML Area will probably continue for many years. More than 15 major projects, at a cost of over \$7 million have been conducted near Beulah. By the year 2010, eleven phases of the present Beulah/Zap project had been completed. Plans have been made for Phase 12 for the 2011 construction season and it is likely that additional phases will be needed.

N. Estimated Construction Cost

Over \$7 million of reclamation work has been completed within the Beulah/Zap AML Area and it is anticipated that additional phases could require several million dollars.

O. Off-site Borrow and Disposal Areas

If off-site borrow or disposal issues arise, applicable environmental regulations will be addressed through the North Dakota Department of Health and Consolidated Laboratories.

P. Noise Pollution

Project work may be conducted very near occupied dwellings, businesses, and roadways. If noise pollution problems are encountered, remedial action measures will be addressed through the North Dakota Department of Health and Consolidated Laboratories.

Q. Environmental Justice Policy

Construction work may result in a slight increase in employment and revenues, but no significant direct or indirect impact on minority or low-income populations is expected.

Section V Consultations

1. U.S. Fish and Wildlife Service

A letter was sent to the United States Fish and Wildlife Service on December 16, 2010, requesting concurrence for the proposed 2011 project.

2. State Historical Preservation Officer

A letter was sent to the State Historical Society of North Dakota on December 16, 2010, requesting concurrence for the proposed 2011 project.

3. North Dakota Parks and Recreation Department

A letter was sent to the North Dakota Parks and Recreation Department on December 16, 2010, requesting concurrence for the proposed 2011 project.

4. North Dakota Department of Health

A letter was sent to the North Dakota Department of Health on December 16, 2010, requesting concurrence for the proposed 2011 project.

Section VI Preparers



James R. Deutsch
Director - AML Division
North Dakota Public Service Commission

**ABANDONED MINE LANDS
CATEGORICAL EXCLUSION DETERMINATION**

State: ND PA# Not Applicable

Project Name: 2011 Exploratory Drilling

Project Description: Exploratory drilling to determine the presence and extents of abandoned mines

Yes responses require submission of an environmental assessment.

I. GENERAL EXCEPTIONS

Does the project type specifically require an EA in 516 DM 6,

Appendix 8, as specified in Item I of the attached instructions? No ☒ Yes ☐

II. DEPARTMENT OF INTERIOR EXCEPTIONS

Will the project have any of the following:

A significant adverse effect on public health or safety? No ☒ Yes ☐

An adverse effect on any of the following unique geographic characteristics?

If yes, check the ones that apply. No ☒ Yes ☐

☐ Parks (State, Local, or National)

☐ Wild or Scenic Rivers

☐ Recreation or Refuge Lands

☐ Wetlands

☐ Wilderness Areas

☐ Floodplains

☐ Ecologically Significant or Critical Areas

☐ Sole or Principal Drinking Water

☐ Prime Farmlands

☐ Aquifers

Highly controversial environmental effects? No ☒ Yes ☐

Highly uncertain and potentially significant environmental effects or unique or unknown environmental risks? No ☒ Yes ☐

A precedent for future action or a decision in principle about future actions with potentially significant environmental effects? No ☒ Yes ☐

Directly related to other actions with individually insignificant but cumulatively significant environmental effects? No ☒ Yes ☐

Adverse effects on properties listed or eligible for listing on the National Register of Historic Places? No ☒ Yes ☐

Adverse effects on species listed or proposed to be listed on the List of No ☒ Yes ☐

Endangered or Threatened Species, or have adverse effects on designated Critical Habitat for these species?

Require compliance with Executive Order 11988 (Floodplain Management), Executive Order 11990 (Wetlands Protection) or The Fish and Wildlife Coordination Act?

No ☒ Yes ☐

Threaten to violate a Federal, State, Tribal or local law or requirement imposed for the protection of the environment?

No ☒ Yes ☐

III. RESOURCE IMPACT EXCEPTIONS


Are there any unresolved issues, or adverse effects requiring specialized mitigation, for any of the following resources? If yes, check the ones that apply.

No ☒ Yes ☐

- | | |
|---|--|
| <input type="checkbox"/> Topography | <input type="checkbox"/> Historic and Cultural |
| <input type="checkbox"/> Land Use (includes prime farmland) | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Soils | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Vegetation (includes wetlands) | <input type="checkbox"/> Noise |
| <input type="checkbox"/> Hydrology | <input type="checkbox"/> Other (includes socioeconomics) |
| <input type="checkbox"/> Fish and Wildlife | |

IV. ATTACH CONSULTATION LETTERS AND A LOCATION MAP

V. RESPONSIBLE OFFICIAL CERTIFICATION

Signature:  Date: January 26, 2011

Name and Title: James R. Deutsch, Director, AML Division

VI. OSM DETERMINATION

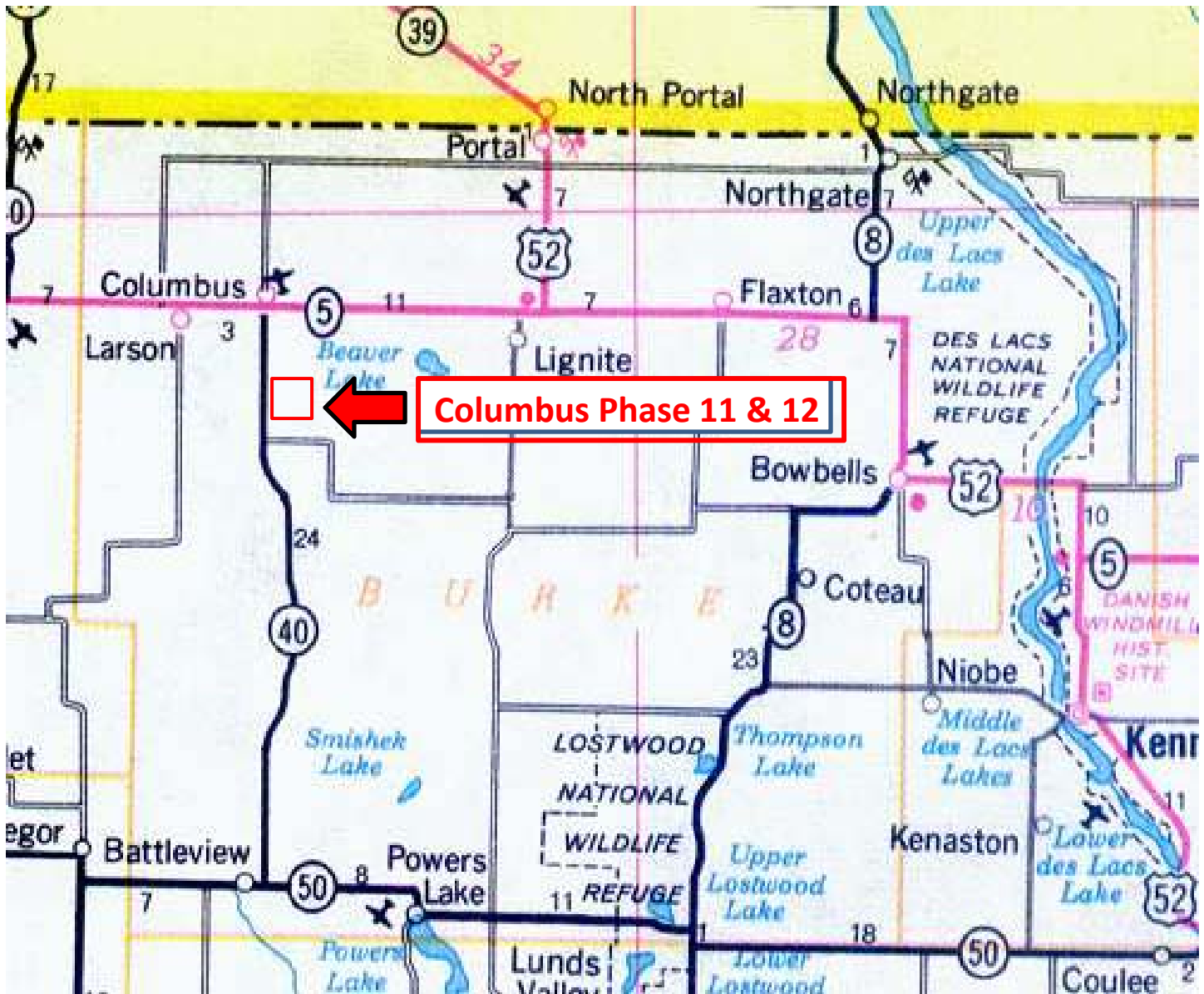
☐ This project conforms with the exclusion criteria in 516 DM 6, Appendix 8, and is excluded from further NEPA compliance.

