

OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

**Annual Evaluation Summary Report
For the**

North Dakota Public Service Commission

Regulatory Program



Evaluation Year 2017

**Produced by the Denver Field Division
Casper Area Office**

EXECUTIVE SUMMARY

This report covers the period of July 1, 2016 to June 30, 2017. Over the past year, the Office of Surface Mining Reclamation and Enforcement (OSMRE) 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

Both North Dakota and OSMRE continue to solicit public comment and input on individual applications and the regulatory program at large. North Dakota staff participated in a number of public hearings and meetings.

Major Accomplishments and Innovations

NDPSC staff completed a draft update to the Revegetation Success Guidelines. Industry has provided comments on the revised document and final updates are expected to be completed in the next year or so. NDPSC also successfully defended a ND Supreme Court challenge to their Alluvial Valley Floor (AVF) determination for the Coyote Creek Mine.

Off-Site Impacts

During EY2017, two off-site impacts were recorded by NDPSC, resulting in issuance of two Notices of Violation (NOV-1601 at the Coyote Creek Mine and NOV-1701 at the Beulah Mine).

Reclamation Success

Currently in North Dakota, a total of 133,327 acres have been permitted, with approximately 80,022 acres (60%), disturbed by mining activity to date. Of these disturbed acres, approximately 55,519 acres have been backfilled, graded, top-soiled and seeded; or 69% of the lands disturbed have been reclaimed to the point of establishing vegetation. Of the 55,519 acres that have been backfilled, graded, top-soiled and seeded, 15,741 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 responded to numerous inquiries from the public regarding mining company responsibilities and reclamation requirements. They also continue to provide the opportunity for opportunity for public participation in permitting (including revisions) and bond release processes.

Maintenance of the Approved Program

OSMRE received North Dakota's formal amendment proposal for State Program Amendment XLI (ND-054-FOR). The amendment proposes rule changes which revise the definition of

“coal” in North Dakota’s reclamation law by adding the phrase “or commercial leonardite” after the word “coal,” and adding a new definition of “commercial leonardite.” The proposed rule Federal Register notice was published on March 31, 2017. The public comment period closed on May 1, 2017. The draft final rule Federal Register notice and technical reviewer findings were sent to the Regional Solicitor for review and comment on July 7, 2017.

A Review of Rules Governing Blasting at Surface Coal Mines in North Dakota

The Denver Field Division (DFD) conducted an evaluation of North Dakota rules and laws governing blasting at surface coal mines in North Dakota. The focus of this study was to evaluate operator’s adherence to applicable state rules and laws. Performance standards for blasting as found in NDAC 69-0.5.2-19 were examined. Office records, blasting plans and field conditions at multiple permits of the Coteau Freedom Mine were reviewed during OSMRE inspections conducted October 5th, 2016 and May 9th, 2017.

OSMRE Assistance

For this past year, the North Dakota Regulatory Program conducted operations for OSMREs 2016 fiscal year (July 1, 2016 to June 30, 2017) with a budget of \$1,512,456. OSMRE awarded the program \$967,972. To conduct operations during this coming year, The North Dakota Regulatory Program submitted a total budget for OSMREs 2017 fiscal year (July 1, 2017 to June 30, 2018) of \$1,554,121. OSMRE awarded the program \$994,638 in federal assistance. During the evaluation year, no NDPSC reclamation staff attended any NTTP’s classes and two Reclamation Division staff attended the TIPS Global Mapper training course

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	OVERVIEW OF COAL MINING INDUSTRY IN NORTH DAKOTA.....	2
III.	OVERVIEW OF THE PUBLIC PARTICIPATION AND OUTREACH EFFORTS.....	4
A.	OSMRE.....	5
B.	North Dakota.....	5
IV.	MAJOR ACCOMPLISHMENTS AND INNOVATIONS.....	7
V.	SUCCESS IN ACHIEVING THE PURPOSES OF SMCRA	8
A.	Off-site Impacts	8
B.	Reclamation Success.....	9
C.	Customer Service	16
VI.	NATIONAL PRIORITY AND GENERAL OVERSIGHT TOPIC REVIEWS.....	17
A.	National Priority Reviews.....	17
B.	General Oversight Topic Reviews	17
C.	Special Study Topics.....	19
VII.	PROGRAM PROBLEMS AND ISSUES.....	20
VIII.	OSMRE ASSISTANCE.....	21
A.	National Technical Training Program (NTTP).....	21
B.	Technical Innovation and Professional Services (TIPS).....	21
C.	Financial.....	21
IX.	CONCLUSION	22
	APPENDIX 1: Summary of Core Data to Characterize the Regulatory Program	23
	APPENDIX 2: Comments of State of North Dakota on the Report	40

Cover Page Photograph: Photo shows coal lifted and fractured by a recent blast at the Freedom Mine, Permit NACT-0401.

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 2017 Evaluation Year (EY) July 1, 2016 to June 30, 2017.

