

OFFICE OF SURFACE MINING
RECLAMATION AND ENFORCEMENT

U.S. Department of the Interior



Annual Evaluation Report for the
Regulatory Program
Administered by the Public Service Commission

Of North Dakota



For Evaluation Year 2015
July 1, 2014 to June 30, 2015
Prepared by Casper Area Office/Denver Field Division
August 2015

EXECUTIVE SUMMARY

This report covers the period of July 1, 2014 to June 30, 2015. Over the past year, the Office of Surface Mining Reclamation and Enforcement (OSMRE) has monitored North Dakota's performance in meeting the goals and objectives of the approved state program. Based on the topics evaluated this year, North Dakota has an effective program with no issues in need of corrective action.

Overview of Public Participation and Outreach Efforts

North Dakota continues to solicit public comment and input on individual applications and the regulatory program at large. OSMRE also solicits input on oversight review topics and in March 2014 the Western Organization of Resource Councils (WORC) responded with several suggestions for study topics. One of those suggestions was to evaluate the ability of North Dakota operators to establish warm and cool season vegetation capable of withstanding regional climatic conditions. This topic is addressed in Section XI-B of this report.

Major Accomplishments and Innovations

During EY2015, mines in North Dakota achieved final bond release for a total of 653.86 acres. This includes 640.9 acres from Permit KRGC-8101 at the Gascoyne Mine, 11.18 acres from Permit NACT-8503, at the Freedom Mine, and the final 1.78 acres from Permit 37 at the Center Mine. With the closing of Permit 37 at the Center Mine, North Dakota no longer has any initial program sites. Mine development work has started in the recently issued Permit NACC-1302, at the Coyote Creek Mine. This permit was issued with 8,091.51 acres, including all acreage currently encompassed by Permit NACC-1301. The 84.2 acres encompassed by Permit NACC-1301 are also included (double permitted) in Permit NACC-1302. On June 17, 2015, Revision No. 1 added another 352.1 acres to Permit NACC-1302.

Off-Site Impacts

During EY2015, two off-site impacts were recorded by NDPSC. The first was recorded during an inspection at the BNI Center Mine on September 3, 2014. Permit boundary markers for Permit BNCR-1101 were not yet in place and small areas outside of the approved permit area were affected by mining activities. A small amount of topsoil was piled outside permit boundaries and heavy equipment was allowed to travel on a closed County road only partially within the permit. NOV-1402 was issued on Sept. 9, 2014 and required that all mining activities conducted outside the permit area be halted and all affected areas be tilled, seeded and stabilized. A second off-site impact was recorded while conducting an inspection at the Coyote Creek Mine on June 30, 2015. Runoff from rainfall in late June resulted in erosion near the outlet of a 60-inch low flow culvert in the mine's shop access road and the eroded materials were washed downstream in Coyote Creek. NOV-1502 was issued on July 7, 2015, requiring submission of a plan for stabilization and protection of the outlet area of the low flow culvert and removal of the stream bed island.

Reclamation Success

Currently in North Dakota, a total of 133,587 acres have been permitted, with approximately 75,483 acres (57%), disturbed by mining activity to date. Of these disturbed acres, approximately 51,043 acres have been backfilled, graded, top-soiled and seeded; or 68% of the lands disturbed have been reclaimed to the point of establishing vegetation. Of the 51,043 acres that have been backfilled, graded, top-soiled and seeded, 15,732 acres have received Phase III (final) bond release.

Customer Service

The OSMRE evaluated the Reclamation Division's customer service by reviewing public outreach associated with bond release and permit applications. The Reclamation Division provided the required notices to landowners and other interested parties for significant revision applications, renewals and bond release applications. OSMRE did not receive any formal citizen's complaints during EY2015, however, the NDSPC responded to at least three specific concerns from the public. The first concern involved the care and removal of suitable plant growth materials, while the other two issues involved hydrologic issues.

Maintenance of the Approved Program

The final rule, approving ND-052 (State Program Amendment XL) was published in the Federal Register on Dec. 16, 2014. ND-052 revises certain North Dakota provisions pertaining to ownership and control and the use of the OSMRE's Applicant Violator System.

Suitability of Vegetation Species Selected for Reclamation Activities in North Dakota

The Denver Field Division (DFD) conducted an evaluation of operator's abilities to select vegetation species for reclamation activities in North Dakota that are diverse and capable of withstanding the unique environmental conditions present in North Dakota. The focus of this evaluation was on the re-vegetation of native grasslands. The reasons behind species selection were examined, with an emphasis on recommendations from the USDA NRCS Plant Materials Center, based in Bismarck. State and federal regulations addressing re-vegetation were identified. Preferred seed mixes used by operators were examined. Three recent bond releases were spot checked for compliance with State re-vegetation standards. In each case, the required standards for plant diversity and seasonality had been met.

OSMRE Assistance

The North Dakota Regulatory Program submitted a total budget for FY2015 of \$1,459,595. The OSMRE awarded the program \$934,141, or 64% of the total budget, in federal assistance. NDSPC Reclamation Division staff attended four NTTP classes and one TIPS training courses during the evaluation period.

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Cover Page Photograph: Photo shows the 542 truck fleet handling topsoil at the Falkirk Mine.

I. INTRODUCTION

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) created the Office of Surface Mining Reclamation and Enforcement (OSMRE) in the Department of the Interior. SMCRA provides authority to the OSMRE to oversee the implementation of, and provide federal funding for, the state regulatory programs and abandoned mine land programs that have been approved by the Secretary of the Interior as meeting the minimum standards specified by SMCRA. In addition to conducting oversight of approved state programs, the OSMRE provides technical assistance, staff training, financial grants and assistance, as well as management assistance to each state program. This report contains summary information regarding the North Dakota Regulatory program and the effectiveness of the North Dakota Regulatory program in meeting the applicable purposes of SMCRA as specified in Section 102. This report covers the 2015 Evaluation Year (EY) July 1, 2014 to June 30, 2015.

Detailed background information and comprehensive reports for the program elements evaluated during the EY are available for review and copying at the OSMRE, Denver Field Division (DFD), Casper Area Office (CAO), 150 East B St., Room 1018, Casper, WY 82602. To arrange an appointment time, contact Jeff Fleischman via telephone (307) 261-6550 or email jfleischman@osmre.gov.

The reports are also available at the OSMRE Oversight Documents website at <http://odocs.osmre.gov/>. Adobe Acrobat Reader® is needed to view these documents. Acrobat Reader® is free and can be downloaded at <http://get.adobe.com/reader/>. Follow these steps to gain access to the document of interest:

1. Select North Dakota from the drop down box labeled “State”. Also select 2015 as the “Evaluation Year”, and then click “Submit”. The search can be narrowed by choosing selections under the “Keyword” or “Category” headings.
2. The oversight documents and reports matching the selected state and evaluation year will appear at the bottom of the page.
3. Select “View” for the document that is of interest and the report will appear for viewing, saving, and/or printing.

The following acronyms are used in this report:

AOC	Approximate Original Contour
AVS	Applicant Violator System
CAO	OSMRE’s Casper Area Office
CO	Cessation Order
DFD	OSMRE’s Denver Field Division
DOJ	Department of Justice

EY	Evaluation Year
FAM	OSMRE's Federal Assistance Manual
GIS	Geographic Information System
GPS	Global Positioning System
NDCC	North Dakota Century Code (Law)
NDAC	North Dakota Administrative Code (Rules)
NDPSC	North Dakota Public Service Commission
NOV	Notice of Violation
NTTP	National Technical Training Program
OSMRE	Office of Surface Mining Reclamation and Enforcement
REG-8	OSMRE Directive REG-8
SMCRA	Surface Mining Control and Reclamation Act of 1977
SPGM	Suitable Plant Growth Material
TDN	Ten-Day Notice
TIPS	Technical Innovation and Professional Services
WR	OSMRE Western Region

II. OVERVIEW OF COAL MINING INDUSTRY IN NORTH DAKOTA

Coal is the most abundant fossil fuel in the world. The United States holds the world's largest estimated recoverable reserves of coal at approximately 27%. Based on current production levels, the United States has enough estimated recoverable reserves of coal to last more than 200 years. Coal is classified into four main types or ranks (anthracite, bituminous, subbituminous, and lignite), depending on the amounts and types of carbon it contains and on the amount of heat energy it can produce. North Dakota has approximately 25 billion tons of recoverable coal reserves consisting of primarily of lignite.

The coalfields of North Dakota are located in the Williston Basin, which is part of the Great Plains Coal Province. They underlie approximately 40 percent of the State's surface area. Most of the coal is produced commercially from two mining districts located in the western part of the State: (1) Beulah-Zap and (2) Hagel. Recoverable coal reserves in North Dakota are generally classified as lignite, which is characterized by low heating value (6,500 BTU), average high moisture content (40 percent) and low sulfur content (less than one percent). The mineable beds in the Williston Basin vary in thickness from 3 to 30 feet; economic stripping ratios range from 1.5:1 to 11:1. All active coal mines in North Dakota are currently large-scale surface mines that provide for mine-mouth or regional electrical generation facilities and a nearby coal gasification facility.

The first commercial mines in North Dakota opened in Morton County in 1873. As the railroad developed across the State, demand for coal increased and was supplied by underground mines. North Dakota was one of the first states to shift from underground to large-scale commercial surface mining. By 1927, 40 percent of the State's production was by surface mining methods, compared to two percent for the nation. By 1959, eighty six percent of North Dakota's coal production was from surface mines, and since 1966, the State's total production has been derived from this mining method. In 1884, North Dakota produced 35 thousand tons of lignite; in 2014, it produced just under 29 million tons (Appendix 1, Table 1) using modern surface mining methods and equipment.

Coal mining in North Dakota is concentrated around the western half of the State. This area consists of approximately 28,000 square miles, and has an estimated total resource of 350 billion tons of coal, or about two-thirds of the total lignite reserves of the United States. North Dakota has a demonstrated recoverable coal reserve base of 25 billion tons. North Dakota enacted its first reclamation law in 1969 and major revisions to that law followed in 1973 and 1975. A new law was enacted by North Dakota in 1979 that is consistent with SMCRA.

According to North Dakota State University Agricultural Economics Publication AAE 14002, projected estimates for 2014 show that lignite related activities provide direct employment for 3,979 people and indirect employment for an additional 11,497 people. The coal industry's substantial impact on the State's population and economy has secondary in-state multiplier effects. Most of the State's coal production also fuels electric power generation plants within North Dakota that supply most of the State's electrical needs. Lignite industry expenditures are estimated at \$1,087 million, which circulates through the State economy, creating an estimated \$3.3 billion in total business activity.

North Dakota currently has six surface coal mining operations, with a total of 26 permits. Twenty one permits are actively mining while the remaining five are exclusively in reclamation. A total of 133,587 acres are currently permitted and 127,971 of those acres are bonded in North Dakota (Appendix 1, Tables 2 and 6). Approximately 75,483 of those permitted acres have been disturbed by mining operations, and 51,043 of those acres have been backfilled, graded, top-soiled and seeded to achieve the intended post-mining land use (Chart 1). Of the 51,043 acres that have been backfilled, graded, top-soiled and seeded, 15,732 acres have received final bond release. Of currently permitted acres, 2,980 have received Phase I bond release. No currently permitted acres have received Phase II bond release.