☐ This project does not conform with the exclusion criteria in 516 DM 6, Appendix 8, and requires an environmental assessment.

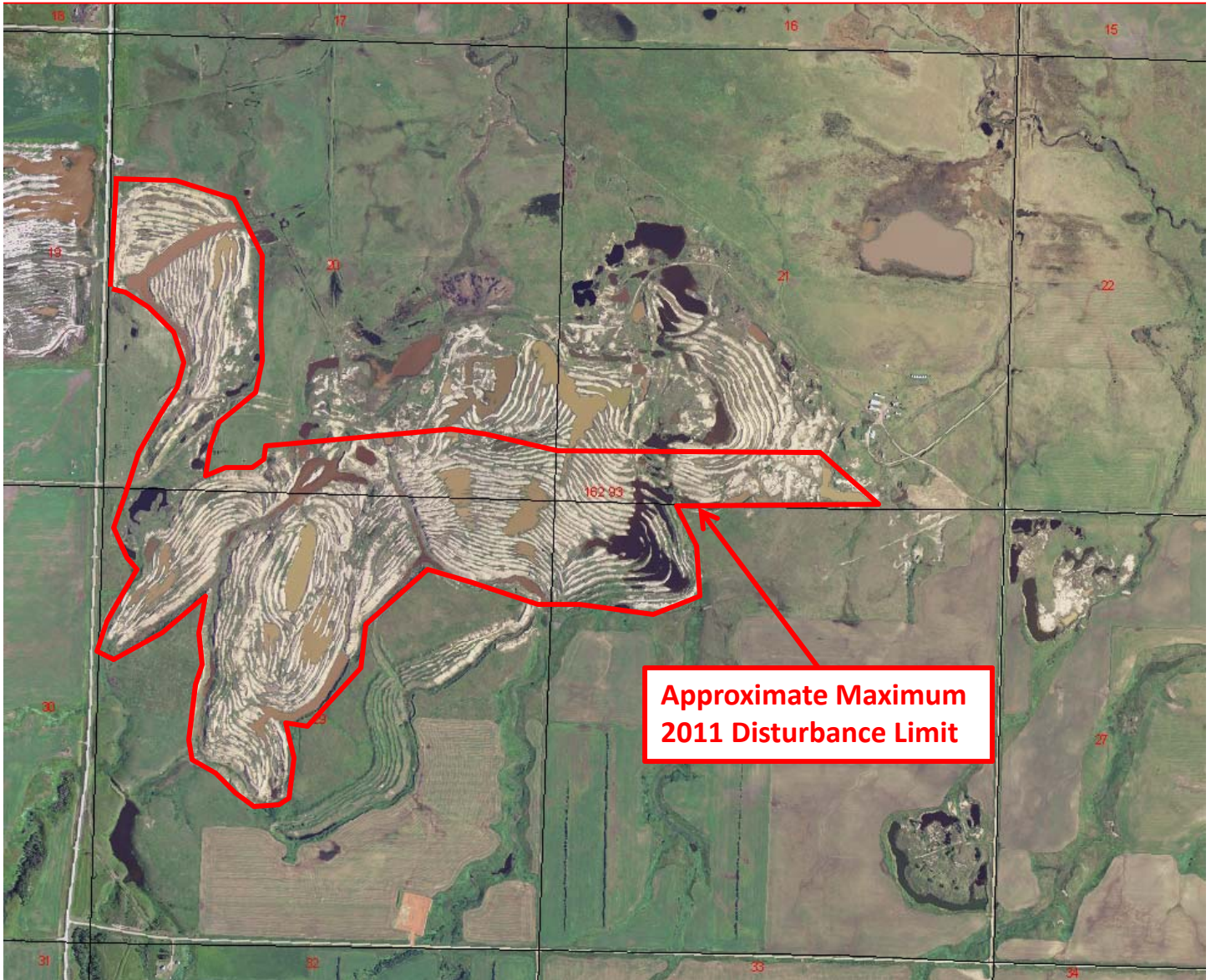
Signature: _____ Date: _____

Name and Title: _____

Columbus Phase 11 and 12 AML Project General Project Location



**Columbus Phase 11 and 12 AML Projects
Sections 20, 21, 28 and 29, T162N, R93W, Burke County**



The map displays a grid system with numbers 1 through 36 across the top and bottom, and letters A through Z along the sides. Key locations marked include:

- Antelope Valley Power Plant**: Located near the top center.
- Hazen Mine**: Located in the upper right corner.
- Zap Pop 287**: Located in the lower left quadrant.
- Beulah No. 1**, **Beulah No. 2**, and **Beulah No. 3**: Located in the lower center.
- Davota Collieres Mine**: Located in the lower left quadrant.
- Knife River Coal Mining Co.**: Located in the lower right quadrant.
- Schram Dam**: Located in the lower right quadrant.
- Creeks**: Santa Fe Creek, Otter Creek, and others are shown flowing through the landscape.
- Railroad**: A major transportation route running horizontally across the middle.
- Geographical Features**: Hills, valleys, and water bodies are depicted with standard cartographic symbols.

A red rectangular box is drawn around a section of the map, specifically highlighting the area labeled "2011Beulah/Zap Phase 12 Sites". This area is situated between the railroad and the Beulah mines, roughly corresponding to grid coordinates 1-10 horizontally and 1-10 vertically.



Public Service Commission

State of North Dakota

COMMISSIONERS

Kevin Cramer
Tony Clark
Brian P. Kalk

Executive Secretary
Darrell Nitschke

600 E. Boulevard Ave. Dept 408
Bismarck, North Dakota 58505-0480
Web: www.nd.gov/psc
E-mail: ndpsc@nd.gov
Phone 701-328-2400
Toll Free 1-877-245-6685
Fax 701-328-2410
TDD 800-366-6888 or 711

December 16, 2010

Kathy Duttonhefner
ND Parks & Recreation Department
1835 Bismarck Expressway
Bismarck, ND 58504

Dear Ms. Duttonhefner:

The Public Service Commission is planning reclamation activities in 2011 at the Columbus and Beulah/Zap Abandoned Mine Lands (AML) Sites. Work at both sites is a continuation of previous reclamation work. These projects will be conducted by contractors selected through competitive bidding.

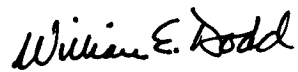
The proposed 2011 Columbus Phase 11 and 12 Projects are located in Sections 20, 21, 28 and 29, T162N, R93W, in Burke County, North Dakota (see maps). These abandoned surface coal mine sites contain hazardous mine pits with steep highwalls. The plan of action is to backfill hazardous pits and highwalls with material from nearby spoil piles. Total surface area to be affected at these project locations in 2011 could be as much as 450 acres, all of which were previously disturbed by surface coal mining. Areas affected by this project will be reseeded with locally adapted species native to western North Dakota. No pit dewatering is planned and runoff from affected areas will flow into mine pits or be contained within project areas.

The proposed 2011 Beulah/Zap Phase 12 Project is located principally along public roads in Sections 7 and 8, T144N, R87W, Sections 12 and 13, T144N, R88W, in Mercer County, North Dakota (see map). These roads and adjacent areas are underlain by abandoned underground mines. The plan of action is to drill holes into the underground mine and, if necessary, pump cementitious grout through drilled holes into abandoned underground mined workings to help stabilize the surface from future mine collapse. The combined total area of disturbance at the Beulah/Zap site in 2011 is expected to be ten acres or less and surface disturbance will be fairly minimal.

As part of the grant application process, our office requests concurrence that the proposed reclamation work will not adversely affect any threatened, endangered or rare plant species. We would appreciate your review and concurrence for the work proposed at these sites. Please reply regarding these proposed projects by January 20, 2011.