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 on 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 2017 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
ASMR	American Society of Mining and Reclamation
AVF	Alluvial Valley Floor
AVS	Applicant Violator System
BLM	Bureau of Land Management
CAO	OSMRE’s Casper Area Office

CO	Cessation Order
DFD	OSMRE's Denver Field Division
DOJ	Department of Justice
DSU	Dickinson State University
EY	Evaluation Year
FAM	OSMRE's Federal Assistance Manual
GIS	Geographic Information System
GPS	Global Positioning System
IMCC	Interstate Mining Compact Commission
IT	Industrial Technology
LEC	Lignite Energy Council
NDCC	North Dakota Century Code (Law)
NDAC	North Dakota Administrative Code (Rules)
NDDH	North Dakota Department of Health
NDPSC	North Dakota Public Service Commission
NDSU	North Dakota State University
NOV	Notice of Violation
NTTP	National Technical Training Program
OMB	Office of Management and Budget
OSMRE	Office of Surface Mining Reclamation and Enforcement
PA	Performance Agreement
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 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. The relatively shallow beds allow for economic stripping ratios ranging from 1.5:1 to 11:1. The low sulfur content of North Dakota lignite contributes to the general lack of acidification problems experienced at current and historic coal mining operations within the State. All active coal mines in North Dakota are currently large-scale surface mines, and 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 2016, it produced just under 27.6 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 unpublished data from the Department of Agricultural Economics at North Dakota State University, the lignite industry is North Dakota's fifth largest industry, accounting for \$3.4 billion of the state's economic base in 2015. It is estimated that the lignite industry directly employs 3,942 people and indirectly employs 11,540 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.

North Dakota currently has six surface coal mining operations, with a total of 25 permits. Twenty permits are actively mining while the remaining five are exclusively in reclamation. The state began EY2017 with 26 permits and ended the year with 25 permits. Revision 1 to Permit NACC-1301 at the Coyote Creek Mine was approved on November 30, 2016, which deleted all

84.24 acres in the permit, effectively closing it. All land encompassed by NACC-1301 was also permitted under Permit NACC-1302, so this action did not change the total number of permitted acres from EY2016 for either the Coyote Creek Mine, or the state. A total of 133,327 acres are currently permitted and all of those acres are bonded in North Dakota (Appendix 1, Tables 2 and 6). Approximately 80,022 of those permitted acres have been disturbed by mining operations, and 55,519 of those acres have been backfilled, graded, top-soiled and seeded to achieve the intended post-mining land use. Of the 55,519 acres that have been backfilled, graded, top-soiled and seeded, 15,741 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.

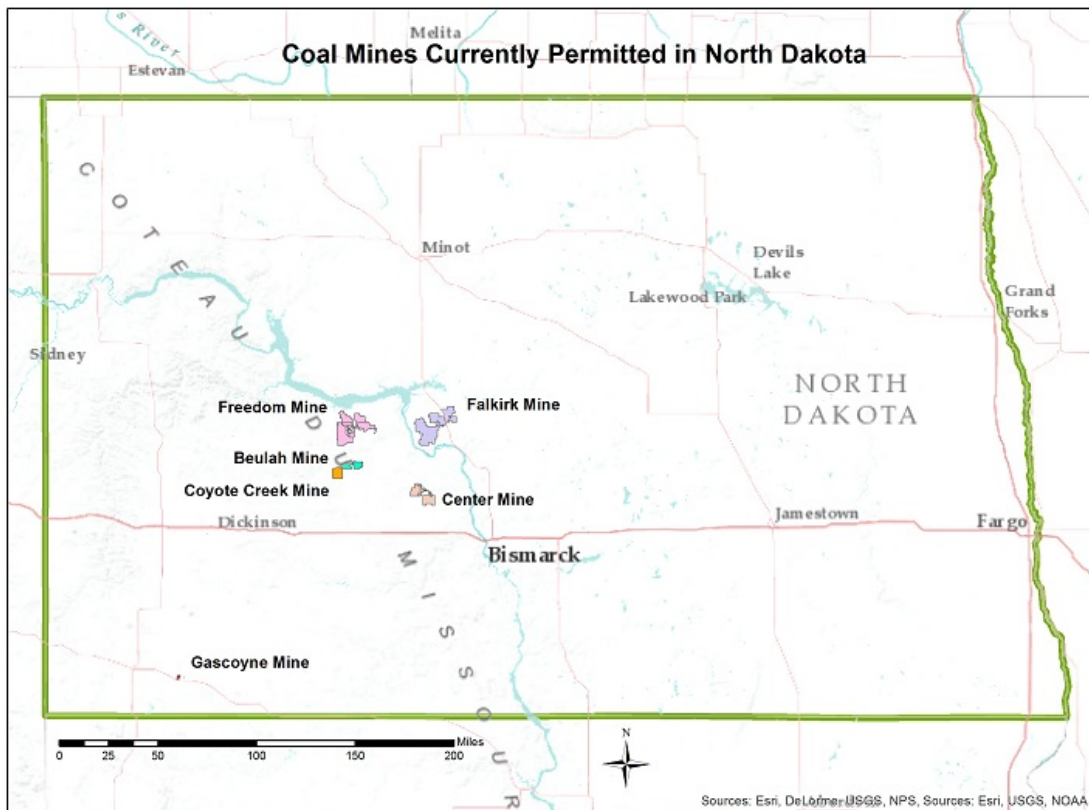


Figure 1: Map of Permitted Coal Mines in North Dakota

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 and significant revision 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 via the internet at the OSMRE Oversight Documents website at <http://odocs.osmre.gov/>. The Introduction section of this report details how to access information using this website.

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 2017 evaluation year was distributed on March 2th, 2016. OSMRE's public solicitation for comment on the 2018 evaluation year was distributed on February 27th, 2017. 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.

The OSMRE-DFD did not receive any comments or suggestions for potential oversight topics for the 2017 or 2018 evaluation years. In joint discussions with the NDPSC, it was decided to evaluate blasting procedures at mines in North Dakota for the EY2017 oversight report. For the EY2018 report, no additional special study topics will be evaluated. Methodologies for each evaluation are discussed in the annual Performance Agreements between OSMRE and NDPSC.