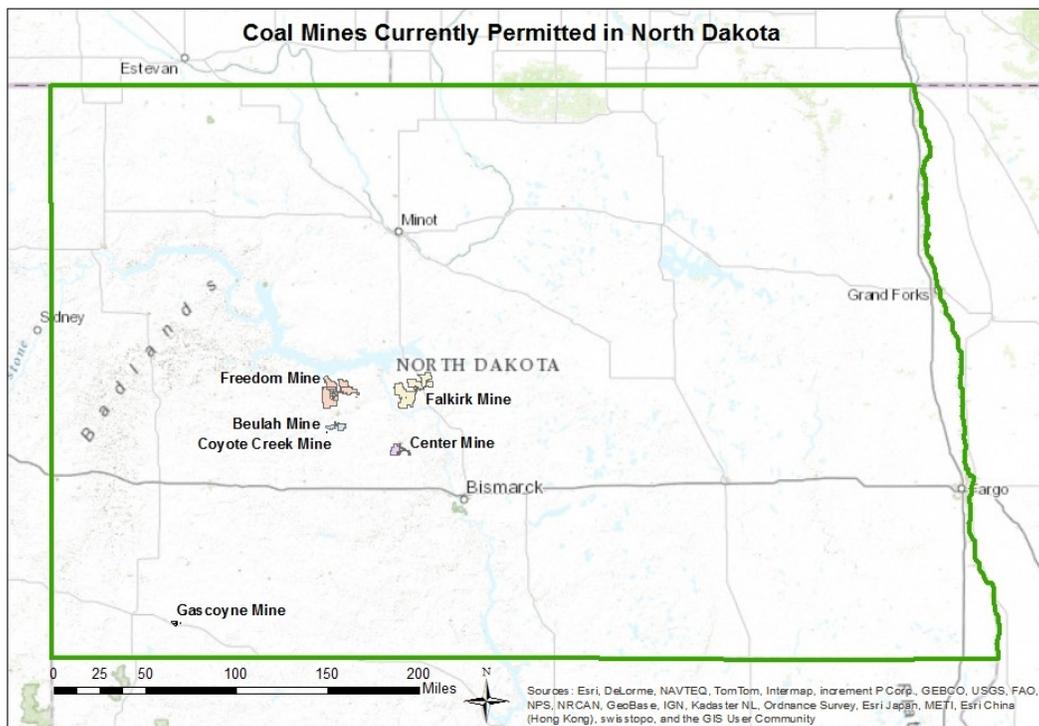


Figure 1: Map of Permitted Coal Mines in North Dakota

III. OVERVIEW OF THE PUBLIC PARTICIPATION AND OUTREACH EFFORTS

The term “public” includes all stakeholders (i.e., citizenry at large, industry, other federal, state or local agencies, and environmental groups). Opportunities for public participation occur at significant points in the North Dakota Regulatory Program and involve the ability of the public to:

- Request that areas be designated as unsuitable for mining;
- Receive notification by advertisement of permit application receipt;
- Review permit and revision applications;
- Contest the decision of the Commission on permit applications and revisions;
- Request an inspection of a mine site;
- Submit blasting, groundwater well, and/or general permit complaints if public believes a violation of regulations is taking place;
- Object to proposed bond releases;
- Initiate civil suits; and
- Petition to initiate rulemaking.

The public can also access the OSMRE annual reports and Performance Agreements (PA) via the internet at the OSMRE Oversight Documents website at <http://odocs.osmre.gov/>. The Introduction section of this report (page 4) details how to access information using this website.

Public participation for EY2015 included:

A. OSMRE

The OSMRE (DFD) provides for transparency in the oversight process by conducting outreach to stakeholders and encouraging public participation throughout the OSMRE-DFD's annual oversight activities.

Each evaluation year, the OSMRE-DFD solicits input from the public and interested parties to comment on oversight and provide suggestions for potential oversight evaluation topics. Sharing of information with the public is highly encouraged by both the OSMRE and the State. The public may include a variety of stakeholders, including, but not limited to; citizenry at large, other Federal, State, or Local agencies, or environmental groups. OSMRE's public solicitation for comment on the 2015 evaluation year was distributed on March 5th, 2014. OSMRE's public solicitation for comment on the upcoming 2016 evaluation year was distributed on March 2nd, 2015. To be included in future solicitations, please make the request by contacting the OSMRE, Denver Field Division (DFD), Casper Area Office (CAO), at 150 East B St., Room 1018, Casper, WY 82602.

On March 28, 2014, the OSMRE received input from the Western Organization of Resource Councils (WORC) regarding topics that deserve special attention in upcoming OSMRE evaluation reports. WORC specifically suggested three topics for OSMRE to address. The first suggested topic is an evaluation of topsoil handling practices and the ability of operators to maintain soil microbes and nutrients for the establishment of vegetative communities. This topic was addressed as a special study topic in Section VI of North Dakota's EY2014 Oversight Report. The second topic suggested by the WORC is an evaluation of operator's abilities to establish diverse communities of both warm and cool season vegetation that are capable of withstanding the harsh weather conditions of the region. This topic is addressed as a special study topic later in this report. The final suggested topic is to conduct an evaluation of controls currently in place to ensure reclamation bonds are sufficient, in light of industry downturns, specifically, where mines are allowed to self-bond. This topic reaches far wider than just the North Dakota program and is currently being considered by OSMRE as a topic for evaluation nation-wide.

B. North Dakota

The North Dakota Public Service Commission (NDPSC) is the State agency charged with the responsibility for the permitting and regulation of the coal mining industry in North Dakota. North Dakota continues to solicit public comment and input on individual projects and the regulatory program at large. North Dakota publishes notices for proposed permit revisions in local and state newspapers and on its website, and solicits public comment and requests for public meeting participation.

The NDPSC encourages public participation through public meetings, press contacts, and by responding to public inquiries. The NDPSC commonly hosts, or participates in a variety of public meetings, conferences, and workshops.

For new or revised permits, NDCC 38-14.1-18 requires that applicants filing for a new permit or revising an existing permit must advertise the ownership, location and boundaries of lands proposed to be affected by the permit or permit revision, and to identify where the application will be available for public inspection. The advertisements must be posted in applicable County newspapers and other daily newspapers of general circulation in the locality of the mining operation at least once a week for four consecutive weeks. A notice of the opportunity to submit comments or objections is also required to be sent to all owners of surface rights of lands within the permit area. Any person with an interest that may be adversely affected has the right to file written comments or objections and may request an informal conference with the NDPSC. Further clarification of public notice requirements for new permits and permit renewals can be found in NDAC 69-05.2-10 and NDAC 69-05.2-11.

For bond release applications, NDCC 38-14.1-17 requires that applicants filing for release of all or part of a performance bond must advertise the location and number of acres affected, the permit and date approved, the amount of bond filed and the amount sought for release, the types and approximate dates of reclamation performed, and the right to file written objections and to request a public hearing or informal conference with the NDPSC. The advertisements must be posted in applicable County newspapers and other daily newspapers of general circulation in the locality of the mining operation at least once a week for four consecutive weeks. The requirements for bond release notification are further clarified by NDPSC Policy Memo No. 9.

In October 2014 the Reclamation Division participated in a reclamation workshop in Billings, MT, that was sponsored by the Western Organization of Resource Councils. This included staff and members of the Dakota Resource Council, Powder River Basin Resource Council, North Plains Resource Council, and the Natural Resources Defense Council. Many farmers and ranchers that live near coal mines in Mercer and McLean Counties attended the formal hearing

that was held on the Commission's decision to issue Permit NACC-1302 to the Coyote Creek Mining Company, L.L.C.

The NDPSC maintains a web site at: <http://www.psc.nd.gov/> that includes links to information on state laws and rules, interpretive documents, formal notices, consumer information, and a list of mine operators.

OSMRE's programmatic reviews of the North Dakota program indicate that the NDPSC is adhering to the State's policies and procedures regarding opportunities for public participation in all phases of their reclamation program.

IV. MAJOR ACCOMPLISHMENTS AND INNOVATIONS

This year marks the 35th anniversary of the primacy program in the State of North Dakota. The maturation of the program has helped protect the public and minimize environmental impacts within the North Dakota coalfields.

Over the past year, the OSMRE monitored North Dakota's performance in meeting the goals and objectives of the approved state program. North Dakota's regulatory program is handled by a relatively small number of staff (Appendix 1, Table 8) considering the amount of land mined and reclaimed each year. The NDPSC Reclamation Division staff members that review permit and revision applications also carry out the compliance inspections and evaluate bond release applications. This allows staff to remain very familiar with the ongoing field operations and approved mining and reclamation plans. The NDPSC has a very good working relationship with their customers that include industry, landowners, citizen groups, and other governmental agencies, including the OSMRE. The Reclamation Division carries out its duties using the appropriate technical expertise and with a high level of professionalism. Once again, the OSMRE finds that North Dakota is successful in implementing its regulatory mine land program. The OSMRE looks forward to working cooperatively with North Dakota during the next year.

The Reclamation Division continues to work closely with mining companies and encourages the submittal of permit related applications in an electronic format. All four active permits for the Falkirk Mine, two large active permits for the Freedom Mine, two permits for the Center Mine, one active permit for the Beulah Mine and the two permits issued for the Coyote Creek Mine are all in an electronic format. Much of the monitoring data submitted by the mining companies is now submitted in an electronic format. Most incoming correspondence is also scanned and filed electronically using a structure that is very similar to the paper filing system.

The Reclamation Division has developed a Geographic Information System (GIS) to track mining and reclamation activities and conduct technical analysis of plans and data provided by the mining companies. Information entered into the GIS for all mines include recent high altitude air photos, permit boundaries, roads, stockpile locations, ponds and related features. Boundaries for many final bond release tracts are also being entered. More information is being added as time allows. Much of this information is being loaded onto tablet computers and iPads equipped with Global Positioning System (GPS) receivers that inspectors use when carrying out mine inspections. This allows for accurate tracking and recording of activities during mine inspections.

Development of the North Dakota Regulatory Program's GIS is an ongoing and dynamic project. The OSMRE's Office of Technology Transfer in the Western Region (WR) and Technical Innovation and Professional Services (TIPS) have provided valuable assistance with the GIS and mobile computing initiatives. The Reclamation Division has been able to move forward with these initiatives while ensuring the necessary mine inspections are conducted and timely action is taken on applications.

During the course of this evaluation year, mines in North Dakota achieved final bond release for a total of 653.86 acres. This includes 640.9 acres from Permit KRGC-8101 at the Gascoyne Mine, 11.18 acres from Permit NACT-8503 at the Freedom Mine, and the final 1.78 acres from Permit 37 at the Center Mine. (See Appendix 1, Table 6). With the closing of Permit 37 at the Center Mine, North Dakota no longer has any initial program sites. All remaining inspectable units in North Dakota are now permanent program sites.

The NDPSC staff continues to implement the program in a professional, cooperative, and fair manner. The Reclamation Division uses new technology to become more efficient and make information more readily available to the public. The NDPSC has the necessary technical expertise for carrying out its functions to ensure that all of the requirements of SMCRA are met.

V. SUCCESS IN ACHIEVING THE PURPOSES OF SMCRA

To further the concept of reporting end-results and on-the-ground success, the findings from performance reviews and public participation evaluations are collected by the OSMRE for a national perspective on the number and extent of observed off-site impacts, the number of acres that have been mined and reclaimed to meet bond release requirements for the various phases of reclamation, and the effectiveness of customer service provided by the state. Individual topic-specific reports that provide additional details on how the following evaluations and measurements were conducted are available online at <http://odocs.osmre.gov/> or at the Casper Area Office.