Attached are maps showing general locations of these proposed reclamation projects. Thank you for your assistance in this matter. If you have any questions or need more information, please contact me at wdodd@nd.gov or 701.328.4101.

Sincerely,

A handwritten signature in black ink that reads "William E. Dodd". The signature is written in a cursive style with a large, stylized 'W' and 'D'.

William E. Dodd,
Assistant Director
Abandoned Mine Lands Division

Enclosures

m/AML/2011/concur_rqst_ltrs_12-16-10



Public Service Commission

State of North Dakota

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Bismarck, North Dakota 58505-0480
Web: www.nd.gov/psc
E-mail: ndpsc@nd.gov
Phone 701-328-2400
Toll Free 1-877-245-6685
Fax 701-328-2410
TDD 800-366-6888 or 711

December 16, 2010

Susan Quinnell
State Historical Society of North Dakota
612 East Boulevard Avenue
Bismarck, ND 58505-0830

Dear Ms. Quinnell:

The Public Service Commission is planning reclamation activities in 2011 at the Columbus and Beulah/Zap Abandoned Mine Lands (AML) Sites. Work at both sites is a continuation of previous reclamation work. These projects will be conducted by contractors selected through competitive bidding.

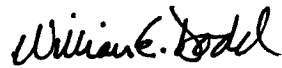
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The proposed 2011 Beulah/Zap Phase 12 Project is located principally along public roads in Sections 7 and 8, T144N, R87W, Sections 12 and 13, T144N, R88W, in Mercer County, North Dakota (see map). These roads and adjacent areas are underlain by abandoned underground mines. The plan of action is to drill holes into the underground mine and, if necessary, pump cementitious grout through drilled holes into abandoned underground mined workings to help stabilize the surface from future mine collapse. The combined total area of disturbance at the Beulah/Zap site in 2011 is expected to be ten acres or less and surface disturbance will be fairly minimal.

As part of the grant application process, our office requests concurrence that the proposed reclamation work will not adversely affect any historical or archaeological resources. We would appreciate your review and concurrence for the work proposed at these sites. Please reply regarding these proposed projects by January 20, 2011.

Attached are maps showing general locations of these proposed reclamation projects. Thank you for your assistance in this matter. If you have any questions or need more information, please contact me at wdodd@nd.gov or 701.328.4101.

Sincerely,

A handwritten signature in black ink, appearing to read "William E. Dodd". The signature is fluid and cursive, with the first name "William" and last name "Dodd" clearly distinguishable.

William E. Dodd,
Assistant Director
Abandoned Mine Lands Division

Enclosures

m/AML/2011/concur_rqst_ltrs_12-16-10



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Fax 701-328-2410
TDD 800-366-6888 or 711

December 16, 2010

Mr. Jeff Towner, Field Supervisor
U.S. Fish and Wildlife Service
3425 Miriam Avenue
Bismarck, ND 58501-7926

Dear Mr. Towner:

The Public Service Commission is planning reclamation activities in 2011 at the Columbus and Beulah/Zap Abandoned Mine Lands (AML) Sites. Work at both sites is a continuation of previous reclamation work. These projects will be conducted by contractors selected through competitive bidding.

The proposed 2011 Columbus Phase 11 and 12 Projects are located in Sections 20, 21, 28 and 29, T162N, R93W, in Burke County, North Dakota (see maps). These abandoned surface coal mine sites contain hazardous mine pits with steep highwalls. The plan of action is to backfill hazardous pits and highwalls with material from nearby spoil piles. Total surface area to be affected at these project locations in 2011 could be as much as 450 acres, all of which were previously disturbed by surface coal mining. Areas affected by this project will be reseeded with locally adapted species native to western North Dakota. No pit dewatering is planned and runoff from affected areas will flow into mine pits or be contained within project areas.

The proposed 2011 Beulah/Zap Phase 12 Project is located principally along public roads in Sections 7 and 8, T144N, R87W, Sections 12 and 13, T144N, R88W, in Mercer County, North Dakota (see map). These roads and adjacent areas are underlain by abandoned underground mines. The plan of action is to drill holes into the underground mine and, if necessary, pump cementitious grout through drilled holes into abandoned underground mined workings to help stabilize the surface from future mine collapse. The combined total area of disturbance at the Beulah/Zap site in 2011 is expected to be ten acres or less and surface disturbance will be fairly minimal.

As part of the grant application process, our office requests concurrence that the proposed reclamation work will not adversely affect any threatened, endangered or rare animal species. We would appreciate your review and concurrence for the work proposed at these sites. Please reply regarding these proposed projects by January 20, 2011.

Attached are maps showing general locations of these proposed reclamation projects. Thank you for your assistance in this matter. If you have any questions or need more information, please contact me at wdodd@nd.gov or 701.328.4101.

Sincerely,

A handwritten signature in black ink, appearing to read "William E. Dodd". The signature is fluid and cursive, with the first name "William" being the most prominent.

William E. Dodd,
Assistant Director
Abandoned Mine Lands Division

Enclosures

m/AML/2011/concur_rqst_ltrs_12-16-10



Public Service Commission

State of North Dakota

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Fax 701-328-2410
TDD 800-366-6888 or 711

December 16, 2010

Mr. Dennis Fewless,
Director of Water Quality
North Dakota Department of Health
Gold Seal Center
918 East Divide Avenue
Bismarck, ND 58501-1947

Dear Mr. Fewless:

The Public Service Commission is planning reclamation activities in 2011 at the Columbus and Beulah/Zap Abandoned Mine Lands (AML) Sites. Work at both sites is a continuation of previous reclamation work. These projects will be conducted by contractors selected through competitive bidding.


The proposed 2011 Columbus Phase 11 and 12 Projects are located in Sections 20, 21, 28 and 29, T162N, R93W, in Burke County, North Dakota (see maps). These abandoned surface coal mine sites contain hazardous mine pits with steep highwalls. The plan of action is to backfill hazardous pits and highwalls with material from nearby spoil piles. Total surface area to be affected at these project locations in 2011 could be as much as 450 acres, all of which were previously disturbed by surface coal mining. Areas affected by this project will be reseeded with locally adapted species native to western North Dakota. No pit dewatering is planned and runoff from affected areas will flow into mine pits or be contained within project areas.

The proposed 2011 Beulah/Zap Phase 12 Project is located principally along public roads in Sections 7 and 8, T144N, R87W, Sections 12 and 13, T144N, R88W, in Mercer County, North Dakota (see map). These roads and adjacent areas are underlain by abandoned underground mines. The plan of action is to drill holes into the underground mine and, if necessary, pump cementitious grout through drilled holes into abandoned underground mined workings to help stabilize the surface from future mine collapse. The combined total area of disturbance at the Beulah/Zap site in 2011 is expected to be ten acres or less and surface disturbance will be fairly minimal.

As part of the grant application process, our office requests concurrence that the proposed reclamation work will not adversely affect water or public health resources. We would appreciate your review and concurrence for the work proposed at these sites. Please reply regarding these proposed projects by January 20, 2011.

Attached are maps showing general locations of these proposed reclamation projects. Thank you for your assistance in this matter. If you have any questions or need more information, please contact me at wdodd@nd.gov or 701.328.4101.

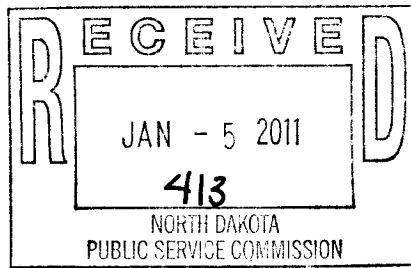
Sincerely,

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William E. Dodd,
Assistant Director
Abandoned Mine Lands Division

Enclosures

m/AML/2011/concur_rqst_ltrs_12-16-10



Jack Dalrymple, Governor
Mark A. Zimmerman, Director

1600 East Century Avenue, Suite 3
Bismarck, ND 58503-0649
Phone 701-328-5357
Fax 701-328-5363
E-mail parkrec@nd.gov
www.parkrec.nd.gov

December 30, 2010

William E. Dodd
ND Public Service Commission
600 E. Boulevard Ave., Dept. 408
Bismarck, ND 58505-0480

RE: Reclamation Activities at the Columbus and Beulah/Zap Abandoned Mine Lands Projects

Dear Mr. Dodd:

The North Dakota Parks and Recreation Department has reviewed the above referenced projects to conduct reclamation activities located in Sections 20, 21, 28, and 29, T162N, R93W, Burke County; and Sections 7 and 18, T144N, R87W and Sections 12 and 13, T144N, R88W, Mercer County.