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 mining companies publish notices for proposed

permit revisions in local and state newspapers and the NDPSC places notices 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 making significant changes to an existing permit 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 at 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 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. Surface owners and county officials are also provided the opportunity to participate in bond release inspections. The requirements for bond release notification are further clarified by NDPSC Policy Memo No. 9.

During the 2017 evaluation year, the North Dakota Regulatory Program participated in the following public meetings, conferences, workshops or other events involving the press or public notification:

- Interstate Mining Compact Commission (IMCC) Annual & Midyear Meetings
- Lignite Energy Council (LEC) Annual & Midyear Meetings & Quarterly PSC/LEC Joint meetings
- IMCC Bonding Workshop (provided data on our bonding program & input into several bonding documents)
- OSMRE Grants Workshop

- OSMRE Western States Meeting
- NDSU/DSU Reclamation Workshop in Dickinson
- Aquatic Assessment workshop
- Staff participated in several professional related meetings (Range Society, ASMR, Geological Society, etc.)
- Several staff participated in GIS related workshops and training

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

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, three large active permits for the Freedom Mine, two permits for the Center Mine, one active permit for the Beulah Mine and the one active permit 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 following accomplishments by the North Dakota Regulatory Program during the 2017 evaluation year are worthy of note:

- ND Regulatory staff completed a draft update to the Revegetation Success Guidelines. The draft document has been provided to industry and other agencies and interested parties for review and comments. Industry has provided comments on the revised document and a meeting will be scheduled in the future to discuss their comments. Final updates are expected to be in the next year or so.
- NDPSC successfully defended a ND Supreme Court challenge of their Alluvial Valley Floor (AVF) determination for the Coyote Creek Mine.

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 EY2017, North

Dakota reported that twenty three out of twenty five (92%) inspectable units were free of off-site impacts. (Appendix 1, Table 5).

An off-site impact occurred at Coyote Creek's Permit NACC-1302 due to runoff from significant rain events, occurring on July 3rd, 10th, and 16th, 2016. The heavy rains caused erosion and deposition of sediment on public and private lands along a four mile stretch of haul road located north of the County Road 12 grade separation.

A second off-site impact occurred at Beulah Mine's Permit KRSB-8603. The impact was noted during a state inspection conducted on March 22nd, 2017. Uncontrolled runoff from a haul road segment caused an erosional gully to develop in adjacent, undisturbed land and resulted in siltation of an intermittent stream.

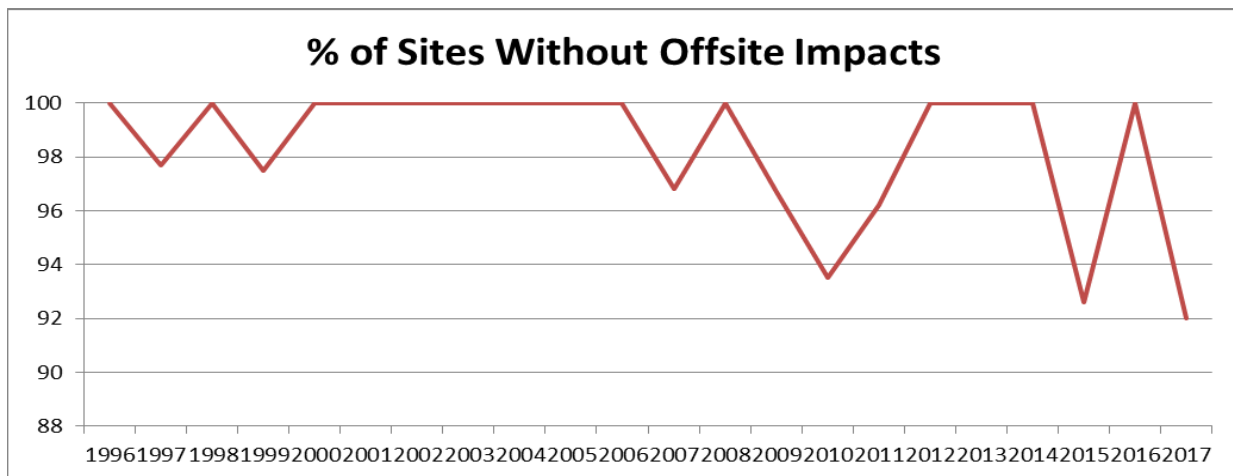


Figure 2: Percentage of sites free of off-site impacts.

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 2017							
YEAR	PHASE I	PHASE II	PHASE III	YEAR	PHASE I	PHASE II	PHASE III
1976-1998	5812	3363	51	2009	816	867	928
1999	834	1021	1933	2010	3006	2905	3042
2000	372	372	496	2011	1113	1137	1137
2001	1872	305	305	2012	1407	1698	1698
2002	0	0	109	2013	1219	1219	1219
2003	88	72	72	2014	324	334	334
2004	945	546	838	2015	68	538	538
2005	198	398	1729	2016	9	9	9
2006	711	292	437	2017	0	0	0
2007	219	219	347				
2008	407	459	519	TOTAL	19,420	15,754	15,741

Figure 3: Phases of Bond Release of Disturbed Lands (acres) from 1976 to 2017.

During the course of this evaluation year, no final bond was released to mines in North Dakota. As of June 30th, 2017, a total of six bond release applications were under review by ND PSC.