A. Off-site Impacts

For the purpose of oversight, a negative off-site impact is defined as anything resulting from a surface coal mining and reclamation activity or operation that causes a negative effect on people, land, water, or structures outside the permit area. The State program must regulate or control either the mining or reclamation activity, or the resulting off-site impact. In addition, the impact on the resource must be substantiated and be related to mining and reclamation activity. It must be outside the area authorized by the permit for conducting mining and reclamation activities.

Several sources of information have been selected for identifying off-site impacts. These include but are not limited to: State and OSMRE inspection reports, enforcement actions, civil penalty assessments, citizens’ complaints, special studies and information from other environmental agencies. If an off-site impact is identified, the sources of information and the basis used to identify and report these impacts will be clearly recorded. Field evaluations for off-site impacts were conducted during routine inspections by the NDPSC and the DFD. During EY2015, North Dakota reported that twenty five out of twenty seven (92.6%) inspectable units were free of off-site impacts. (Appendix 1, Table 5).

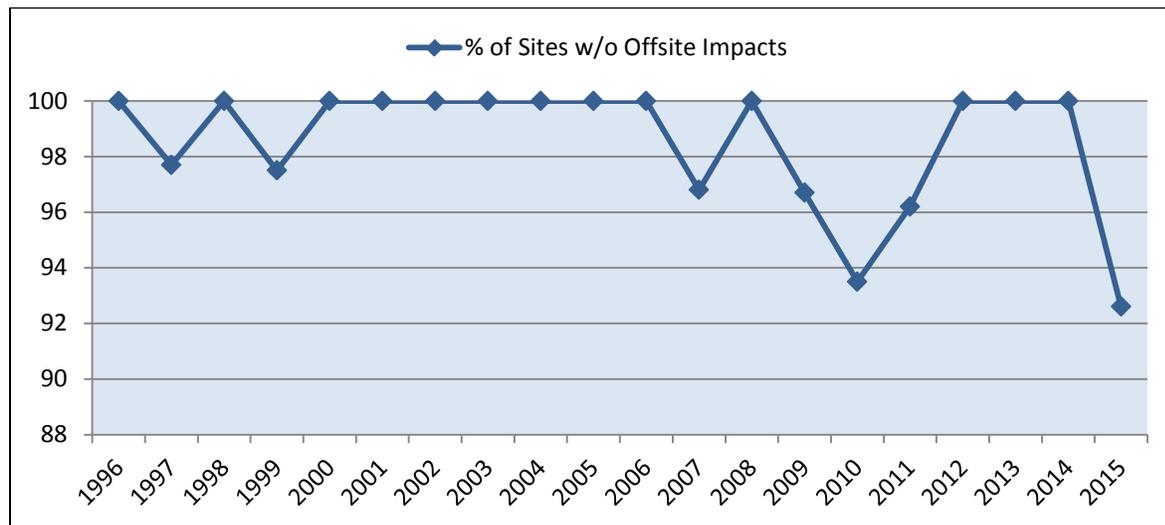


Figure 2: Percent of sites free of off-site impacts

NDPSC recorded an off-site impact while conducting an inspection at the BNI Center Mine on September 3, 2014. Permit boundary markers for Permit BNCR-1101 were not yet in place along the boundary between Sections 5 & 6, and 6 & 7 of T141N, R83W. Section 6 is located outside of the permit, while Sections 5 & 7 are not. With no signs delineating the boundaries of the permit, two small areas outside of the approved permit area were affected by mining activities. A small amount of topsoil was stockpiled in Section 6 and heavy equipment was

allowed to travel on a closed county road that is only partially within the permit. NOV-1402 was issued on Sept. 9, 2014 and required that all mining activities conducted outside the permit area be halted and the small area affected by the topsoil stockpile outside of the permit be tilled, seeded and stabilized. BNI was also directed to install all required permit boundary signs and submit a plan outlining steps to prevent similar occurrences in the future.

NDPSC recorded an off-site impact while conducting an inspection at the Coyote Creek Mine on June 30, 2015. On June 22, 2015, a rainfall event caused Coyote Creek to overtop the shop access road, causing deposition of sediment into Coyote Creek and erosion downstream of the outlet of the 60-inch low flow culvert in the mine shop access area. Flows from the culvert created an erosion feature (on island area) on the opposite bank and the eroded material moved off permit with the stream flow. The notice of violation that was issued on July 7, 2015 alleged that no special erosion control or stabilization measures were in place at the culvert outlet. The affected area is below the culvert outlet located in the SE ¼ of Section 30, T143N, R88W. This appears to be the result of culverts for the shop access road being installed in reverse order of that initially approved in Permit NACC-1302. The permit had called for the installation of four 10 foot by 10 foot box culverts, followed by installation of a 36 inch low flow steel culvert. At the time of the June 22nd rainfall, the 60-inch culvert had been installed, but the box culverts had not. This discrepancy with the approved permit was pointed out to mine personnel during NDPSC inspections on April 13th and again on April 16th. During a June 11th inspection, it was noted that installation of the box culverts had begun, however; installation had not been completed prior to the June 22nd rain event. NOV-1502 was issued on July 7, 2015, requiring submission of a plan for stabilization and protection of the outlet area of the low flow culvert and/or removal of the stream bed island. It should be noted that this off-site impact occurred and was recorded by the NDPSC during EY2015; however NOV-1502 was not issued until EY2016.

B. Reclamation Success

The OSMRE Directive REG-8 states that the OSMRE will evaluate and report on the effectiveness of state programs in ensuring successful reclamation on lands affected by surface coal mining operations. Success will be determined based on the number of acres that meet the bond release standards and have been released by the state. Table 1 shows the number of acres of bond release of disturbed lands reported since the beginning of the North Dakota program. This table reports OSMRE Phase I, II, and III bond release of acres that have been disturbed by surface coal mining operations. This table does not include any lands that were permitted but were not disturbed by mining. Permitted lands untouched by mining require no reclamation. The information in this table should also not be confused with the North Dakota Phases of bond release.

According to North Dakota Century Code (NDCC) 38-14.1-17, North Dakota may release bond in four stages:

ND Phase I – When the permittee completes the backfilling, re-grading, and drainage control in a bonded area, 40% of the bond for an area may be released. *This also meets the requirements for OSMRE Phase I release.*

ND Phase II – After spreading suitable plant growth material or other suitable strata on the re-graded land, 20% of the bond for the area may be released.

ND Phase III – After vegetation is established on the re-graded land, additional bond may be released. *This also meets the requirements for OSMRE Phase II release.*

ND Phase IV – When the permittee has successfully completed all surface coal mining and reclamation operations, and after the 10-year responsibility period for maintaining successful re-vegetation has expired, the remaining bond may be released. *This also meets the requirements for OSMRE Phase III (final) release.*

When this report refers to Phase I, II and III bond release, it should be assumed that the intended meaning is OSMRE’s definition of bond release. In addition to the nationwide information reported, Field or Area Offices and States may conduct specific evaluations to better illustrate the mining and reclamation process.

Phases of Bond Release of Disturbed Lands (acres) 1976 to 2015							
YEAR	PHASE I	PHASE II	PHASE III	YEAR	PHASE I	PHASE II	PHASE III
1976-1998	5812	3363	51	2008	407	459	519
1999	834	1021	1933	2009	816	867	928
2000	372	372	496	2010	3006	2905	3042
2001	1872	305	305	2011	1113	1137	1137
2002	0	0	109	2012	1407	1698	1698
2003	88	72	72	2013	1219	1219	1219
2004	945	546	838	2014	324	334	334
2005	198	398	1729	2015	68	538	538
2006	711	292	437				
2007	219	219	347	TOTAL	19,411	15,745	15,732

REG-8 further requires that bond release information is collected to measure program performance in the following areas: a. Land form/Approximate Original Contour, b. Land Capability, and c. Hydrologic Reclamation.

Land form/approximate original contour (AOC)

- 1.) AOC achievement is measured by the acres of Phase I bond released. Acreage disturbed by mining activities that has been released under Phase I bond liability will be documented as having achieved AOC. Approximately 26% (19,411 acres) of the disturbed lands (75,483 acres) in North Dakota have received Phase I Bond Release.

Land Capability

There are several measurements that may be conducted to demonstrate the reestablishment of land capability on mined areas.

- 1.) Proper replacement of soil resources is measured by acres of Phase II bond release. Approximately 21% (15,754 acres) of the disturbed lands (75,483 acres) in North Dakota have received Phase II Bond Release.
- 2.) Vegetation stability is measured by acres of Phase II bond release. Acreage released from Phase II bond liability can be documented as having achieved erosion stability. Approximately 21% (15,754 acres) of the disturbed lands (75,483 acres) in North Dakota have received Phase II Bond Release.
- 3.) Achievement of post mining land uses is measured by acres of Phase III (final) bond release. Land capability is demonstrated by the acres for which the approved post mining land uses have been achieved. The acreage released from Phase III (final) bond liability can be documented as having achieved the approved post mining land uses. Approximately 21% (15,732 acres) of the disturbed lands (75,483 acres) in North Dakota have received Phase III (final) Bond Release. More than half of the reclaimed lands that have been seeded for 10 or more years (30,366 acres) have received final bond release.
- 4.) Successful revegetation is measured by the acres of Phase III (final) bond release. Land capability is demonstrated by the acres for which revegetation success has been successfully demonstrated for the land use at the time of Phase III (final) bond release. Approximately 21% (15,732 acres) of the disturbed lands (75,483 acres) in North Dakota have received Phase III (final) Bond Release.

Hydrologic Reclamation

- 1.) Achievement of surface water quality and quantity restoration can be measured by acres of Phase III (final) bond release. Surface water quality and quantity restoration may be measured in terms of acres released from bond liability. Phase III (final) bond release will document that water quality meets surface water quality standards and water quantity is adequate for its intended use. Approximately 21% (15,732 acres) of the disturbed lands (75,483 acres) have received Phase III Bond Release.

- 2.) Achievement of groundwater recharge capacity and ground water quantity and quality restoration can be measured by acres of Phase III (final) bond release. Approximately 21% (15,732 acres) of the disturbed lands (75,483 acres) have received Phase III Bond Release.

It should be noted that both State and Federal regulations do not require that a permittee file for bond release at any prescribed time. Therefore, using bond release statistics only to evaluate reclamation success can be misleading. Typically, permittees do not file for Phase II or Phase III bond release until completion of the entire mining operation. As a result, the number of acres released from final bond in North Dakota is relatively small compared to the number of acres actually graded, soiled, and seeded.

The OSMRE – Denver Field Division (DFD) has also reviewed general trends in Phase III bond release in North Dakota. When looking at final bond release trends over the life of the North Dakota regulatory program, notice that during the first 22 years (1976-1998), only 51 acres of disturbed land had achieved final bond release. Over the last 17 years (1999-2015), final bond release has been achieved on 15,681 acres of disturbed land. This trend of increasing Phase III bond release can be expected. Even under ideal conditions, due to the 10 year liability period for revegetation efforts, it takes in excess of ten years to even meet the requirements to apply for final bond release. Advances in technology have also allowed mines to become increasingly efficient and grow to ever increasing sizes. Land where coal is extracted today may not be eligible for final bond release for 15 to 20 years. After implementation of SMCRA in 1977, the industry saw the closure of smaller mining operations and the expansion of larger corporate mining operations. Reclamation activities carried out by those larger mines in the early to mid-1980's became eligible for final bond release in the late 1990s. The trend of increasing final bond release in North Dakota has continued from 1999 until the present.