Our agency scope of authority and expertise covers recreation and biological resources (in particular rare plants and ecological communities). The project as defined does not affect state park lands that we manage or Land and Water Conservation Fund recreation projects that we coordinate.

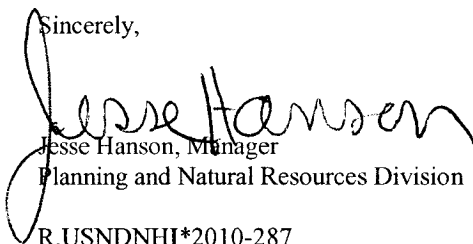
The North Dakota Natural Heritage biological conservation database has been reviewed to determine if any current or historical plant or animal species of concern or other significant ecological communities are known to occur within an approximate one-mile radius of the project area. Based on this review, we do have records for several occurrences in sections adjacent to the project including: *Scirpus spp. - Typha spp. mixed inland great plains wetland* (mixed emergent marsh), *Carex atherodes - Scholochloa festucacea wetland* (slough sedge shallow marsh), and *Carex backii* (Back's sedge). Adjacent species can indicate that the habitat in the project area may be suited for these species or other rare, threatened, sensitive or endangered species. Please see the attached spreadsheet and map for more information on these occurrences. We defer further comments regarding animal species to the North Dakota Game and Fish Department and the United States Fish and Wildlife Service.

Because this information is not based on a comprehensive inventory, there may be species of concern or otherwise significant ecological communities in the area that are not represented in the database. The lack of data for any project area cannot be construed to mean that no significant features are present. The absence of data may indicate that the project area has not been surveyed, rather than confirm that the area lacks natural heritage resources.

Regarding any reclamation efforts, we recommend that any impacted areas be revegetated with species native to the project area.

We appreciate your commitment to rare plant, animal and ecological community conservation, management and inter-agency cooperation to date. For additional information please contact Kathy Duttonhefner (701-328-5370 or kgduttonhefner@nd.gov) of our staff. Thank you for the opportunity to comment on this proposed project.

Sincerely,


Jesse Hanson, Manager
Planning and Natural Resources Division

R.USNDNHI*2010-287
CD/1222/DL0120

.....
Play in our backyard!

North Dakota Natural Heritage Inventory
Rare Animal and Plant Species and Significant Ecological Communities

State Scientific Name	State Common Name	State Rank	Global Rank	Federal Status	Township Range Section	County	Last Observation	Estimated Representation Accuracy	Precision
Scirpus spp. - typha spp. mixed inland great plains wetland	Mixed Emergent Marsh	S3	GNR		162N093W - 30	Burke	1991-07-12		S
Carex atherodes - scholochloa festucacea wetland	Slough Sedge Shallow Marsh	S3	GNR		162N093W - 30	Burke	1991-07-12		S
Carex backii	Back's Sedge	S2S3	G4		162N093W - 32; 162N093W - 31; 162N093W - 29; 162N093W - 28; 161N093W - 04; 161N093W - 05; 162N093W - 33; 161N093W - 06; 162N093W - 30	Burke	1971-06-12		M

North Dakota Natural Heritage Inventory Biological and Conservation Data Disclaimer

The quantity and quality of data collected by the North Dakota Natural Heritage Inventory are dependent on the research and observations of many individuals and organizations. In most cases, this information is not the result of comprehensive or site-specific field surveys; many natural areas in North Dakota have never been thoroughly surveyed, and new species are still being discovered. For these reasons, the Natural Heritage Inventory cannot provide a definite statement on the presence, absence, or condition of biological elements in any part of North Dakota. Natural Heritage data summarize the existing information known at the time of the request. Our data are continually upgraded and information is continually being added to the database. This data should never be regarded as final statements on the elements or areas that are being considered, nor should they be substituted for on-site surveys.

Estimated Representation Accuracy

Value that indicates the approximate percentage of the Element Occurrence Representation (EO Rep) that was observed to be occupied by the species or community (versus buffer area added for locational uncertainty). Use of estimated representation accuracy provides a common index for the consistent comparison of EO reps, thus helping to ensure that aggregated data are correctly analyzed and interpreted.

Very high (>95%)

High (>80%, <= 95%)

Medium (>20%, <= 80%)

Low (>0%, <= 20%)

Unknown

(null) - Not assessed

Precision

A single-letter code for the precision used to map the Element Occurrence (EO) on a U.S. Geological Survey (USGS) 7.5' (or 15') topographic quadrangle map, based on the previous Heritage methodology in which EOs were located on paper maps using dots.

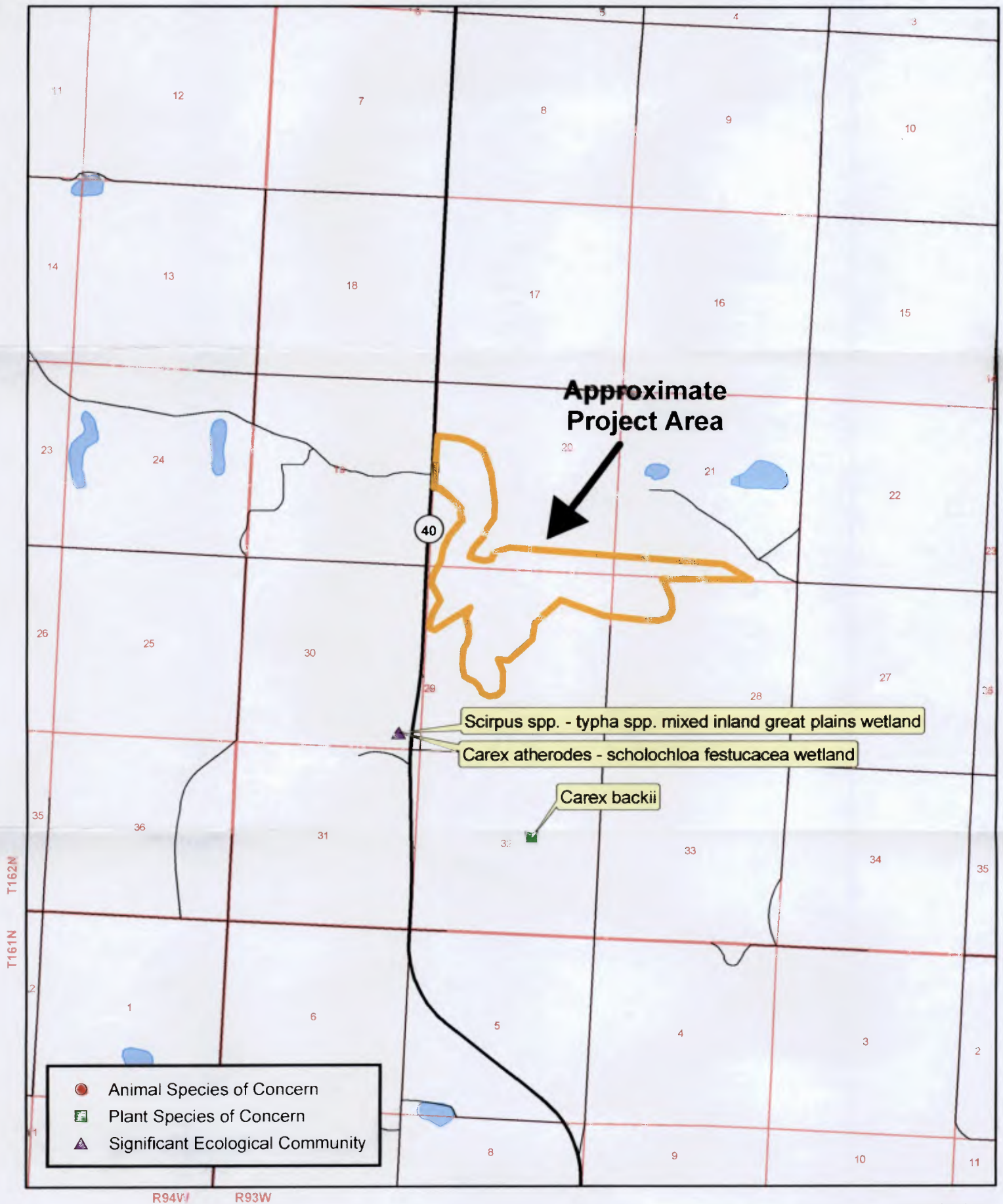
S - Seconds: accuracy of locality mappable within a three-second radius; 100 meters from the centerpoint