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 24% (19,420 acres) of the disturbed lands (80,022 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 20% (15,754 acres) of the disturbed lands (80,022 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 20% (15,754 acres) of the disturbed lands (80,022 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 20% (15,741 acres) of the disturbed lands (80,022 acres) in North Dakota have received Phase III (final) Bond Release. Approximately 42% of the reclaimed lands that have been seeded for 10 or more years (33,584 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 20% (15,741 acres) of the disturbed lands (80,022 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 20% (15,741 acres) of the disturbed lands (80,022 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

20% (15,741 acres) of the disturbed lands (80,022 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 only bond release statistics 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 actually released from final bond in North Dakota tends to be significantly less than the number of acres that may be eligible for bond release. Land that is eligible for final bond release must be graded, soiled, seeded then, go through a 10 year evaluation period, during which revegetation standards must be met. As it is economically advantageous for operators to include large chunks of eligible land in bond release applications, final bond release tends to occur in spurts, with periods of a large amount of bond release followed by periods of little bond release. To gain insight on the true state of reclamation success, it is useful to monitor both final bond release and grading, soiling and seeding activities.

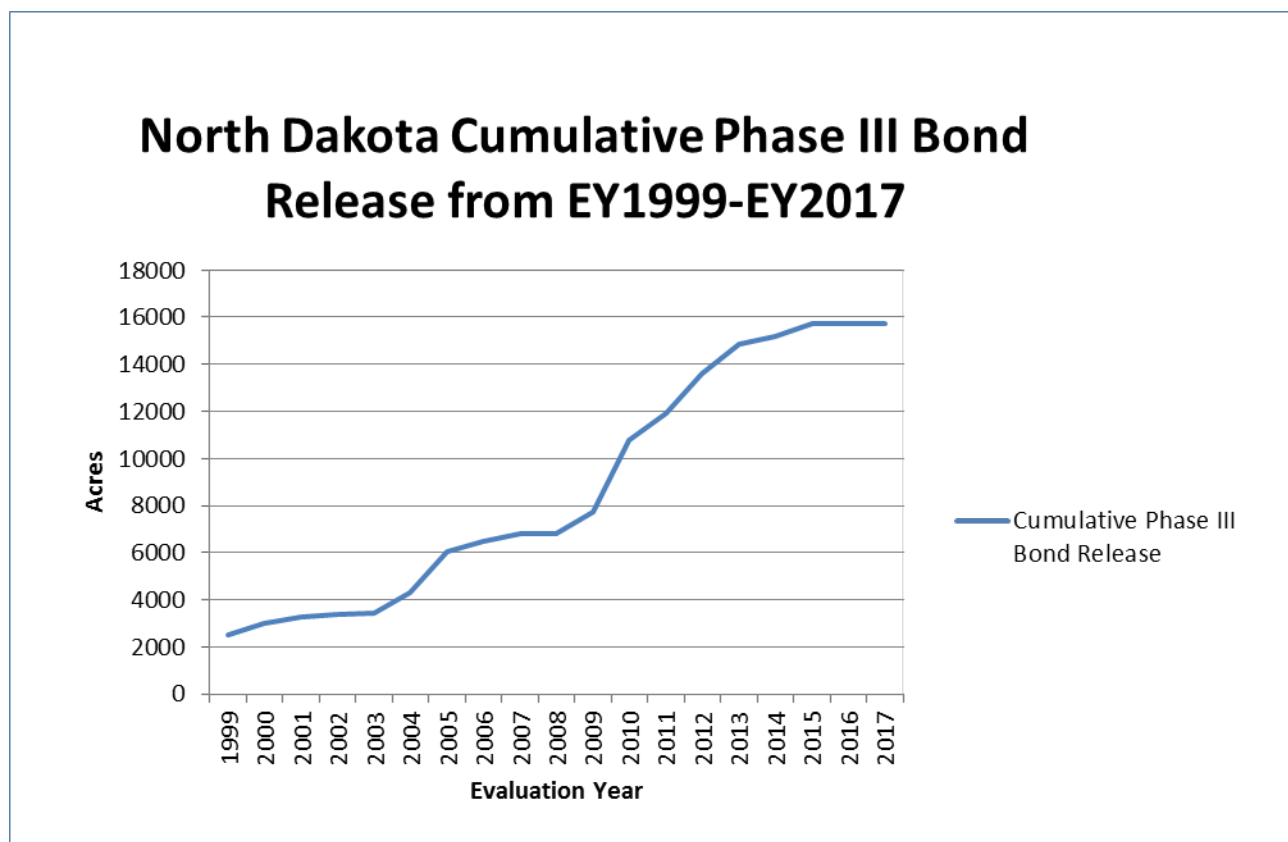


Figure 4: Trend of Increasing Bond Release in North Dakota

Figure 4 (above) plots the number of acres Phase III (final) bond release of disturbed lands since 1999. The rate at which final bond release is occurring is indicated by the slope of the line. This illustrates the tendency for final bond release to occur in spurts, with periods of a large amount of bond release

followed by periods of little bond release. The last few years have seen a slowdown in the amount of final bond released in North Dakota.

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. Thus, the rate at which contemporaneous reclamation is occurring can 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 for large tracts of land, and then file for all phases of bond release at once. As a result, the number of acres released from final bond in North Dakota tends to be 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 133,327 acres are permitted, with approximately 80,022 acres (60%), disturbed by mining activity to date. Of these disturbed acres, approximately 54,094 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 contemporaneously (timely) the State's mines are reclaiming land disturbed by mining, 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.

Low ratios of reclamation to disturbance indicate that reclamation is not progressing at the same rate as mining. Conversely, high ratios of reclamation to disturbance indicate that reclamation is occurring faster than disturbance.

Figures 5 and 6 illustrate the overall mining and reclamation activities for the North Dakota coal mines since 1999. They 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. Note that the lines indicating disturbed (blue line) and graded/soiled/seeded (red line) in Figure 6 are roughly parallel, indicating the rate of reclamation is roughly the same as the rate of disturbance.