Contemporaneous Reclamation

Contemporaneous reclamation specifically refers to the timeliness that reclamation is occurring. The OSMRE Directive REG-8 establishes bond release as the primary measure of reclamation

success. How contemporaneously reclamation is occurring can then be measured by the rate at which bond release is being achieved. Table 6 of Appendix 1 catalogues the acreage of land released from bond for OSMRE Phase I, II, and III. While useful, the method of tracking the rate of bond release can give a biased view of how much reclamation is actually taking place. Permittees are not required to file for any phase of bond release at any prescribed time. The time and cost required to put together an application for bond release for a small tract of reclaimed land is comparable to that required for a large tract of land. As a result, it is not cost effective for operators to submit multiple applications for bond release for small tracts of reclaimed land. It is more common for permittees to wait until the entire reclamation process is complete to file for all three phases of bond release at once. As a result, the number of acres released from final bond in North Dakota is relatively small compared to the number of acres that actually go through the process of reclamation, have completed the required ten year liability period and are awaiting application for bond release. In addition to bond release information, Field or Area Offices and States may conduct other evaluations to supplement and better illustrate the rate of reclamation. CAO has elected to use the rate at which disturbed lands are graded, top-soiled and seeded to the point of establishing vegetation. This is typically the point at which Phase II bond release may be sought.

Currently in North Dakota, a total of 133,587 acres are permitted, with approximately 75,483 acres (57%), disturbed by mining activity to date. Of these disturbed acres, approximately 51,043 acres have been backfilled, graded, top-soiled and seeded; or 68% of the lands disturbed have been reclaimed to the point of establishing vegetation. This ratio of disturbed acres vs. acres reclaimed to vegetation (graded/soiled/seeded) is a measure of how contemporaneous (timely) the State's mines are reclaiming acres to the point of establishing vegetation. Once the re-vegetated acres have fulfilled their 10-year liability period and met other requirements, they may be available for Phase III (final) bond release.

The following Chart (1) and Graph (1) are used to show the rate at which lands are being permanently reclaimed to the point of establishing vegetation (seeded) compared to the rate of disturbance. Lands in these charts are considered reclaimed to vegetation when they are seeded with permanent vegetation consisting of species as prescribed in the reclamation plan of the approved permit.

Low ratios of reclamation to disturbance indicate that reclamation is not progressing at the same rate as mining, resulting in an increasing acreage of disturbed lands. Conversely, high ratios of reclamation to disturbance indicate that reclamation is occurring faster than disturbance.

Chart 1 and Graph 1 illustrate the overall mining and reclamation activities for the North Dakota coal mines since 1999. Note that the lines indicating disturbed (blue line) and

graded/soiled/seeded (red line) in Graph 1 are roughly parallel, indicating the rate of reclamation is roughly the same as the rate of disturbance.

Chart 1: North Dakota Reclamation Summary

EVAL. YEAR	ACRES DISTURBED	Cumulative Acres Disturbed	ACRES RECLAIMED to VEGETATION (graded/soiled/seeded)	Cumulative Acres Reclaimed to Vegetation	Annual RATIO OF RECLAM VS DISTURB	Cumulative RATIO OF RECLAM VS DISTURB
1999	1,725	43,484	2,270	24,979	1.32	0.58
2000	1,913	45,397	1,518	26,497	0.79	0.58
2001	1,738	47,135	1,998	28,495	1.15	0.61
2002	2,036	49,171	1,610	30,105	0.79	0.61
2003	2,242	51,413	1,678	31,783	0.75	0.62
2004	1,772	53,185	1,775	33,558	1.00	0.63
2005	1,796	54,981	1,458	35,016	0.81	0.64
2006	2,004	56,985	1,463	36,479	0.73	0.64
2007	2,085	59,070	1,787	38,046	0.86	0.64
2008	2,045	61,115	1,934	39,980	0.95	0.65
2009	1,873	62,988	2,322	42,302	1.24	0.67
2010	2,429	65,417	851	43,153	0.35	0.66
2011	1,654	67,071	1,153	44,306	0.70	0.66
2012	2,530	69,601	1,208	45,514	0.48	0.65
2013	2,413	72,014	1,692	47,146	0.70	0.65
2014	1,561	73,575	2,005	49,151	1.28	0.67
2015	1,908	75,483	1,902	51,043	1.00	0.68

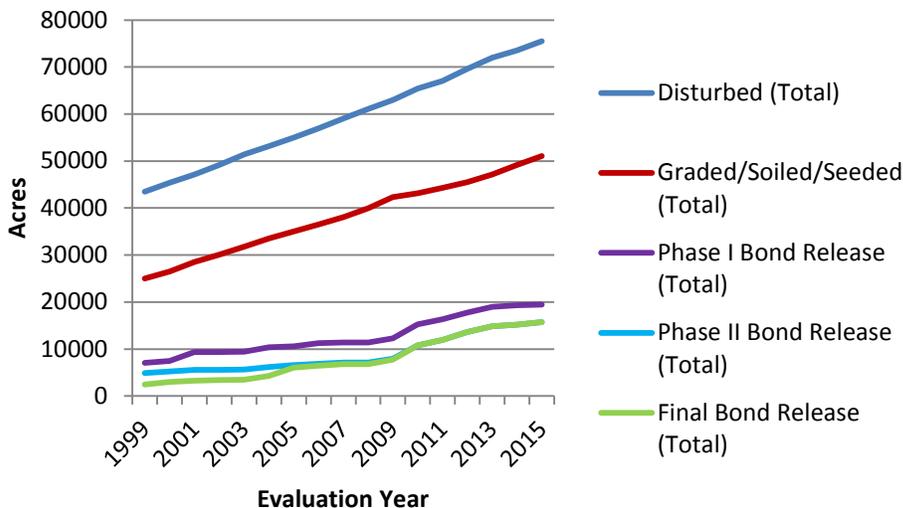
Source of data: ND-PSC

Chart 1 (above) provides the actual acres disturbed and reclaimed to vegetation (graded/re-soiled/seeded) annually for all mines. The cumulative reclamation to disturbance ratio has remained relatively steady and is currently 0.68, as indicated on the chart. This ratio indicates that 68 percent of the cumulative acres disturbed in North Dakota have been reclaimed to the point of being backfilled, graded and seeded. The cumulative ratio of lands reclaimed to the point of establishing vegetation to lands disturbed by mining has steadily increased over the past 17 years from 0.58 to 0.68. This reflects favorably on the contemporaneous nature of reclamation efforts in North Dakota.

Graph 1 shows that the rate of disturbance (slope of the blue line) at mines in North Dakota has remained very consistent since 1999. The rate of acres being graded/soiled/seeded (slope of the red line) has remained very consistent with the rate of disturbance, indicated by the fact that the red and blue lines are nearly parallel. Recent years have seen the opening of several new mine areas, such as mine development work in Permit NACC-1302 at the Coyote Creek Mine and Permit BNCR-1101 at the Center Mine, resulting in a slight dip in the red line. The rate of final bond release (slope of the green line) has historically been less than the rate of disturbance, but recent years indicate an upturn.

Graph 1

All Coal Mines in North Dakota



Source of data: ND-PSC

Graph 1 (above) plots the number of acres disturbed, acres graded/soiled/seeded and Final Bond Release of disturbed acreage. Acres of Phase I and Phase II bond release of disturbed acreage are included for reference. The rate (change over time) of disturbance or reclamation is indicated by the slope (rise over run) of each line. Ideally, the line showing the rate of reclamation should parallel the line showing the rate of disturbance.

Note how the purple, light blue and green lines, representing Phase I, II and III bond release respectively, parallel each other closely. There is slightly more Phase I bond released than Phase II or III, primarily due to the greater financial incentive (release of 40% of bond) and the relatively short time required to achieve. Phase I bond release requires the completion of backfilling and grading to the approximate original contour, and can be completed in a relatively short time period, when compared to requirements for Phase II and III bond release. Depending on the established post mining land use, Phase II release may require collection of multiple years of crop production data to verify successful revegetation, and Phase III release requires completion of all reclamation activities, including all Phase II requirements and completion of a ten year liability period for establishment of vegetation. Also note, how the light blue and green lines seem to merge around 2005, with almost all Phase II and Phase III bond being released concurrently.

Mechanisms are in place to ensure that land disturbed by surface coal mining operations will be reclaimed. SMCRA requires that every permitted acre in a surface coal mine is bonded to ensure that sufficient funds will be available to reclaim that land in the event that an operator fails to

fulfill their responsibilities. The DFD's analysis shows that the State program is effective in achieving its goal of having disturbed lands reclaimed to the approved post-mining land use as contemporaneously as possible.

C. Customer Service

One of the requirements of a regulatory authority for reclamation programs implemented under SMCRA is to develop and encourage open communication not only with the industry being regulated, but also the citizenry and communities in the coalfields around the mines. To accomplish this requirement, SMCRA programs must involve the public in all phases of coal mine permitting. North Dakota's program provides for public involvement of permitting actions when a new application is received, when a permit is renewed, when any significant permit revision is proposed and when a phase of reclamation is completed to the point of requesting bond release from a tract of reclaimed land. The provisions of the North Dakota program that extensively describe these procedures can be found at sections NDCC 38-14.1-18 (North Dakota Century Code) and NDAC 69-05.2-10 and 69-05.2-12 (North Dakota Administrative Code).

The Reclamation Division provided the required notices to landowners and other interested parties for significant revision applications, renewals and bond release applications. Staff encourages participation in bond release inspections by the landowners and county officials. While the OSMRE did not receive any formal citizen's complaints during EY2015, the NDSPC responded to requests for assistance from citizens on at least three occasions.

Landowner concerns regarding the care and removal of suitable plant growth materials were investigated by NDPSC personnel at the Coyote Creek Mine. The landowner expressed their concerns and accompanied NDPSC inspectors on an inspection conducted on April 13, 2015. The landowner was concerned about possible topsoil degradation in an equipment and contractor parking area. While no rutting or soil contamination was observed, topsoil was removed and saved from a larger area following that inspection.

On October 24, 2014, another landowner expressed concerns regarding basement flooding and asked the NDPSC if water issues might be related to surface water management at the nearby Coteau Freedom Mine. The NDPSC has investigated the landowner's claims and continues to monitor both surface flow and groundwater levels at monitoring station in the vicinity of the landowner's farmstead. A regional rise in groundwater levels has been confirmed, but NDPSC was unable to single out Coteau as a major contributor to the regional rise in groundwater levels. During a joint OSMRE/NDPSC inspection conducted on May 12, 2015, Coteau officials confirmed that they have temporarily ceased all discharges into the East Antelope Creek, which flows through the landowner's property and within ½ mile of his home, in an attempt to assist

the NDPSC investigation. The hydrology of this area is highly complex and the NDPSC is continuing to monitor the situation.

