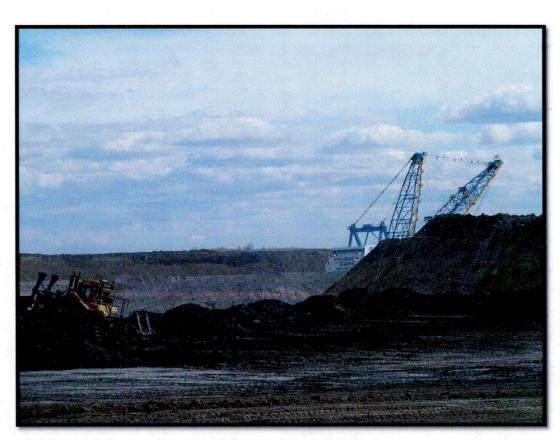


OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

Annual Evaluation Summary Report For the

North Dakota Public Service Commission

Regulatory Program



Evaluation Year 2016

Produced by the Denver Field Division Casper Area Office

EXECUTIVE SUMMARY

This report covers the period of July 1, 2015 to June 30, 2016. 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, including hearings regarding issuance of NOV-1502 at the Coyote Creek Mine, and another regarding State Program Amendment XLI. Reclamation staff also participated in a public meeting in Casper, hosted by the BLM, regarding federal coal leasing, and another BLM scoping meeting regarding a federal coal lease application at the Center Mine. NDPSC also arranged mine tours and a public meeting that included Assistant Secretary of the Interior Janice Schneider, North Dakota's Congressional delegation and industry representatives to discuss the Stream Protection Rule.

Major Accomplishments and Innovations

NDPSC presented Dakota Westmoreland, operators of the Beulah Mine, the 2015 Reclamation Award during the Lignite Energy Council's fall meeting. Reclamation staff also conducted a thorough review of the proposed Stream Protection Rule. Reclamation staff also completed a project to convert all paper documents in previously bond released mine permits into electronic format.

Off-Site Impacts

During EY2016, no off-site impacts were recorded by NDPSC.

Reclamation Success

Currently in North Dakota, a total of 133,527 acres have been permitted, with approximately 78,013 acres (58%), disturbed by mining activity to date. Of these disturbed acres, approximately 54,094 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 54,094 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, and comments from landowners regarding permit renewals and permit revisions. A formal hearing was requested by a landowner who raised concerns regarding a mine company request for an easement to allow additional water to pass through his property. Both parties requested an indefinite postponement of the hearing to allow more time to resolve the matter.

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 sent to OSMRE headquarters for processing and publication on June 9, 2016.

A Review of Rules Governing Waste Disposal at Surface Coal Mines in North Dakota The Denver Field Division (DFD) conducted an evaluation of North Dakota rules and laws governing waste disposal 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 waste materials as found in NDAC 69-0.5.2-19 were examined in conjunction with North Dakota Policy Memoranda No. 15 and No. 21. Two mines were inspected and plans for the handling and disposal of both coal and non-coal waste were reviewed for each permit. Field conditions were inspected and compared to both the approved waste disposal plans and applicable state laws and rules. BNI Coal, operator of the Center Mine, and North American Coal, operator of the Freedom Mine, were both determined to be in compliance with all applicable state laws and rules regarding waste disposal procedures at coal mines in North Dakota.

OSMRE Assistance

For this past year, the North Dakota Regulatory Program conducted operations for OSMREs 2015 fiscal year (July 1, 2015 to June 30, 2016) with a budget of \$1,421,218. OSMRE awarded the program \$909,580. To conduct operation during this coming year, The North Dakota Regulatory Program submitted a total budget for OSMREs 2016 fiscal year (July 1, 2016 to June 30, 2017) of \$1,512,456. OSMRE awarded the program \$967,972 in federal assistance. Two Reclamation Division staff attended NTTP's Enforcement Procedures class. One Reclamation Division staff member attended the TIPS HEC-RAS training course.

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Cover Page Photograph: Photo shows backfilling and grading operations 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 2016 Evaluation Year (EY) July 1, 2015 to June 30, 2016.

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 2016 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
BLM	Bureau of Land Management
CAO	OSMRE's Casper Area Office
CO	Cessation Order
DFD	OSMRE's Denver Field Division

DOJ Department of Justice

DFD OSMRE's Denver Field Division

EY Evaluation Year

FAM OSMRE's Federal Assistance Manual

GIS Geographic Information System

GPS Global Positioning System

IT Industrial Technology

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 2015, 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.

The NDSU Agricultural Economics Publication, AAE 14002, estimates 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 133,527 acres are currently permitted and all of those acres are bonded in North Dakota (Appendix 1, Tables 2 and 6). Approximately 78,013 of those permitted acres have been disturbed by mining operations, and 54,094 of those acres have been backfilled, graded, topsoiled and seeded to achieve the intended post-mining land use (Chart 1). Of the 54,094 acres that have been backfilled, graded, top-soiled and seeded, 15,760 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.