EVAL. YEAR	ACRES DISTURBED	Cumulative Acres Disturbed	DISTURBED ACRES RECLAIMED to VEGETATION (graded/soiled/seeded)	Cumulative Disturbed Acres Reclaimed to Vegetation	Annual RATIO OF RECLAIM VS DISTURB	Cumulative RATIO OF RECLAIM 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
2016	2,530	78,013	1,468	52,511	0.58	0.67
2017	2,009	80,022	1,990	54,095	0.99	0.67

Figure 5: North Dakota Reclamation Summary

Source of data: ND-PSC

Figure 5 (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 0.67, as indicated on the chart. This ratio indicates that 67 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 18 years from 0.58 to its current ratio of 0.67. This reflects favorably on the contemporaneous nature of reclamation efforts in North Dakota.

Figure 6 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. The last three years have seen a slowdown in the rate at which final bond release is achieved, as indicated by the slope of the blue line in Figure 4.

However, the rate at which lands are graded, soiled and seeded continues to parallel the rate that lands are disturbed, demonstrating that even though there has been a significant reduction in the amount of final bond released in recent years, reclamation is occurring at a contemporaneous rate. There is every reason to believe that the blocky pattern of final bond release will continue as more acres go through the process of grading, soiling and seeding at a consistent rate.

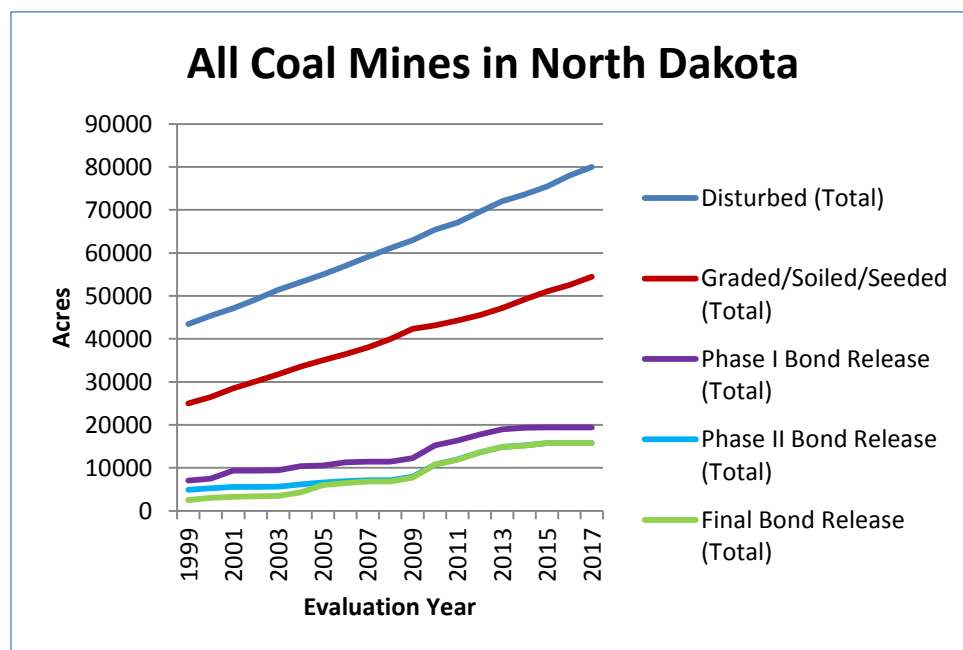


Figure 6: Rates of Disturbance at Coal Mines in North Dakota

Source of data: ND-PSC

Figure 6 (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 (2,980 more acres) released than Phase II or III, primarily due to the greater financial incentive (release of 40% of bond) and the relatively short time required for such bond release. 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 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 disturbed 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 EY2017, the NDSPC routinely responds to requests for assistance from citizens.

The North Dakota Program addressed the following landowner concerns or customer service related issues during EY2017:

- Reclamation Division staff responded to several landowner inquiries and/or concerns regarding mining and reclamation issues (no formal complaints were received during this evaluation period).
- Continue to provide the opportunity for public participation in permitting (including revisions) and bond release processes.

The NDSPC 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. There were no National Priority Reviews this evaluation year.

B. General Oversight Topic Reviews

General Oversight Topic Reviews are conducted as specified in the North Dakota Performance Agreement. For EY2017, CAO has elected to evaluate the following topics:

Maintenance of the Approved Program

ND-054-FOR (State Program Amendment XLI)

OSMRE received North Dakota's formal amendment proposal on May 19, 2016. A letter has been sent to the State confirming receipt of the amendment and processing has begun. The amendment proposes rule changes as a result of Senate Bill 2377 which revised the definition of "coal" in North Dakota's reclamation law by adding the phrase "or commercial leonardite" after the word "coal," and adding a new definition of "commercial leonardite." Letters have been sent to interested parties along with electronic copies of the amendment for comment. So far all responses received back have been "no comment." On June 9, 2016 the proposed rule Federal Register notice was sent to Headquarters for processing and publication. The proposed rule Federal Register notice was published on March 31, 2017. The public comment period closed on May 1, 2017. The draft final rule Federal Register notice and technical reviewer findings were sent to the Regional Solicitor for review and comment on July 7, 2017.

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

State Inspection Frequency

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 EY2017, North Dakota reported 20, active, permanent program permits, and 5 inactive permanent program permits. North Dakota no longer has any initial program sites. The total number of State inspections required for EY2017 is 100 complete inspections and 160 partial inspections.