On Sept. 2nd, 2014, another landowner called the NDPSC to express concerns that water discharges from the Coteau Freedom Mine were causing problems on private farmland. A NDPSC inspection conducted on Sept. 3rd, 2014, confirmed that water from a sedimentation pond located within permitted areas of the Freedom Mine had overflowed the emergency spillway and continued across the landowner's property. Access to portions of the landowner's property was restricted and a soybean field had been negatively impacted due to the high water levels. The NDPSC investigation concluded that, the manner in which Coteau dewatered the pond did not contribute to flooding problems and actually helped to reduce the amount of water flowing through the landowner's property, when compared to pre-mine conditions. Coteau is also providing the landowner with additional cropland and hayland in the general area, and have carried out miscellaneous land improvement projects on the landowner's property, demonstrating a good faith effort by Coteau to address landowner concerns and maintain positive landowner relations.

The NDPSC provides service to all parties requesting assistance, documents or information, and regulates the coal mining industry within the State. Its services include, but are not limited to attending or making presentations at public meetings, discussions with individuals or groups regarding the North Dakota regulatory program, reclamation, or government activities.

In addition to the services provided to the general public, the regulatory program staff and management also contribute to task forces and ad-hoc committees in relation to inter-agency and intra-agency problem solving committees and panels. Some coal program personnel also plan and/or participate in various symposia, seminars, and workshops in relation to technical and legal aspects of coal prospecting, mining, and reclamation.

VI. NATIONAL PRIORITY AND GENERAL OVERSIGHT TOPIC REVIEWS

National priority reviews and general oversight topic reviews can be located and reviewed at the OSMRE's website as listed at the Introduction (page 4) of this report. Individual reports prepared by the OSMRE are part of the oversight process of each state and contains findings and details regarding the evaluation of specific elements of the state program.

A. National Priority Reviews

National Priority Reviews are oversight topic reviews selected by the OSMRE to review nationwide. This EY, there were no National Priority Reviews.

B. General Oversight Topic Reviews

General Oversight Topic Reviews are conducted as specified in the North Dakota Performance Agreement. For EY2015, CAO has elected to evaluate the following topics:

Maintenance of the Approved Program

ND-052 (State Program Amendment XL)

On October 2, 2009, the OSMRE notified the NDPSC that, under 30 CFR 732.17(d), certain North Dakota provisions pertaining to ownership and control and the use of the OSMRE's Applicant Violator System (AVS) need to be revised. The NDPSC sent the OSMRE draft AVS and other Ownership and Control rules for review in late 2011. Following receipt of the OSMRE's comments in early 2012, a revised draft rule change package was distributed for informal review. In May, 2012, the NDPSC issued a Notice of Rulemaking for these and other rule changes. A public hearing regarding the rulemaking cases was held on July 12, 2012. The proposed rule changes were sent to the State Attorney General's office for legal opinion. The OSMRE received the formal North Dakota Program Amendment (SATS No. ND-052-FOR) on November 14th, 2012. The OSMRE announced receipt of the proposed amendment in the January 29, 2013 Federal Register (78 FR 6062), which also opened the public comment period and provided an opportunity for public hearing. No public hearing or meeting was requested. On May 10, 2013, NDPSC submitted a modification to North Dakota State Program Amendment XL in response to concerns raised by the OSMRE technical reviews. The modification corrects a drafting error in NDAC 69-0.5-10-09 to coincide with similar language in federal regulations. ND-052: The final rule federal register notice approving the amendment was sent to headquarters on July 2, 2014. The final rule, approving this amendment, was published in the federal register on Dec. 16, 2014.

At this time, there are no outstanding programmatic issues unresolved in the North Dakota program.

Evaluation of the State-Federal Cooperative Agreement with North Dakota

Plans to conduct this evaluation were included in the 2015 Performance Agreement between OSMRE and NDPSC, however, limitations in time and resources have prevented this evaluation from being conducted at this time. This topic may be included in future Performance Agreements as an evaluation topic.

State Inspection Frequency

The NDPSC continues to conduct frequent and thorough inspections. North Dakota conducted 87 complete inspections and 487 partial inspections on all active mine sites during this evaluation year. North Dakota also conducted 22 complete inspections and 69 partial inspections

on all inactive mine sites during this evaluation year. This comes to a total of 109 complete inspections and 556 partial inspections conducted during EY2015.

Using Federal programs as a guide, North Dakota is required to conduct an average of at least one partial inspection per month and one complete inspection per calendar quarter for all Active, Permanent Program Permits. Inactive, Permanent Program Permits also require an average of at least one complete inspection per calendar quarter, but only as many partial inspections as are necessary to ensure effective enforcement of the Regulatory program. Initial program sites require at least one complete inspection every 6 months. During EY2015, North Dakota reported 21, Active, Permanent Program Permits, and 5 Inactive Permanent Program Permits. Coyote Creek Mine Permit NACC-1302 is an Active, Permanent Program Permit, however, it was issued on October 22, 2014 and has only been in existence for 3 of the 4 quarterly inspection periods. The remaining acreage in Center Mine Permit 37 was in an Initial Program Site that received final bond release on Sept. 22, 2014, and thus only required oversight for one of the two 6 month inspection periods. The total number of State inspection required for EY2015 is 104 complete inspections and 166 partial inspections. The state inspected up to 27 inspectable units during EY2015, but with the final bond release of all lands in Permit 37 at the Center Mine, the state ended the year with 26 inspectable units.

During EY2015, North Dakota inspectors issued a total of two NOVs and no cessation orders. NOV-1501 was issued on April 24, 2015 at the Coyote Creek Mine. A contractor drilling large diameter holes for an electrical substation placed a mixture of subsoil and overburden on undisturbed, in-situ topsoil and against an adjacent topsoil stockpile. The violation was noticed during a NDPSC inspection conducted on April 16, 2014. The mine had successfully cleaned up the area the following day. NOV-1501 required the operator to submit a description of procedures that will be used to ensure that all topsoil is removed and protected from areas to be affected by mining activities to the NSPDC within 15 days of receipt of the NOV.

NOV-1402 was issued on Sept. 9, 2014 at the BNI Center Mine. During a NDPSC inspection conducted on September 3, 2014, it was noted that permit boundary markers for Permit BNCR-1101 were not yet in place along the boundary between Sections 5 & 6, and 6 & 7 of T141N, R83W. Section 6 is located outside of the permit, while Sections 5 & 7 are not. With no signs delineating the boundaries of the permit, two small areas outside of the approved permit area were affected by mining activities. Topsoil was stockpiled in Section 6 and heavy equipment was allowed to travel on a closed County road that is only partially within the permit. NOV-1402 required that all mining activities conducted outside the permit area be halted and all affected areas be tilled, seeded and stabilized. BNI was also directed to install all required permit boundaries and submit a plan outlining steps to prevent similar occurrences in the future.

An off-site impact that occurred on June 22, 2015, involving Permit NACC-1302 at the Coyote Creek Mine, resulted in NDPSC’s issuance of NOV-1502 on July 7, 2015. Following an inspection conducted on April 13, 2015, NDPSC inspectors alerted Coyote Creek personnel to actions that were inconsistent with the existing permit. Permit NACC-1302 calls for the installation of four 10 foot by 10 foot box culverts, followed by installation of a 36-inch low flow steel culvert. On April 11th, a 60-inch culvert had been installed, in place of the 36-inch culvert called for in the permit, and the box culverts had not yet been installed. This discrepancy with the approved permit was again pointed out to mine personnel during NDPSC inspections on April 16th. During a June 11th inspection, it was noted that installation of the box culverts had begun, however installation had not been completed prior to a June 22nd rain event that caused significant erosion downstream of the low flow culvert. These actions resulted in the issuance of NOV-1502. This off-site impact occurred and was recorded by the NDPSC during EY2015, and is, thus reflected in this report. However, NOV-1502 was not actually issued until EY2016, and will be recorded in next year’s evaluation report.

OSMRE Oversight Inspection Activity

The CAO conducted three complete oversight inspections and four partial oversight inspections. One of the complete inspections was an unannounced independent inspection. No Ten Day Notices (TDNs) or Cessation Orders (COs) were issued by the OSMRE during EY2015.

OSMRE Inspections

EY2015 Inspections Conducted	EY2015 Inspection Target	Percent Target Inspections Completed
7	7	100%

Inspection Types

Complete	Partial	Focused	Joint	Non-Joint	Independent
3	4	0	7	0	1

C. Special Study Topics

In addition to National Priority Reviews and General Oversight Topic Reviews, OSMRE also conducts reviews of special study topics. These reviews address topics of special interest and are commonly the result of requests from the general public that OSMRE review or investigate a particular issue regarding the state regulatory program. CAO has elected to review the following special study topic for EY2015:

Suitability of Vegetation Species Selected for Reclamation Activities in North Dakota

In response to a letter from the WORC, the EY2015 performance agreement between OSMRE and NDPSC, it was decided to conduct an analysis of the mine operator's ability to establish resilient, diverse communities of warm season and cool season vegetation on reclaimed native grasslands that can withstand the harsh weather conditions of the region, and support livestock and wildlife communities over time. To properly examine this topic, it is necessary to understand how and why operators select the vegetative species they place on reclaimed lands. The following includes a list of commonly asked questions regarding the selection of vegetation species in North Dakota and a short response addressing each question.

How does the mining and reclamation process work?

When land is disturbed by surface coal mining, North Dakota reclamation laws require that topsoil and subsoil be removed and stored separately for later use during reclamation. Prior to overburden and coal removal, care is taken to remove and segregate the topsoil and subsoil layers. Removal of large amounts of coal will inevitably leave the land at a lower elevation than before mining took place. Mine operators are required to backfill and grade the land to the approximate original contour (AOC) that existed prior to mining operations. Since the act of mining physically removes a large amount of material, it is impossible to attain the exact land contours that existed prior to mining. Removal of a 10 to 20 foot layer of coal will have an obvious effect on the elevation of the post mining landscape. However, mining companies in North Dakota estimate that the overburden will swell by approximately 10% after removal. A variety of techniques, including software that attempts to reestablish natural contours and drainage patterns are used to approximate pre-mining conditions and minimize the impact of mining on the land. Highwalls and final pits left at the boundary of coal extraction areas are backfilled and blended to tie into the adjacent unmined lands. Once re-graded with overburden material and contoured to achieve the AOC, the subsoil and topsoil can then be respread to specified depths, to ensure a base of suitable plant growth materials (SPGM), in which to re-establish vegetation.

Reclamation Specialists from the various North Dakota mines investigate each reclamation area independently and develop reclamation plans to reintroduce vegetation based on factors such as, post mining land use, the type and quality of the SPGM, adjacent land uses, erosion control, and the desires of the landowner. The mine permit identifies the post mining land use for each area within the permit. These designations are reviewed and agreed upon by the mine operator, the land owner, and the reviewing regulatory agency, before the permit can be approved. Every permit is also open to public review and scrutiny prior to approval. The type of vegetation seeded in each reclamation area is determined by the reclamation plan and is specific to the post mining land use for that reclamation tract. Areas designated as woodlands, may be seeded with a variety of native trees and shrub species. And areas that are designated native grassland are seeded with a variety of native grass species.

How do the mines determine what seed mixes to use?