M - Minute: accuracy of locality mappable within a one-minute radius; 2 km from the centerpoint

G - General: accuracy of locality mappable to map or place name precision only; 8 km from centerpoint

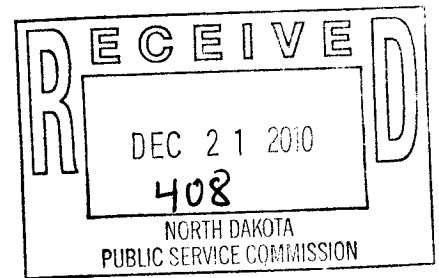
U - Unmappable

North Dakota Parks and Recreation Department
North Dakota Natural Heritage Inventory





**STATE
HISTORICAL
SOCIETY
OF NORTH DAKOTA**



Jack Dalrymple
Governor of North Dakota

**North Dakota
State Historical Board**

Chester E. Nelson, Jr.
Bismarck - President

Gereld Gerntholz
Valley City - Vice President

Richard Kloubec
Fargo - Secretary

Albert I. Berger
Grand Forks

Calvin Grinnell
New Town

Diane K. Larson
Bismarck

A. Ruric Todd III
Jamestown

Sara Otte Coleman
*Director
Tourism Division*

Kelly Schmidt
State Treasurer

Alvin A. Jaeger
Secretary of State

Mark A. Zimmerman
*Director
Parks and Recreation Department*

Francis Ziegler
*Director
Department of Transportation*

Merlan E. Paaverud, Jr.
Director

Accredited by the
American Association
of Museums since 1986

December 21, 2010

Mr. William Dodd, Assistant Director
AML Division
ND PSC
600 East Boulevard Avenue
Dept 408
Bismarck ND 58505-0480

**ND SHPO Ref.: 11-0428 ND PSC AML Division: 2011 Reclamation Activities at
Columbus Phase 11 and 12 Abandoned Mine Lands Site in portions of [T162N
R93W Sections 20, 21, 28 and 29] Burke County, North Dakota**

Dear Mr. Dodd,

We reviewed ND SHPO Ref.: 11-0428 ND PSC AML Division: 2011 Reclamation Activities at Columbus Phase 11 and 12 Abandoned Mine Lands Site in portions of [T162N R93W Sections 20, 21, 28 and 29] Burke County, North Dakota. Our Historic Site 32BKx779 Truax-Traer Mine is identified as potentially eligible for nomination to the National Register of Historic Places. The document that identifies it is Jeffrey A. Hess et. al., "Coal Mining in the Coal-Bearing Region of North Dakota, 1870 - 1945," August 1992.

We recommend a Class III (pedestrian) survey of the site with recommendations regarding portions of the site deemed eligible for nomination to the National Register of Historic Places. The person(s) to undertake the work should be mining historian(s). Then our office should review and comment on the report before any work on the ground begins. I can supply a list of mining historians upon request.

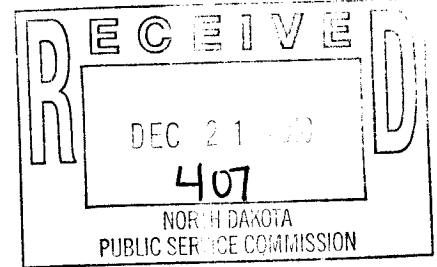
If you have any questions, please contact Susan Quinnell, Review & Compliance Coordinator 701-328-3576, e-mail: squinnell@nd.gov

Sincerely,

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



**STATE
HISTORICAL
SOCIETY
OF NORTH DAKOTA**



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Governor of North Dakota

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December 21, 2010

Mr. William E. Dodd
Assistant Director
Abandoned Mines Lands Division
600 East Boulevard Avenue Dept 408
Bismarck ND 58505-0480

ND SHPO REF: 11-0428A PSC/AML Beulah/Zap Phase 12 2011 Project in portions of [T144N R87W Sections 7 and 18; T144N R88W Sections 12 and 13] Mercer County, North Dakota

Dear Mr. Dodd,

We reviewed ND SHPO REF: 11-0428A PSC/AML Beulah/Zap Phase 12 2011 Project in portions of [T144N R87W Sections 7 and 18; T144N R88W Sections 12 and 13] Mercer County, North Dakota. We concur with a "No Historic Properties Affected" determination, provided the project is of the nature specified and in the mapped locations.

Thank you for the opportunity to review this project. If you have any questions please contact Susan Quinnell, Review and Compliance Coordinator at (701) 328-3576, e-mail squinnell@nd.gov

Sincerely,

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

Attached are maps showing general locations of these proposed reclamation projects. Thank you for your assistance in this matter. If you have any questions or need more information, please contact me at wdodd@nd.gov or 701.328.4101.

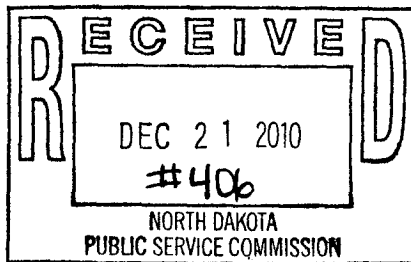
Sincerely,



William E. Dodd,
Assistant Director
Abandoned Mine Lands Division

Enclosures

m/AML/2011/concur_rqst_ltrs_12-16-10



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.

12/20/10
Date


Jeffrey K. Towner
Field Supervisor



Public Service Commission

State of North Dakota

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Tony Clark
Brian P. Kalk

Executive Secretary
Darrell Nitschke

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Toll Free 1-877-245-6685
Fax 701-328-2410
TDD 800-366-6888 or 711

December 16, 2010

Mr. Jeff Towner, Field Supervisor
U.S. Fish and Wildlife Service
3425 Miriam Avenue
Bismarck, ND 58501-7926

Dear Mr. Towner:

The Public Service Commission is planning reclamation activities in 2011 at the Columbus and Beulah/Zap Abandoned Mine Lands (AML) Sites. Work at both sites is a continuation of previous reclamation work. These projects will be conducted by contractors selected through competitive bidding.

The proposed 2011 Columbus Phase 11 and 12 Projects are located in Sections 20, 21, 28 and 29, T162N, R93W, in Burke County, North Dakota (see maps). These abandoned surface coal mine sites contain hazardous mine pits with steep highwalls. The plan of action is to backfill hazardous pits and highwalls with material from nearby spoil piles. Total surface area to be affected at these project locations in 2011 could be as much as 450 acres, all of which were previously disturbed by surface coal mining. Areas affected by this project will be reseeded with locally adapted species native to western North Dakota. No pit dewatering is planned and runoff from affected areas will flow into mine pits or be contained within project areas.

The proposed 2011 Beulah/Zap Phase 12 Project is located principally along public roads in Sections 7 and 8, T144N, R87W, Sections 12 and 13, T144N, R88W, in Mercer County, North Dakota (see map). These roads and adjacent areas are underlain by abandoned underground mines. The plan of action is to drill holes into the underground mine and, if necessary, pump cementitious grout through drilled holes into abandoned underground mined workings to help stabilize the surface from future mine collapse. The combined total area of disturbance at the Beulah/Zap site in 2011 is expected to be ten acres or less and surface disturbance will be fairly minimal.

As part of the grant application process, our office requests concurrence that the proposed reclamation work will not adversely affect any threatened, endangered or rare animal species. We would appreciate your review and concurrence for the work proposed at these sites. Please reply regarding these proposed projects by January 20, 2011.



NORTH DAKOTA
DEPARTMENT of HEALTH

ENVIRONMENTAL HEALTH SECTION
Gold Seal Center, 918 E. Divide Ave.
Bismarck, ND 58501-1947
701.328.5200 (fax)
www.ndhealth.gov



January 12, 2011

William Dodd, Assistant Director
Abandoned Mine Lands Division
Public Service Commission
600 E. Boulevard Ave
Bismarck, ND 58505

RE: 2011 Reclamation at Columbus and Beulah/Zap AML Sites

Dear Mr. Dodd:

We have reviewed the reclamation activities planned for 2011 at the Columbus and Beulah/Zap Abandoned Mine Lands (AML) sites as described in your December 16, 2010 letter.