The NDPSC continues to conduct frequent and thorough inspections. North Dakota conducted 80 complete inspections and 486 partial inspections on all active mine sites during this evaluation year. North Dakota also conducted 20 complete inspections and 60 partial inspections on all inactive mine sites during this evaluation year. This comes to a total of 100 complete inspections and 546 partial inspections conducted during EY2017. This exceeds the number of inspections required and helps to demonstrate the State program's commitment to effective and thorough oversight of coal mining activities within the State of North Dakota.

State Enforcement Actions

During EY2017, North Dakota inspectors issued a total of two NOVs and no cessation orders.

NOV-1601

At Coyote Creek's Permit NACC-1302, runoff from significant rain events, occurring on July 3rd, 10th, and 16th, 2016 caused erosion and deposition of sediment on public and private lands along a four mile stretch of haul road located north of the County Road 12 grade separation. The impacted area included both public and private lands located on and off of the permit. This impact was noted during state inspections on July 12th and 18th. The state issued NOV-1601 to the Coyote Creek Mining Co. LLC on July 21st, 2016, citing violation of the following state rules and laws: NDCC 38-14.1-24(8)(b), NDCC 38-14.1-24(15), NDAC 69-5.2-16-08(1)(a&d), NDAC 69-5.2-24-01(2)(c). The operator requested an informal conference with NDPSC, and requested that the NOV be vacated. An informal conference was scheduled for November 3rd 2016. NDPSC assessed a penalty for NOV-1601 of \$2500. The operator paid the assessed penalty on October 7th, 2016 and withdrew its request for an informal conference on October 12th, 2016. Reclamation Division staff inspected the required remedial actions on November 2nd and 15th, 2016 and determined them to be satisfactorily completed. NOV-1601 was terminated on November 30th, 2016.

NOV-1701

At the Beulah Mine, uncontrolled runoff from a haul road segment in Permit KR5B-8603 caused an erosional gully to develop in adjacent, undisturbed land and resulted in siltation of an

intermittent stream. The impacted area included lands located both on and off of the permit. This impact was noted during a state inspection on March 22nd, 2017. The state issued NOV-1701 to the Dakota Westmoreland Corporation on the same day, citing violation of the following state rules and laws: NDCC 38-14.1-24(15), NDAC 69-5.2-24-01(2)(a), and NDAC 69-05.2-24-01(5). Email correspondence from the operator on April 26th, 2017 states that remediation has been accomplished. Inspection of the remedial work by Reclamation Division personnel is pending.

OSMRE Oversight Inspection Activity

The CAO conducted eight complete oversight inspections and one partial oversight inspections. Complete inspections were conducted at the Freedom Mine, Permit NACT-8102, NACT-8203, NACT-8401, NACT-8503, NACT-8601, NACT-9001, and the Gascoyne Mine, Permit KRGC-8101, KRGC-8404. A partial inspection was conducted at the Freedom Mine Permit NACT-0401. Both inspections at the Gascoyne Mine were considered short-notice inspections with less than 24-hour advance notice to the NDPSC. No Ten Day Notices (TDNs) or Cessation Orders (COs) were issued by the OSMRE during EY2017.

OSMRE Inspections

EY2017 Inspections Conducted	EY2017 Inspection Target	Percent Target Inspections Completed
9	7	100%

Inspection Types

Complete	Partial	Focused	Joint	Non-Joint	Short-Notice
8	1	0	9	0	2

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 EY2017:

A Review of Rules Governing Blasting at Surface Coal Mines in North Dakota

The use of explosives at surface coal mines in North Dakota, while commonplace, can still be a dangerous undertaking. Both State and federal rules exist to protect mining employees and the public from the hazards associated with blasting and explosives. Each mining permit includes plans for the design and implementation of blasting. Mines may elect to create a consolidated blasting plan, which addresses multiple permits encompassed by that mine. Adherence to these plans is inspected and monitored by both State and OSMRE inspections. Since the State of North Dakota has primacy, the NDPSC is the recognized regulatory authority charged with regulation of surface coal mining activities within the State. Thus, this topic review primarily addresses North Dakota rules and laws, which have been determined by OSMRE to be at least as stringent as federal regulations.

North Dakota State rules governing surface mining and reclamation operations can be found in the North Dakota Administrative Code (NDAC). Laws specific to surface mining and reclamation operations can be found in the North Dakota Century Code (NDCC). Performance Standards for the use of explosives are found in NDAC 69-0.5.2-17. Section 01 includes general requirements, Section 02 lists performance standards for the pre-blasting survey, Section 03 has standards for publishing public notices of blasting schedules. Section 05 lists surface blasting procedures, Section 06 covers standards for taking seismograph measurements, and Section 07 covers record keeping. State laws regarding the use of explosives are located at NDCC 38-14.1-24(13). State law regarding submission of a blasting plan is located at NDCC 38-14.1-14(4).

Adherence to applicable state laws and rules was examined by spot checking operations at select permits. These field verifications took place as part of OSMRE inspections at the Coteau Freedom Mine on October 5th, 2016 and May 9th, 2017. Each permit was inspected and blasting plans were examined for compliance. Office records, including blaster certifications and blast logs were inspected. Field conditions, including drilling operations, magazine and product storage, and a recent coal blast were inspected and compared to both the approved blasting plans and applicable State Laws and Rules. The Coteau Properties Company, operator of the Freedom Mine, was determined to be in compliance with all applicable state laws and rules regarding blasting procedures at coal mines in North Dakota.