Mine operators evaluate each reclamation tract independently. According to NDAC 69-05.2-22-02(3) when the approved post mining land use is native grassland, the permittee shall select species of grasses, legumes, forbs, half-shrubs, or shrubs, seeded or planted and their pattern of distribution, to provide a diverse effective, and permanent vegetative cover, with seasonal variety, succession, and regenerative capabilities native to the land. Native grassland reference areas, baseline vegetation inventory information and NRCS ecological site descriptions can be used to determine species composition of the undisturbed lands. The performance and adaptive capabilities of native plants are largely influenced by their origin. Experience in the Northern Great Plains and Upper Midwest has shown that generally, warm-season grasses and forbs can be moved from their place of origin about 300 miles north or 200 miles south without sacrificing productivity. Movement east or west, however, is more influenced by moisture and elevation and must be considered on a site specific basis. When deciding which species to use, operators look to the expertise of the USDA-NRCS Plant Materials Center for recommendations. Once the recommended seed mixes are chosen, the NRCS Herbaceous Vegetation Establishment Guide can be used to determine proper variety and seeding rates for individual native grassland seed mixes.

Why choose native grasses?

Plant species are selected that are adapted to the soils and will provide for the planned post mining land use. North Dakota can be a harsh place for some species to survive, so care must be taken to ensure the varieties chosen for native grasslands are suited to this area. A similar variety or subspecies of grass may flourish in Florida, but would not survive the cold winters or shorter growing seasons encountered in North Dakota. Likewise, some subspecies thrive in specific soil types that may not be present just a few counties over. Native grasses have a proven record of performance and are adapted to specific areas. They also typically allow for more genetic variation within a seed source, allowing for a more genetically diverse population, improving

species persistence and long-term performance. It is important to establish native vegetation as quickly as possible to avoid competition with invasive perennial species such as Canada thistle, leafy spurge, smooth brome grass and various knapweeds that can quickly establish and provide long-term ecological and management concerns. Certification by State seed certifying agencies helps to ensure high quality seed with known germination and purity rates.

What are cool season and warm season grasses?

Much of the reclaimed mine land in North Dakota is returned to native grassland and either utilized as pasture for livestock or hayed prior to grazing. To successfully revegetate an area for use as native pasture, it is best to establish a mix of both warm and cool season grasses. Cool season grasses flourish in cooler, northern climates while warm season grasses tend to flourish in warmer, southern climates. Cool-season grasses are productive in the spring and fall because of the cooler temperatures during the day and night, shorter photoperiods, and higher soil moisture. During the summer, growth is reduced and dormancy is induced by high temperatures and low precipitation. However, in fall, when temperatures drop and moisture is more available, growth resumes. Warm-season grasses are most productive during the warmer summer months. Both cool-season and warm-season species are used in combination to provide forage throughout the growing season. Warm-season grasses reach their peak of production about a month later than cool-season grasses. Although some warm-season grasses produce less yield, their virtue is to provide superior midsummer grazing when cool-season grasses are semi-dormant.

USDA-NRCS Plant Materials Center – What they do.

The Plant Materials Center (PMC) in Bismarck, ND is one of 27 offices of the USDA, NRCS. The Plant Materials Program conducts research and provides plant materials for conservation efforts throughout the Northern Great Plains. In cooperation with other State and Federal agencies, the PMC assembles plant and seed collections from representative areas, and then evaluates their performance growing in North Dakota. The PCM is located in Bismarck, but also utilizes a variety of off-center sites across North Dakota, South Dakota and Minnesota as testing locations. Production procedures are documented, cultural and management techniques are evaluated, and seeds are grown under actual field-use conditions. Species that are determined to have a potential for release are distributed through various cooperators and made available to commercial growers and nurseries.

Who grows these seeds?

A list of seed vendors and growers, as well as their contact information is available from the PMC and may be downloaded directly from their website at:

<http://www.nrcs.usda.gov/wps/portal/nrcs/main/plantmaterials/pmc/central/ndpmc/>

What is required for successful seeding?

After appropriate seed mixes have been selected, it is important to plant them at the appropriate time. Grasses should be seeded when soil moisture and temperature are optimum for germination. If the site is dominated by cool season species, a spring, late summer, or late fall dormant planting date is preferred. If the seed mix includes warm season species, it is best to plant in late spring after the last chance of frost. A proper seedbed is also required for optimal seeding. This includes a firm soil medium that is firm enough to prevent seeds from being planted too deep for proper germination or for emerging shoots to reach the surface. If weeds are properly managed prior to seeding, grasses can typically be seeded into a tilled or no-tilled seedbed. Depending on the type of seed, optimal planting depths for grasses native to the Northern Great Plains typically range from ¼ inch up to an inch. Grass seed can be broadly categorized into three types; fluffy or chaffy, smooth small seed, and smooth large seed. Each type has an optimum planting depth, and seeding rate, requiring the use of specialized seeding drills. The quality of seed planted also contributes to a successful seeding. All seed should meet the requirements of the State’s seed laws and should be tested for purity and germination. Purity identifies any weeds or inert matter in the seed mix. Germination is an indication of the percentage of seed that will sprout and grow. Seed quality is usually identified by a Pure Live Seed (PLS) indicator, which is calculated by multiplying purity by germination. A high PLS usually indicated high seed quality. Lastly, weed control should be maintained to ensure a successful seeding. Weeds compete with grass seedlings for moisture, light and nutrients. Weeds can be controlled mechanically by mowing or clipping, or chemically, through the use of herbicides. Livestock grazing may also be used to help control certain unwanted species.

What seed mixes are recommended by the Plant Materials Center?

A variety of publications are available online at the plant Materials Center, some with specific recommendations for seed mixes to address vegetation of sites with a variety of different environmental conditions. The following are examples of seeding mixtures recommended by the Plant Materials Center in Bismarck ND for use in reclamation of disturbed sites in North Dakota, based on general soil types:

Native rangeland (loam, clayey, and sandy soils)
Western wheatgrass (native cool-season rhizomatous grass)
Green needlegrass (native cool-season bunchgrass)
Canada wildrye (native cool-season bunchgrass)
Sideoats grama (native warm-season rhizomatous grass)
Blue grama (native warm-season bunchgrass)
Purple prairieclover (native leguminous forb)

Native rangeland (sands and shallow soils)
Western wheatgrass (native cool-season rhizomatous grass) Prairie sandreed (native warm-season rhizomatous grass) Little bluestem (native warm-season bunchgrass) Canada wildrye (native cool-season bunchgrass) Blue grama (native warm-season bunchgrass) Narrow-leaf purple coneflower (native forb)
Native rangeland (saline and/or sodic affected soils)
Western wheatgrass (native cool-season rhizomatous grass) Slender wheatgrass (native cool-season bunchgrass) Canada wildrye (native cool-season bunchgrass) Blue grama (native warm-season bunchgrass) Western yarrow (native forb) Wyoming big sagebrush (native shrub) – for reclamation sites within sage grouse habitat
Introduced pasture or hayland (all soil types)
When re-establishing tame grass pastures or hayland, use introduced species which are adapted to the soil and match existing vegetation. This may include intermediate/pubescent wheatgrass (introduced cool-season rhizomatous grass), meadow brome grass (introduced cool-season bunchgrass), crested wheatgrass (introduced cool-season bunchgrass), and alfalfa (introduced leguminous forb). Be aware of the potential for livestock bloat when using alfalfa in pasture mixtures.

What seed mixes do the mines use?

A site visit was conducted by OSMRE and State inspectors on September 24th, 2014, to investigate how the mine determines suitable mixes of vegetation for various land use tracts. The seed mix depends on the associated land use tracts, suitable SPGM availability, and is varied for other miscellaneous disturbance areas. Species that are not available during a given year may be replaced with an appropriate substitute, or not included in the mix for that year. All variations are documented appropriately. Croplands are planted with a temporary pre-crop grass/legume seed mix, or planted directly with a small grain crop, depending on the season and potential erosion problems. Road ditches are typically seeded with the same seed mix as the adjacent land use. If that land is cropland, the pre-crop seed mix is typically used. Cover crops of oats or rye are used in place of or in conjunctions with mulching and crimping to prevent erosion. Native grassland hay may be used, depending on price, origin and quality. In croplands, wetland edges are planted in a seed mix beneficial to wildlife and valuable as a hay crop. Wetland basins are not seeded for other land uses, since they are rapidly invaded by wetland vegetation. Wetland

edges are seeded with the same seed mix as the surrounding land use. The specific seed mixes used by the mines can be found in the Reclamation Plan for each permit.

What is required by North Dakota rules?

NDAC 69-05.2-22-02(3) states that when the approved post mining land use is native grassland, the permittee shall select species of grasses, legumes, forbs, half-shrubs or shrubs seeded or planted and their pattern of distribution, to provide a diverse, effective, and permanent vegetative cover with seasonal variety, succession, and regenerative capabilities native to the area. The reclaimed land must be compared to a reference area or an approved standard. According to NDAC 69-05.2-22-07(3)(a), ground cover is required to be equal to or greater than that of the reference area or approved standard with 90 percent statistical confidence, in order to be considered for OSMRE Phase 2 bond release (ND Phase 3). NDAC 69-05.2-22-07(4)(a) and (1) states that, prior to final bond release (OSMRE Phase 3/ND Phase 4), productivity and ground cover are required to be equal to or greater than that of the reference area or approved standard. Equivalence for both productivity and ground cover must demonstrated with 90 percent statistical confidence during any two years after year six of the responsibility period. Diversity, seasonality, and permanence of the reclaimed native grasslands are also required to meet the approved standard.

What is required by Federal regulations?

30 U.S.C. 1269, Sec 519(c)(2) of SMCRA states that Phase 2 bond may be released by the regulatory authority after revegetation has been established on the re-graded mined lands in accordance with the approved reclamation plan. This is reiterated in 30CFR§800.40(c)(2). The reclamation plan is developed by the mine operator and approved by the regulatory authority, which in North Dakota is the North Dakota Public Service Commission. Federal performance standards for revegetation are established in 30CFR§816.116.

OSMRE spot-check to verify adherence to vegetation standards

Three recent bond release applications were spot checked to determine that both cover and diversity on reclaimed native grasslands are at acceptable standards and in compliance with North Dakota Administrative Code 69-05.2-22. Final bond release applications No. 4 and 5 for Permit NACT-9101 at the Freedom Mine, and final bond release application No. 6 for Permit BCGH-8204 at the Glenharold Mine were examined for compliance.

In each case, production, cover and diversity were recorded and compared to standards established in the reclamation plan. The number of native species present by cover and weight were recorded, as were the number, cover and weight of warm season vs. cool season species. Tracts were evaluated on whether they met established standards for both cover and production. Only those tracts that met cover and production standards were submitted for final bond release.

All reclaimed lands submitted as part of final bond releases No. 4 and 5 for Permit NACT-9101 and final bond release No. 6 for Permit BCGH-8204 met the required standards for vegetative production, cover, seasonality and diversity and were found to be in compliance with North Dakota Administrative Code 69-05.2-22.

More detailed information concerning this topic is available in a topic specific entitled, "Suitability of Vegetation Species Selected for Reclamation Activities in North Dakota". This report is available for review in the annual evaluation file at the Casper Area Office or online at the following OSMRE website: <http://odocs.osmre.gov/>

VII. PROGRAM PROBLEMS AND ISSUES

The OSMRE will initiate a corrective action process that applies when problems are identified with a state's approved regulatory program, or the state's actions under that program, that could, if left unaddressed, result in a failure by the state to effectively implement, administer, enforce, or maintain its approved regulatory program. No site-specific issues identified by the CAO during inspections.

During the evaluation year, no regulatory program problems or issues were identified. No regulatory problems were identified that remain uncompleted at the end of the evaluation year.