The department believes that the planned project activities will not adversely affect surface water or groundwater resources. The Columbus Phase 11 and 12 Project activities are described as surface shaping and filling within the abandon mine area. The Beulah/Zap Phase 12 Project involves drilling and void filling in an abandon underground mine area in a manner similar to previous projects and the precautions taken in the past would be appropriate for this project.

In addition it does not appear that an NDPDES permit would be required for the projects. The activity described for the Beulah/Zap project does not require an NDPDES permit. As described for the Columbus Phase 11 and 12 Projects there is no pit dewatering planned and runoff from areas involved in the reclamation activities will flow into mine pits or be contained within the project area. Should project plans change and it becomes necessary to drain or discharge water outside or the project area, please contact the department for potential permitting requirements.

We appreciated the opportunity to review the planned reclamation projects. Should you have any question, please contact me at 701-328-5239.

Sincerely,

Randy Kowalski
Environmental Scientist
Division of Water Quality

RK:dlp



Public Service Commission

State of North Dakota

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Toll Free 1-877-245-6685
Fax 701-328-2410
TDD 800-366-6888 or 711

January 26, 2011

Jeffrey W. Fleischman, Director
OSM Casper Field Office
P.O. Box 11018
150 East "B" Street, Room 1018
Casper, WY 82602-5004

RE: Eligibility Determination for 2011 Columbus Phases 11 and 12 and Beulah/Zap Phase 12 Projects in North Dakota.

Dear Mr. Fleischman:

This letter is submitted under 30 CFR 874.12 as the required eligibility determination for lands included in the proposed abandoned mine lands reclamation projects. Legal descriptions for these lands are included with the request for authorization to proceed and are summarized below:

Columbus Phases 11 and 12 Project: The S $\frac{1}{2}$ and the S $\frac{1}{2}$ of the NW $\frac{1}{4}$ of Section 20; the S $\frac{1}{2}$ and the S $\frac{1}{2}$ of the NW $\frac{1}{4}$ of Section 21; the N $\frac{1}{2}$ of Section 28; the N $\frac{1}{2}$, N $\frac{1}{2}$ of the SW $\frac{1}{4}$, N $\frac{1}{2}$ of the SE $\frac{1}{4}$, SE $\frac{1}{4}$ of the SW $\frac{1}{4}$, and the SW $\frac{1}{4}$ of the SE $\frac{1}{4}$ of Section 29; all in T162N, R93W, Burke County.

Beulah/Zap Phase 12 Project: Portions of Sections 7 and 8, T144N, R87W, and Sections 12 and 13, T144N, R88W, Mercer County.

Eligibility Determination - 30 CFR 874.12

The requirements of this section of the Abandoned Mine Reclamation Program set forth the following criteria for eligibility for reclamation activities (paraphrased):

- a. Was the real property subjected to coal mining and related processes?

Mr. Jeffrey Fleischman

January 26, 2011

Page 2

- b. Did the coal mining processes on the real property occur prior to August 3, 1977, and was said real property left or abandoned in an unreclaimed or inadequately reclaimed condition? and,
- c. Is there continuing responsibility for reclamation by the operator, permittee, or agent of the permittee under the statutes of the State of North Dakota or the government of the United States?

Based upon available historical information, I find that the described real properties were mined for coal; that the coal mining activity occurred prior to August 3, 1977; and, that the property has been left in an abandoned and unreclaimed state. I further find that there is no continuing responsibility for reclamation by the operator, permittee or agent of the permittee under statutes of the State of North Dakota or the government of the United States.

Based on these findings, it is my opinion that the described real properties meet the eligibility requirements of 30 CFR 874.12 for abandoned mine reclamation.

Sincerely,



James R. Deutsch

Director

Reclamation and AML Divisions



U.S. Department of the Interior
Office of Surface Mining - Reclamation and Enforcement
Abandoned Mine Land Inventory System (AMLIS)

OMB Number: 1029-0087
Expiration Date: 4/30/2010

AMLIS Key: **ND000031SGA**

PA Name: **COLUMBUS**

Prepared: **3/2/1993**

By: **DR. LOU OGAARD**

State/Tribe: **NORTH DAKOTA**

PU Number: **96**

Mining Type: **Surface**

PU Name: **W BRANCH SHORT CREEK**

County: **BURKE**

Quadrangle: **COLUMBUS SE**

FIPS: **38013**

Cong.Dist: **1**

Longitude: **0.00000000 (DMS=00:00:00)**

Watershed: **UPPER SOURIS**

Latitude: **0.00000000 (DMS=00:00:00)**

Surf.Owners: Priv. **100 %** State **0 %** Indian **0 %** PkSvc **0 %** BLM **0 %** ForSvc **0 %** Other **0 %**

Ore Types: **none**

Problem Summary

Pri. - Prob. - Fnd.Src.*	Unfunded		Funded		Completed		Total	
	Units	Costs	Units	Costs	Units	Costs	Units	Costs
2 Dangerous Highwalls (Feet)								
000	27,800	4,618,555	0	0	20,000	3,023,488	47,800	7,642,043
Total P 2		4,618,555		0		3,023,488		7,642,043
PAD Total		4,618,555		0		3,023,488		7,642,043

* Alternate Funding sources: 000- none



U.S. Department of the Interior
Office of Surface Mining - Reclamation and Enforcement
 Abandoned Mine Land Inventory System (AMLIS)

OMB Number: 1029-0087
 Expiration Date: 4/30/2010

AMLIS Key: **ND000014SGA**

PA Name: **BEULAH**

Prepared: **3/2/1993**

By: **DR. LOU OGAARD**

State/Tribe: **NORTH DAKOTA**

PU Number: **64**

Mining Type: **Underground**

PU Name: **HAZEN DAM**

County: **MERCER**

Quadrangle: **BEULAH**

FIPS: **38057**

Cong.Dist: **1**

Longitude: **-101.75000000 (DMS=101:45:00)**

Watershed: **KNIFE**

Latitude: **47.25000000 (DMS=47:15:00)**

Surf.Owners: Priv. **80 %** State **20 %** Indian **0 %** PkSvc **0 %** BLM **0 %** ForSvc **0 %** Other **0 %**

Ore Types: **none**

Problem Summary

Pri. - Prob. - Fnd.Src.*	Unfunded		Funded		Completed		Total	
	Units	Costs	Units	Costs	Units	Costs	Units	Costs
1 Surface Burning (Acres)								
000	0		0	0	0	0	0	0
Total P 1		0		0		0		0
2 Dangerous Highwalls (Feet)								
000	3,200	736,000	0	0	0	0	3,200	736,000
2 Subsidence (Acres)								
000	626	2,314,608	5	624,800	420	7,060,592	1,050	10,000,000
Total P 2		3,050,608		624,800		7,060,592		10,736,000
PAD Total		3,050,608		624,800		7,060,592		10,736,000

* Alternate Funding sources: 000- none

2011 Proposed Exploratory Drilling Project Plan

North Dakota Public Service Commission

Objective: To locate possible abandoned mines below private residences and public structures that pose an inherent risk to public safety.

The North Dakota Public Service Commission (PSC) Abandoned Mine Lands (AML) Division currently is aware of several areas that may be undermined and pose a risk to public safety. The AML Division is planning an exploratory drilling project to determine the extent of undermining near roads, residential and commercial areas located on private and public property. If sub-surface voids are detected through the drilling process, PVC casing will be installed with the intent of a future pressurized grout remote backfilling project in mind.