More detailed information concerning this topic is available in a topic specific entitled, "A Review of Rules Governing Blasting at Surface Coal Mines 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 a state's actions under that program, that could, if

left unaddressed, result in a failure by that state to effectively implement, administer, enforce, or maintain its approved regulatory program.

During the evaluation year, no regulatory program problems or issues were identified by CAO. 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)

During the evaluation year, no NDPSC reclamation staff attended any NTTP's classes. One NDPSC AML staff member attended the Erosion and Sediment Control class.

B. Technical Innovation and Professional Services (TIPS)

During the evaluation year, two NDPSC reclamation staff member attended the TIPS Global Mapper training course. One NDPSC AML staff member attended the CAD2000 class, and another AML staff member attended AML Design: Dangerous Highwalls.

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 also 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 fiscal year 2017 grant period, North Dakota elected to use the area-weighted average option to calculate the overall federal funding share for the North Dakota Regulatory Program.

For this past year, the North Dakota Regulatory Program conducted operations for OSMREs 2016 fiscal year (July 1, 2016 to June 30, 2017) with a budget of \$1,512,456. OSMRE awarded the program \$967,972, or 64% of the total budget, in federal assistance.

To conduct operation during this coming year, The North Dakota Regulatory Program submitted a total budget for OSMREs 2017 fiscal year (July 1, 2017 to June 30, 2018) of \$1,554,121. OSMRE awarded the program \$994,638, 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 EY2017, two off-site impacts occurred. During this evaluation year, NDPSC issued two Notices of Violation (NOV-1601 at the Coyote Creek Mine and NOV-1701 at the Beulah Mine). Reclamation is occurring at a contemporaneous rate. 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 2017

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
Table 9	Funds Granted to State by OSMRE
Table 10	State Inspection Activity
Table 11	State Enforcement Activity
Table 12	Lands Unsuitable Activity
Table 13	OSMRE Oversight Activity
Table 14	Status of Action Plans
Table 15	Land Use Acreage (Optional)

TABLE 1

COAL PRODUCED FOR SALE, TRANSFER, OR USE ^A (Millions of short tons)			
Calendar Year	Surface Mines	Underground Mines	Total
2013	27.7	0.0	27.7
2014	28.8	0.0	28.8
2015	28.9	0.0	28.9
2016	27.6	0.0	27.6

^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.

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								Insp. Units ^{1 2}	Area in Acres ³				Total Area
	Permanent Program Permits				Initial Program Sites					Permanent Program Permits (Permit Area)		Initial Program Sites		
	Active	Inactive	Aban-doned	Total	Active	Inactive	Aban-doned	Total		Federal Lands	State/ Tribal and Private Lands	Federal Lands	State/ Tribal and Private Lands	
Surface Mines	20	5	0	25	0	0	0	0	25	17,632	115,695	0	0	133,327
Underground Mines	0	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	0
Total	20	5	0	25	0	0	0	0	25	17,632	115,695	0	0	133,327
Permanent Program Permits and Initial Program Sites (Number on Federal Lands: 0)				Total Number:		25		Average Acres per Site:				5,333.08		
Average Number of Permanent Program Permits and Initial Program Sites per Inspectable Unit (IU):				Total Number:		1.00		Average Acres per IU:				5,333.08		
Permanent Program Permits in Temporary Cessation:				Total Number:		0		Number More than 3 Years:				0		
EXPLORATION SITES			Total Number of Sites			Sites on Federal Lands ⁴			Exploration Inspectable Units					
Exploration Sites with Permits:			0			0			0					
Exploration Sites with Notices:			4			0			0					
¹ An 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.														
² Total Inspectable Units calculation includes Exploration Sites Inspectable Units														
³ When 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.														
⁴ The 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 OSM pursuant to the Federal Lands Program, but excludes exploration sites that are regulated by the Bureau of Land Management														

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)	0	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(c)	0	0
In-Situ Processing	785.22(c)	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)	0	5

TABLE 4

PERMITTING ACTIVITY												
Type of Application	Surface Mines			Underground Mines			Other Facilities			Totals		
	App. Rec.	Issued/ Appvd	Acres	App. Rec.	Issued/ Appvd	Acres ¹	App. Rec.	Issued/ Appvd	Acres	App. Rec.	Issued/ Appvd	Acres
New Permits	0	0	0	0	0	0	0	0	0	0	0	0
Renewals	2	5		0	0		0	0		2	5	
Transfers, sales, and assignments of permit rights	0	0		0	0		0	0		0	0	
Small operator assistance	0	0		0	0		0	0		0	0	
Exploration permits										0	0	
Exploration notices ²											0	
Revisions that do not add acreage to the permit area	20	21		0	0		0	0		20	21	
Revisions that add acreage to the permit area but are not incidental boundary revisions	1	0	320	0	0	0	0	0	0	1	0	320
Incidental boundary revisions	0	0	0	0	0	0	0	0	0	0	0	0
Totals	23	26	320	0	0	0	0	0	0	23	26	320
Permits terminated for failure to initiate operations:									Number:	0	Acres:	0.0
Acres of Phase III bond releases (Areas no longer considered to be disturbed):											Acres:	0.0
Permits in temporary cessation							Notices received:		0	Terminations:		0
Midterm permit reviews completed							Number:		6			
¹ Includes only the number of acres of proposed surface disturbance												
² State approval not required. Involves removal of less than 250 tons of coal and does not affect lands designated unsuitable for mining.												