VIII. OSMRE ASSISTANCE

The OSMRE provides technical assistance and technology support to state Regulatory Programs at the individual state level on project specific efforts, and at the national level in the form of national meetings, forums, and national initiatives. The OSMRE provides direct technical assistance in project and problem investigation, design and analysis, permitting assistance, developing technical guidelines, training and support. The OSMRE initiated a regional Technology Transfer Team in 2004 to support and enhance the technical skills needed to operate regulatory and reclamation programs which each state, including North Dakota, has a representative.

A. National Technical Training Program (NTTP)

Four NDPSC reclamation staff attended NTTP classes during the evaluation year.

B. Technical Innovation and Professional Services (TIPS)

During the evaluation year, one NDPSC staff member attended a TIPS training course. The OSMRE's library services did not receive any requests from the NDPSC for references or article reprints.

C. Financial

The OSMRE contributed Federal funds to help administer and enforce the provisions of SMCRA on Federal and non-Federal lands pursuant to North Dakota's approved permanent program (approved December 1980) and their Cooperative Agreement with the OSMRE. The NDPSC uses these funds to conduct permitting, inspection and enforcement actions, and administrative functions using Federal and matching State funds.

The NDPSC uses these funds to provide State regulation on surface coal mining operations on both Federal and non-Federal lands within the State. For the Federal lands portion of the program, North Dakota was granted funding for Federal land activities pursuant to the Cooperative Agreement with the OSMRE. For non-Federal lands, the State shares one half the cost of the program with OSMRE. For the FY2015 grant period, North Dakota elected to use the Area-Weighted Average Option to calculate the overall Federal funding share for the Regulatory Program.

The North Dakota Regulatory Program submitted a total budget for FY2015 (July 1, 2014 to June 30, 2015) of \$1,459,595. OSMRE awarded the program \$934,141, or 64% of the total budget, in federal assistance. NDPSC maintains a cost effective program with over 65% of the budget dedicated to salary and benefits for 9.4 Full Time Employees (FTEs).

IX. CONCLUSION

Based on the topics evaluated this year, North Dakota has an effective program with no issues that need corrective action. NDPSC actively pursues public participation and outreach efforts. NDPSC employees demonstrate an appropriate level of technical expertise and take advantage of OSMRE and other training opportunities. They also make use of the latest tools and technology. During EY2015, two off-site impacts occurred. During this evaluation year, NDPSC issued two Notices of Violation (NOV-1401 at Center and NOV-1501 at Coyote Creek). A third incident occurred during this evaluation year at the Coyote Creek Mine that resulted in issuance of NOV-1502, however, the NOV was not actually issued until July 7th, 2015, which is during EY2016. Reclamation is occurring as contemporaneously as possible. NDPSC does an appropriate job of collecting and tracking the data necessary to accurately track and assess reclamation success as

well as the contemporaneous nature of that reclamation. Customer service efforts have been demonstrated to be appropriate and scientifically sound. The State conducts the appropriate number of inspections and those inspections are thorough and complete.

APPENDIX 1: Summary of Core Data to Characterize the Regulatory Program**North Dakota Annual Evaluation Report
Evaluation Year 2015**

The following tables present summary data pertinent to mining operations and regulatory activities under the North Dakota regulatory program. Unless otherwise specified, the reporting period for the data contained in the tables is the Evaluation Year. Other data and information used by OSMRE in its evaluation of North Dakota performance are available for review in the evaluation file maintained by the DFD-CAO.

Because of the enormous variations from state to state in the number, size, and type of coal mining operations and the differences between state programs, the summary data should not be used to compare one state to another.

List of Tables

Table 1	Coal Produced for Sale, Transfer, or Use
Table 2	Permanent Program Permits, Initial Program Sites, Inspectable Units, and Exploration
Table 3	Permits Allowing Special Categories of Mining
Table 4	Permitting Activity
Table 5	Off-site Impacts
Table 6	Surface Coal Mining and Reclamation Activity
Table 7	Bond Forfeiture Activity
Table 8	Regulatory and AML Programs Staffing
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Table 15	Land Use Acreage (Optional)

OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

U.S. Department of the Interior

North Dakota
 EY 2015, ending June 30, 2015

TABLE 1

COAL PRODUCED FOR SALE, TRANSFER, OR USE ^A			
(Millions of short tons)			
Calendar Year	Surface Mines	Underground Mines	Total
2011	28.2	0.0	28.2
2012	27.8	0.0	27.8
2013	27.7	0.0	27.7
2014	28.8	0.0	28.8

^A Coal production is the gross tonnage (short tons) and includes coal produced during the calendar year (CY) for sale, transfer or use. The coal produced in each CY quarter is reported by each mining company to OSM during the following quarter on line 8(a) of form OSM-1, "Coal Reclamation Fee Report." Gross tonnage does not provide for a moisture reduction. OSM verifies tonnage reported through routine auditing of mining companies. This production may vary from that reported by other sources due to varying methods of determining and reporting coal production.

North Dakota
EY 2015, ending June 30, 2015

TABLE 2

PERMANENT PROGRAM PERMITS, INITIAL PROGRAM SITES, INSPECTABLE UNITS, AND EXPLORATION															
Mines and Other Facilities	Numbers of Permanent Program Permits and Initial Program Sites						Area in Acres ⁵								
	Permanent Program Permits			Initial Program Sites			Permanent Program Permits (Permit Area)			Initial Program Sites					
	Active	Inactive	Abandoned	Total	Active	Inactive	Abandoned	Total	Insp. Units ²	Federal Lands	State/Tribal and Private Lands	Total Area			
Surface Mines	21	5	0	26	0	0	0	0	26	17,632	115,955	0	133,587		
Underground Mines	0	0	0	0	0	0	0	0	0	0	0	0	0		
Other Facilities	0	0	0	0	0	0	0	0	0	0	0	0	0		
Total	21	5	0	26	0	0	0	0	26	17,632	115,955	0	133,587		
Permanent Program Permits and Initial Program Sites (Number on Federal Lands: 0)								Total Number:	26	Average Acres per Site:				5,137.96	
Average Number of Permanent Program Permits and Initial Program Sites per Inspectable Unit (IU):								Total Number:	1.00	Average Acres per IU:				5,137.96	
Permanent Program Permits in Temporary Cessation:								Total Number:	0	Number More than 3 Years:				0	
EXPLORATION SITES				Total Number of Sites				Sites on Federal Lands⁴				Exploration Inspectable Units			
Exploration Sites with Permits:				0				0				0			
Exploration Sites with Notices:				4				0				0			

¹An Inspectable Unit may include multiple small and neighboring Permanent Program Permits or Initial Program Sites that have been grouped together as one Inspectable Unit, or conversely, an Inspectable Unit may be one of multiple Inspectable Units within a Permanent Program Permit.

²Total Inspectable Units calculation includes Exploration Sites Inspectable Units

³When a Permanent Program Permit or Initial Program Site contains both Federal and State and Private lands, the acreage for each type of land is in the applicable column.

⁴The number of Exploration Sites on Federal lands includes sites with exploration permits or notices any part of which is regulated by the state under a cooperative agreement or by OSRM pursuant to the Federal Lands Program, but excludes exploration sites that are regulated by the Bureau of Land Management

North Dakota
EY 2015, ending June 30, 2015

TABLE 3

PERMITS ALLOWING SPECIAL CATEGORIES OF MINING			
Special Category of Mining	30 CFR Citation Defining Permits Allowing Special Mining Practices	Numbers of Permits	
		Issued During EY	Total Active and Inactive Permits
Experimental Practice	785.13(d)	0	0
Mountaintop Removal Mining	785.14(c)(5)	0	0
Steep Slope Mining	785.15(c)	0	0
AOC Variances for Steep Slope Mining	785.16(b)(2)	0	0
Prime Farmlands Historically Used for Cropland	785.17(e)	1	21
Contemporaneous Reclamation Variances	785.18(c)(9)	0	0
Mining on or Adjacent to Alluvial Valley Floors	785.19(e)(2)	0	0
Auger Mining	785.20(c)	0	0
Coal Preparation Plants Not Located at a Mine Site	785.21(e)	0	0
In-Situ Processing	785.22(e)	0	0
Remining	773.15(m) and 785.25	0	0
Activities in or Within 100 Feet of a Perennial or Intermittent Stream	780.28(d) and/or (e) 784.28(d) and/or (e)	1	5

North Dakota
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TABLE 5

OFF-SITE IMPACTS EXCLUDING BOND FORFEITURE SITES

RESOURCES AFFECTED	People			Land			Water			Structures		
	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major
DEGREE OF IMPACT												
NUMBER OF IMPACT EVENTS												
Blasting	0	0	0	0	0	0	0	0	0	0	0	0
Land Stability	0	0	0	0	0	0	0	0	0	0	0	0
Hydrology	1	0	0	0	0	0	1	0	0	0	0	0
Encroachment	1	0	0	1	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	0	0	1	0	0	1	0	0	0	0	0

Total Number of Inspectable Units¹: 27
 Inspectable Units with one or more off-site impacts: 2
 Exploration Inspectable Units with one or more off-site impacts²: 0
 Inspectable Units free of off-site impacts: 25 % of Inspectable Units free of off-site impacts⁴: 93

¹ Total number of Inspectable Units is (1) the number of active and inactive inspectable units at the end of the Evaluation Year and (2) the number of Inspectable Units that were final bond released or removed during the Evaluation Year

² Exploration Inspectable Units with one or more off-site impacts is a subset of Inspectable Units with one or more off-site impacts

OFF-SITE IMPACTS AT BOND FORFEITURE SITES

RESOURCES AFFECTED	People			Land			Water			Structures		
	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major
DEGREE OF IMPACT												
NUMBER OF IMPACT EVENTS												
Blasting	0	0	0	0	0	0	0	0	0	0	0	0
Land Stability	0	0	0	0	0	0	0	0	0	0	0	0
Hydrology	0	0	0	0	0	0	0	0	0	0	0	0
Encroachment	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0									

Total Number of Inspectable Units³: 0
 Inspectable Units with one or more off-site impacts: 0
 Inspectable Units free of off-site impacts: 0 % of Inspectable Units free of off-site impacts⁴: 0

³ Total number of Inspectable Units is (1) the number of bond forfeiture sites that were reclaimed during the Evaluation Year and (2) the number of bond forfeiture sites that were unreclaimed at the end of the Evaluation Year

North Dakota
EY 2015, ending June 30, 2015

TABLE 5
(Continued)

TOTAL OFF-SITE IMPACTS INCLUDING BOND FORFEITURE SITES														
RESOURCES AFFECTED	DEGREE OF IMPACT	NUMBER OF IMPACT EVENTS	People			Land			Water			Structures		
			Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major
Blasting	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Land Stability	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrology	1	0	0	0	0	0	0	1	0	0	0	0	0	0
Encroachment	1	0	0	0	1	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	0	0	0	1	0	0	1	0	0	0	0	0	0
Total Number of Inspectable Units ⁵ :						27								
Inspectable Units with one or more off-site impacts:						2								
Exploration Inspectable Units with one or more off-site impacts:						0								
Inspectable Units free of off-site impacts:						25			% of Inspectable Units free of off-site impacts ⁴ :			93		

⁴ % of Inspectable Units free of off-site impacts is based on the number of Inspectable Units during the Evaluation Year. The number of Inspectable Units may vary during the Evaluation Year.