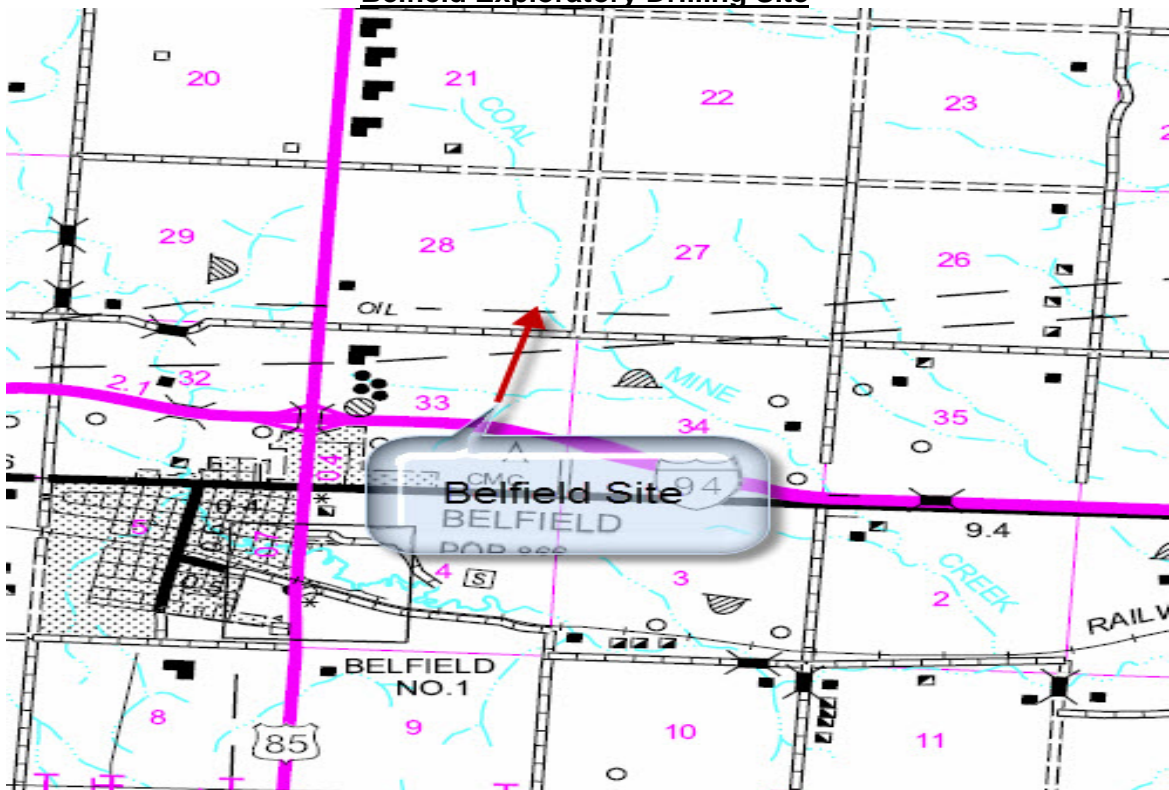
Standard Process for Exploratory Drilling

1. Using available maps and data, locate areas of highest priority for exploratory drilling;
2. Locate all utilities within the targeted drilling locations;
3. Drill to target depths, or to the depth of the coal seam that was mine in the area;
4. If sub-surface voids are encountered, install 3 inch PVC casing from the surface to a depth just above the sub-surface void;
5. Angled holes may be required when drilling near or when the target is located beneath a structure; and,
6. Remove all drill cuttings and reclaim surface to pre-drilling conditions.

Potential Locations:

Site	Section	Location
Belfield	28	T140N, R99W
Bowman	14, 15, 22, and 23	T132N, R102W
Scranton	24	T131N, R100W
Reeder	9	T130N, R98W
New Leipzig	26	T134N, R90W
Parshall	17	T154N, R89W
Wilton	5, 6, 7, 8, and 15	T142N, R79W