TABLE 5

OFF-SITE IMPACTS EXCLUDING BOND FORFEITURE SITES													
RESOURCES AFFECTED		People			Land			Water			Structures		
DEGREE OF IMPACT		Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major
TYPE OF IMPACT EVENT	NUMBER OF EVENTS												
Blasting	0	0	0	0	0	0	0	0	0	0	0	0	0
Land Stability	2	0	0	0	0	1	0	2	0	0	0	0	0
Hydrology	0	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	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	0	0	0	0	1	0	2	0	0	0	0	0
Total Number of Inspectable Units ¹ :				26									
Inspectable Units with one or more off-site impacts:				2									
Exploration Inspectable Units with one or more off-site impacts ² :				0									
Inspectable Units free of off-site impacts:				24				% of Inspectable Units free of off-site impacts ⁴ :				92	
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		
DEGREE OF IMPACT		Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major
TYPE OF IMPACT EVENT	NUMBER OF EVENTS												
Blasting	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
Hydrology	0	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	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Number of Inspectable Units ³ :				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 impacts ⁴ :				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													

TABLE 5
(Continued)

TOTAL OFF-SITE IMPACTS INCLUDING BOND FORFEITURE SITES													
RESOURCES AFFECTED		People			Land			Water			Structures		
DEGREE OF IMPACT		Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major
TYPE OF IMPACT EVENT	NUMBER OF EVENTS												
Blasting	0	0	0	0	0	0	0	0	0	0	0	0	0
Land Stability	2	0	0	0	0	1	0	2	0	0	0	0	0
Hydrology	0	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	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	0	0	0	0	1	0	2	0	0	0	0	0
Total Number of Inspectable Units ⁵ :				26									
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:				24				% of Inspectable Units free of off-site impacts ⁴ :				92	
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.													

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 I Releases	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	Phase I	0
	0			0		Phase II	0
			0			Phase III	0
Number of Permanent Program Permits with Jurisdiction Terminated Under Phase III Bond Release During the Evaluation Year					0	Other Releases - Acres	
Initial Program Sites with Jurisdiction Terminated During the Evaluation Year					0	Administrative Adjustments	200
Number of Inspectable Units Removed					1	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			0
Total Area Bonded for Disturbance	133,527	133,327	(200)
Area Bonded for Disturbance without Phase I Bond Release	130,547	130,347	(200)
Area Bonded for Disturbance for which Phase I Bond Release Has Been Approved	2,980	2,980	0
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 Remining	0	0	0
Areas of Permits Disturbed by Surface Coal Mining and Reclamation Operations			
Disturbed Area	78,013	80,022	2,009

*A 200 acre administrative adjustment has been made to account for a typographic error from the EY2016 OSMRE Oversight Report.

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.			

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

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	967,972		
Other Regulatory Funding, if applicable	0		
Subtotal (Regulatory Funding)	967,972	1,512,456	64
Small Operator Assistance Program Grant Funding	0	0	
Abandoned Mine Land Reclamation Funding	2,793,000	2,793,000	100
Watershed Cooperative Agreement Program	0	0	
TOTAL	3,760,972		

TABLE 10

STATE INSPECTION ACTIVITY INSPECTABLE UNITS FOR WHICH STATE MET REQUIRED INSPECTION FREQUENCY ON AN INSPECTABLE UNIT-BY-INSPECTABLE UNIT BASIS ¹												
Inspectable 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	82	486	21	100	21	100	21	21	100
Inactive	5	20	0	20	60	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	102	546	26	100	26	100	26	26	100
Coal Exploration Activities ⁴		Complete Inspections						Partial Inspections				
Exploration sites with permits		0						0				
Exploration sites with notices		4						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 SMCRA does not establish a minimum numerical inspection frequency for coal exploration activities.

⁵ NA - Not Available

* The number of inspections required annually in Table 10 is calculated based on 26 inspectable units permitted for the entire year. During EY2017, Permit NACC-1301 was removed by Revision No. 1 on November 30, 2016, and was thus only active for one half of the evaluation year. The resulting number of required inspections for EY2017 totals 102 complete and 164 partial inspections.

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.		

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

TABLE 13

OSM OVERSIGHT ACTIVITY					
Oversight Inspections and Site Visits					
	Complete		Partial		
	Joint	Non-Joint	Joint	Non-Joint	Total
Oversight Inspections	8	0	1	0	9
	Technical Assistance		Other		Total
Site Visits	0		0		0
Violations Observed by OSM and Citizen Requests for Inspection ¹					
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.					

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						

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	0.00
Pasture/Hayland	0.00
Grazingland	0.00
Forestry	0.00
Residential	0.00
Industrial/Commercial	0.00
Recreation	0.00
Fish & Wildlife Habitat	0.00
Developed Water Resources	0.00
Undeveloped land or no current use or land management	0.00
Other - Public Utilities	0.00
Other -	0.00
Other -	0.00
Other -	0.00
Other -	0.00
Other -	0.00
Other -	0.00
Other -	0.00
Sub-Total Other	0.00
Total	0.00
¹ Land uses as defined in 30 CFR 701.5 or "Other" as defined under the state or tribal program	

APPENDIX 2: Comments from State of North Dakota on the Report

North Dakota Annual Evaluation Report

Evaluation Year 2017

North Dakota had the following comments on the EY2017 Report:

On September 14, 2016, NDPSC responded with comments and suggestions for improvement regarding this report. Data supplied for the DST Tables was verified, specifically, information in Tables 6 and 10. OSMRE was notified of one additional meeting that was not previously listed in the section, Overview of Public Participation and Outreach Efforts. The state also pointed out that one additional permit had been converted to an electronic format. Other suggestions were mostly of a grammatical nature.

OSMRE would like to thank the NDPSC for their cooperation and assistance in gathering the information needed to produce this report.