⁵ Total number of Inspectable Units is (1) the number of active and inactive Inspectable Units at the end of the Evaluation Year and (2) the number of Inspectable Units that were final bond released or removed during the Evaluation Year and (3) the number bond forfeiture sites that were reclaimed during the Evaluation Year and (4) the number of bond forfeiture sites that were unreclaimed at the end of the Evaluation Year.

North Dakota
EY 2015, ending June 30, 2015

TABLE 6

SURFACE COAL MINING AND RECLAMATION ACTIVITY						
Areas of Phase I, II, and III Bond Releases During the Evaluation Year (EY)						
Phase I Releases	Phase II Releases		Phase III Releases			Total Acres Released During the EY
	Total Acres Released in Approved Phase II Releases	Acres not previously released under Phase I	Total Acres Released in Approved Phase III Releases	Acres not previously released under Phase II	Acres not previously released under Phase I or II	
0	0	0	654	654	76	Phase I 76 Phase II 654 Phase III 654
Number of Permanent Program Permits with Jurisdiction Terminated Under Phase III Bond Release During the Evaluation Year						
0						
Initial Program Sites with Jurisdiction Terminated During the Evaluation Year						
1						
Number of Inspectable Units Removed						
1						
Administrative Adjustments						
0						
Bond Forfeiture						
0						
Other Releases - Acres						
Administrative Adjustments						
0						
Bond Forfeiture						
0						
Areas of Permits Bonded for Disturbance by Surface Coal Mining and Reclamation Operations						
	Total Acres at Start of EY	Total Acres at End of EY	Change in Acres During EY			
New Area Bonded for Disturbance			2,744			
Total Area Bonded for Disturbance	125,881	127,971	2,090			
Area Bonded for Disturbance without Phase I Bond Release	122,323	124,991	2,668			
Area Bonded for Disturbance for which Phase I Bond Release Has Been Approved	3,556	2,980	(576)			
Area Bonded for Disturbance for which Phase II Bond Release Has Been Approved	0	0	0			
Area Bonded for Disturbance with Bonds Forfeited During Evaluation Year			0			
Area Bonded for Remaining	0	0	0			
Areas of Permits Disturbed by Surface Coal Mining and Reclamation Operations						
Disturbed Area	73,575	75,483	1,908			

North Dakota
 EY 2015, ending June 30, 2015

TABLE 7

BOND FORFEITURE ACTIVITY (Permanent Program Permits)			
Bond Forfeiture and Reclamation Activity	Number of Sites	Dollars	Acres
Sites with bonds forfeited and collected that were un-reclaimed at the start of the current Evaluation Year (i.e. end of previous Evaluation Year) ¹	0		0
Sites with bonds forfeited and collected during the current Evaluation Year	0	0	0
Sites with bonds forfeited and collected that were re-permitted during the current Evaluation Year	0		0
Sites with bonds forfeited and collected that were reclaimed during the current Evaluation Year	0		0
Sites with bonds forfeited and collected that were un-reclaimed at the end of the current Evaluation Year ¹	0		0
Sites with bonds forfeited but un-collected at the end of the current Evaluation Year	0		0
Forfeiture Sites with Long-Term Water Pollution			
Bonds forfeited, lands reclaimed, but water pollution is still occurring	0		
Bonds forfeited, lands reclaimed, and water treatment is ongoing	0		
Surety/Other Reclamation Activity In Lieu of Forfeiture			
Sites being reclaimed by surety/other party at the start of the current Evaluation Year (i.e., the end of previous Evaluation Year) ²	0		0
Sites where surety/other party agreed during the current Evaluation Year to do reclamation	0		0
Sites being reclaimed by surety/other party that were re-permitted during the current Evaluation Year	0		0
Sites with reclamation completed by surety/other party during the current Evaluation Year ³	0		0
Sites being reclaimed by surety/other party at the end of the current Evaluation Year ²	0		0
¹ Includes data only for those forfeiture sites not fully reclaimed. ² Includes all sites where surety or other party has agreed to complete reclamation and the site is not fully reclaimed. ³ These sites are also reported in Table 6, Surface Coal Mining and Reclamation Activity, because Phase III bond release would be granted on these sites.			

North Dakota
 EY 2015, ending June 30, 2015

TABLE 8

REGULATORY AND AML PROGRAMS STAFFING	
Function	Number of FTEs
Regulatory Program	
Permit Review and Maintenance	5.20
Inspection	2.10
Other (supervisory, clerical, administrative, fiscal, personnel, etc.)	2.10
Regulatory Program Total	9.40
AML Program Total	4.50
TOTAL	13.90

OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

U.S. Department of the Interior

North Dakota
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TABLE 9

FUNDS GRANTED TO STATE OR TRIBE BY OSM (Actual Dollars Rounded to the Nearest Dollar)			
Type of Funding	Federal Funds Awarded	Total Program Cost	Federal Funds Awarded as a Percentage of Total Program Costs
Regulatory Funding			
Administration and Enforcement Grant	934,141		
Other Regulatory Funding, if applicable	0		
Subtotal (Regulatory Funding)	934,141	1,459,595	64
Small Operator Assistance Program Grant Funding	0	0	
Abandoned Mine Land Reclamation Funding	2,781,000	2,781,000	100
Watershed Cooperative Agreement Program	0	0	
TOTAL	3,715,141		

North Dakota
 EY 2015, ending June 30, 2015

TABLE 10

STATE INSPECTION ACTIVITY INSPECTABLE UNITS FOR WHICH STATE MET REQUIRED INSPECTION FREQUENCY ON AN INSPECTABLE UNIT-BY-INSPECTABLE UNIT BASIS ¹													
Inspectible Units (IUs)	Total number of inspectable units ²	Number of inspections required annually		Number of inspections conducted		IUs Met Complete Inspection Frequency Requirement		IUs Met Partial Inspection Frequency Requirement		IUs Met Complete and Partial Inspection Frequency Requirements			
		Complete inspections	Partial inspections	Complete inspections	Partial inspections	Number	Percent	Number	Percent	Total number of IUs	Number that met inspection frequency	Percent	
COAL MINES AND FACILITIES													
Active	21	84	168	87	487	21	100	21	100	21	21	100	
Inactive	5	20	0	22	69	5	100	5	100	5	5	100	
Abandoned	0	0	0	0	0	0	0	0	0	0	0	0	
TOTALS ³	26	104	168	109	556	26	100	26	100	26	26	100	
Coal Exploration Activities ⁴													
Complete Inspections						Partial Inspections							
Exploration sites with permits		0		3		0		0		0		0	
Exploration sites with notices		0		0		0		0		0		0	

¹ Calculated on a site-specific basis.

² Total number includes both permanent program permits and initial program sites.

³ OSM is assuming that all states have gone through the process described in 30 CFR 840.11(h) and 842.11(f) to reduce inspection frequency on abandoned/forfeited sites

⁴ Includes all valid notices and permits. No inspection frequency data are provided since SM/CRA does not establish a minimum numerical inspection frequency for coal exploration activities.

⁵ NA - Not Available

North Dakota
EY 2015, ending June 30, 2015

TABLE 11

STATE OR TRIBAL ENFORCEMENT ACTIVITY		
Type of Enforcement Action	Number of Actions ¹	Number of Violations ¹
Notice of Violation	2	2
Failure-to-Abate Cessation Order	0	0
Imminent Harm Cessation Order	0	0

¹ Does not include actions and violations that were vacated.

North Dakota
 EY 2015, ending June 30, 2015

TABLE 12

LANDS UNSUITABLE ACTIVITY		
Activity	Number	Acres
Petitions Received	0	
Petitions Rejected	0	
Petitions Accepted	0	
Decisions Denying Petition	0	
Decisions Declaring Lands Unsuitable	0	0
Decisions Terminating Unsuitable Designations	0	0

North Dakota
EY 2015, ending June 30, 2015

TABLE 13

OSM OVERSIGHT ACTIVITY					
Oversight Inspections and Site Visits					
	Complete		Partial		Total
	Joint	Non-Joint	Joint	Non-Joint	
Oversight Inspections	3	0	4	0	7
	Technical Assistance		Other		Total
Site Visits	0		0		0
Violations Observed by OSM and Citizen Requests for Inspection¹					
Type of Action					Total number of each action
How many violations were observed by OSM on oversight inspections?					0
Of the violations observed, how many did OSM defer to State action during inspections?					0
Of the violations observed, how many did OSM refer to the State through Ten-Day Notices? ²					0
How many Ten-Day Notices did OSM Issue for observed violations? ³					0
How many Ten-Day Notices did OSM issue to refer citizen requests for inspection?					0
How many Notices of Violation did OSM issue?					0
How many Failure-to-Abate Cessation Orders did OSM issue?					0
How many Imminent Harm Cessation Orders did OSM issue?					0
OSM Action for Delinquent Reporting or Non-Payment of Federal AML Reclamation Fees					
How many Ten-Day Notices for delinquent reporting or non-payment of Federal AML reclamation fees did OSM issue?					0
How many Notices of Violation for delinquent reporting or non-payment of Federal AML reclamation fees did OSM issue?					0
How many Federal Failure-to-Abate Cessation Orders for delinquent reporting or non-payment of Federal AML reclamation fees did OSM issue?					0
¹ This section does not include actions for delinquent reporting or non-payment of Federal AML fees that are reported in the last section of the table. ² Number of violations contained in Ten-Day Notices not including those issued to refer citizen requests for inspection. ³ Number of Ten-Day Notices issued not including those to refer citizen requests for inspection.					

North Dakota
EY 2015, ending June 30, 2015

TABLE 14

STATUS OF ACTION PLANS						
Action Plan ID	Problem Type ¹	Problem Title	Problem Description	Date Action Plan Initiated	Scheduled Completion Date	Actual Completion Date
None						

¹ Problem Type: "PA" indicates a required Program change under subchapter T or 732.
"RP" indicates a Regulatory Program implementation or administrative problem

North Dakota
 EY 2015, ending June 30, 2015

**TABLE 15
 (Optional)**

POST-MINING LAND USE ACREAGE OF SITES FULLY RECLAIMED (Phase III bond release or termination of jurisdiction under the Initial Program)	
Land Use¹	Acres Released
Cropland	521.18
Pasture/Hayland	0.00
Grazingland	0.00
Forestry	0.00
Residential	0.00
Industrial/Commercial	2.00
Recreation	0.00
Fish & Wildlife Habitat	0.00
Developed Water Resources	13.20
Undeveloped land or no current use or land management	0.00
Other - Public Utilities	0.00
Other - Roads	0.80
Other - Undisturbed	116.68
Other -	0.00
Sub-Total Other	117.48
Total	653.86

¹ Land uses as defined in 30 CFR 701.5 or "Other" as defined under the state or tribal program

APPENDIX 2: COMMENTS OF STATE OF NORTH DAKOTA ON THE REPORT

North Dakota Annual Evaluation Report

Evaluation Year 2015

Initial comments from the NDPSC regarding this report were received by the CAO on August 31, 2015. The numbers reported in Table 6 were discussed and verified. Clarification was offered on the narrative sections of this report dealing with NOVs and complaints/customer service. The assistance of the NDPSC in providing information for this report is greatly appreciated.

A second round of comments was discussed during the fall oversight meeting in Bismarck. Comments and suggestions were mostly in regard to the text of the report and addressed grammatical errors. The record of events involving off-site impacts and any associated NOVs were also clarified. Technical aspects of the special study topic were also discussed and language was added to the report to reflect proper terminology.