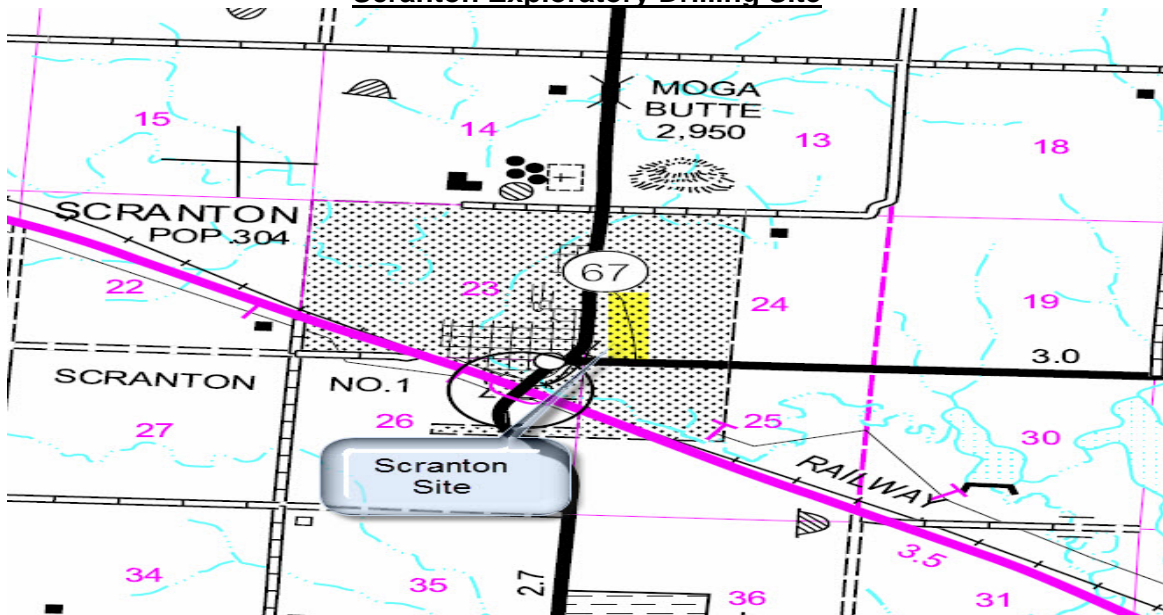
Belfield Exploratory Drilling Site



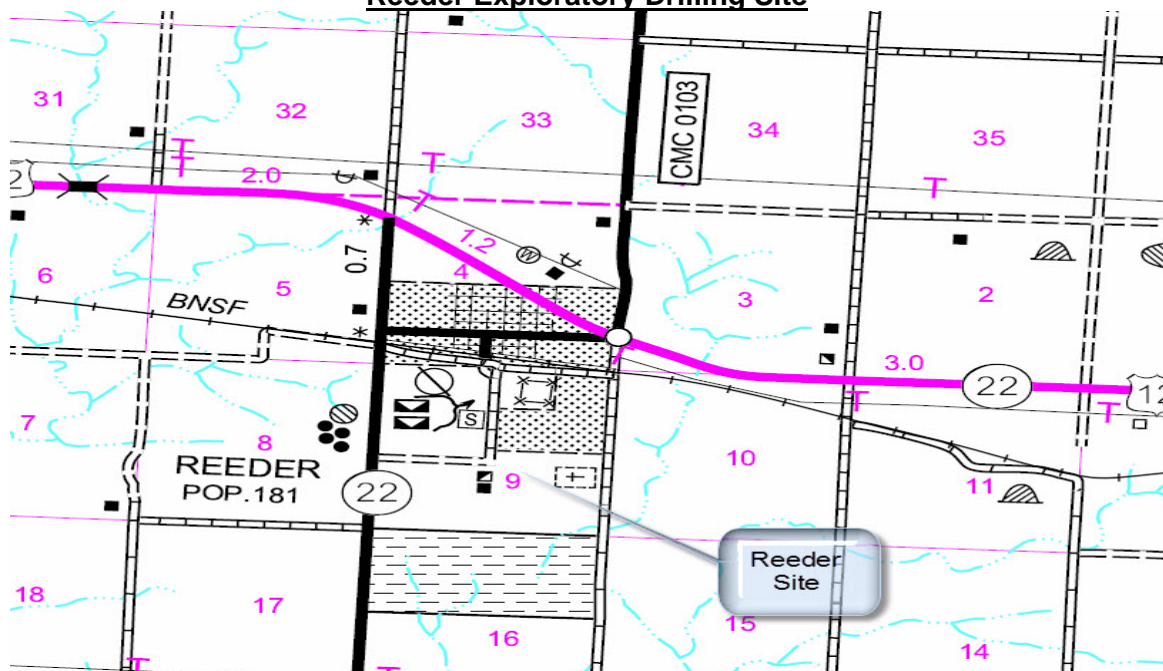
Bowman Exploratory Drilling Site



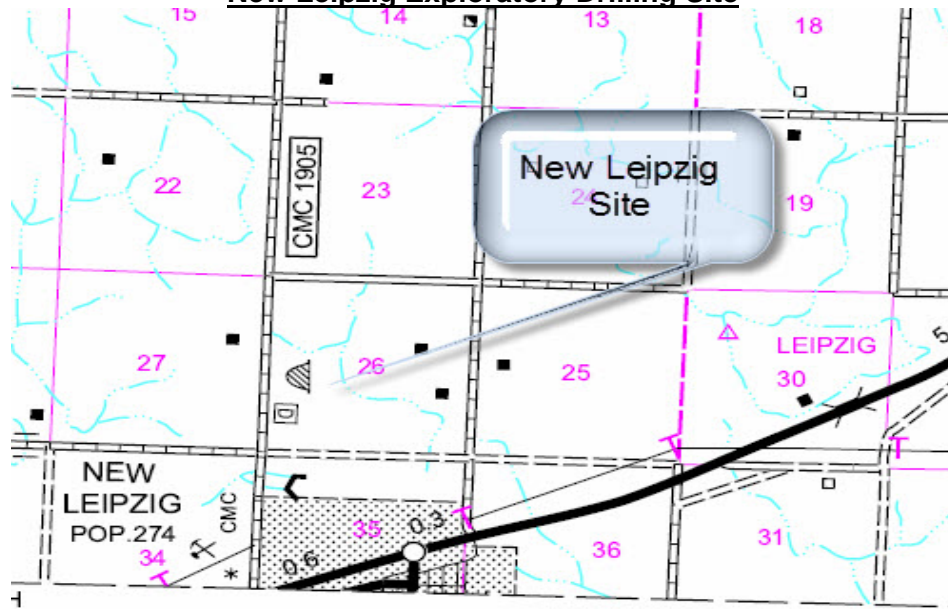
Scranton Exploratory Drilling Site



Reeder Exploratory Drilling Site

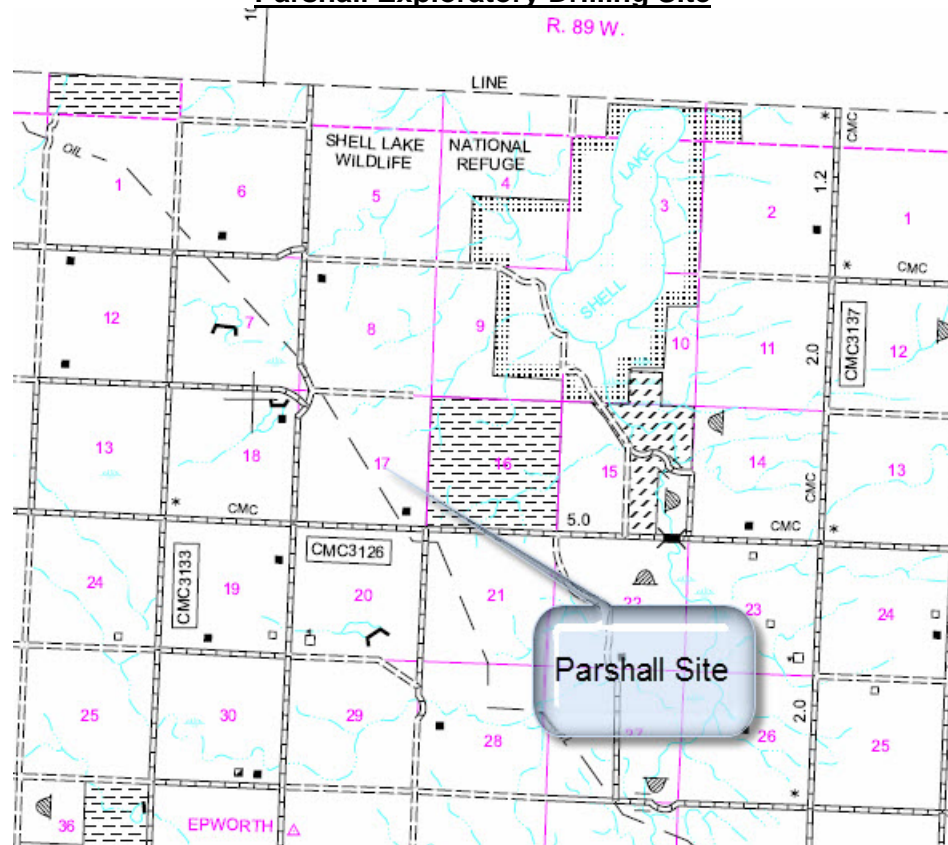


New Leipzig Exploratory Drilling Site

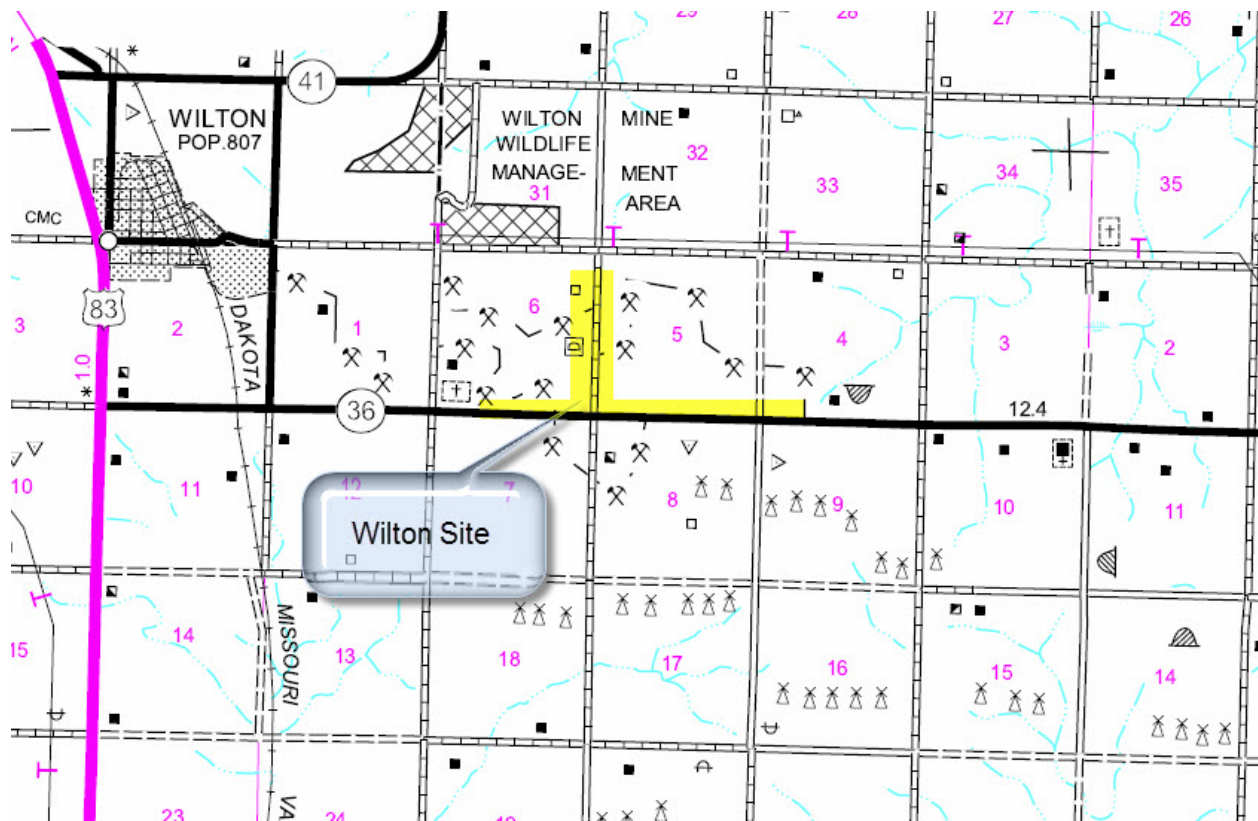


90W.

Parshall Exploratory Drilling Site



Wilton Exploratory Drilling Site



m/AML/2011/explore_drill_plan_1-11