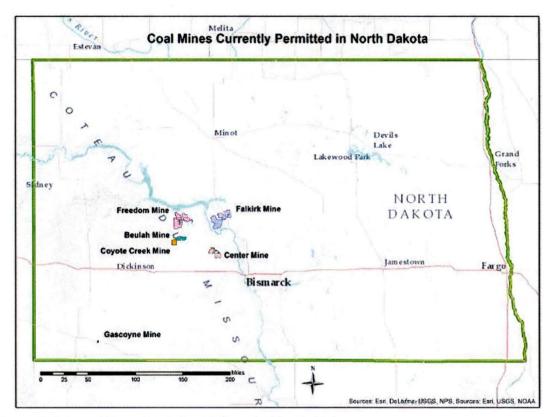


Figure 1: Map of Permitted Coal Mines in North Dakota

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 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 2016 evaluation year was distributed on March 2th, 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.

The OSMRE-DFD did not receive any comments or suggestions for potential oversight topics for the 2016 evaluation year. In joint discussions with the NDPSC, it was decided to evaluate waste handling and disposal procedures at mines in North Dakota for the EY2016 oversight report. For the EY2017 report, it was decided to evaluate blasting procedures at North Dakota mines. 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. The requirements for bond release notification are further clarified by NDPSC Policy Memo No. 9.

During the 2016 evaluation year, the North Dakota Regulatory Program participated in the following public meetings, conferences, workshops or other events involving the press or public notification:

- A formal hearing was held in August 2015 on Notice of Violation No. 1502 that was issued by the Reclamation Division in July 2015.
- A PSC Commissioner and some Reclamation Division staff participated in BLM's public scoping meeting in October 2015 that was held on BNI Coal's federal coal lease application.
- A public hearing was held in mid-February 2016 on the rule changes that were proposed due to legislation approved during North Dakota 2015 Legislative Session. The rule changes pertain to the definition of coal and commercial leonardite and are part of State Program Amendment No. XLI (41) that was submitted to OSMRE in May 2016.
- In late February a Reclamation Division staff meeting presented a technical paper on reclaimed mined lands at the Dickinson Reclamation Symposium sponsored by Dickinson State University, North Dakota State University, and others.
- The Reclamation Division helped arrange the May 2016 meeting with Assistant Secretary of the Interior Janice Schneider, North Dakota's Congressional delegation, NDPSC and industry to discuss concerns with the proposed stream protection rule and related tour at the Freedom Mine. This meeting was covered by several media outlets.
- In May 2016 a Reclamation Division staff member testified at BLM's public meeting in Casper, Wyoming, on federal coal leasing to address negative impacts and additional disturbances that occur if small isolated tracts of federal coal are not leased for mining.

- One of the NDPSC Commissioners arranged a tour of the Freedom Mine in June 2016 so people attending the Mid-America Regulatory Conference in Bismarck could see mining and reclamation operations in North Dakota.
- Throughout the evaluation year Reclamation Division staff responded to several inquiries from the press about surface coal mining and reclamation operations in North Dakota. A majority of the inquiries involved questions about self-bonding.
- At several regular Commission meetings during the evaluation year, members of the
 press asked questions about mining and reclamation items that were on agendas and a
 few related stories appeared in the newspaper and on television and radio news
 broadcasts.

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, 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 following accomplishments by the North Dakota Regulatory Program during the 2016 evaluation year are worthy of note:

- The new Coyote Creek Mine began coal production in May 2016 after being permitted by the Commission in 2014 and major mine development work in 2015. The Coyote Creek Mine now supplies coal to the Coyote Power Station which previously received coal from Dakota Westmoreland Corporation's Beulah Mine.
- The Commission presented Dakota Westmoreland Corporation with the North Dakota 2015 Reclamation Award on the Lignite Energy Council's fall meeting in October 2015. The Reclamation Division had recommended the Dakota Westmoreland be recognized for implementing a plan to avoid or minimize disturbance to wooded draws at the Beulah Mine. Wooded draws are naturally occurring steep, narrow valleys that are primarily vegetated by trees and shrubs that provide valuable wildlife habitat as well as landscape diversity and livestock shelter. The Reclamation Division encourages mining companies to avoid disturbances to woody draws because they are difficult to reclaim considering the steeper topography and diverse vegetation types that would have to be re-established.
- The Reclamation Division conducted a thorough review of OSMRE's proposed nationwide stream protection rule and in October 2015 submitted more than thirty pages of detailed comments on the proposal. The Reclamation Division believes that significant modifications to the proposed rule are needed in order to more appropriately address semi-arid conditions in the northern Great Plains and the intense agricultural uses that are present on lands mined in North Dakota. In addition, the Reclamation Division participated in a June 2016 meeting with OMB's Office of Information and Regulatory Affairs to emphasize these concerns on the proposed rule.
- The Reclamation Division completed a project to convert all paper documents in permits that have been bond released into an electric format. This involved having a contractor scan all documents in 740 three-ring binders. The NDPSC's IT Division is now in the process of setting up a database for organizing and storing the electronic files.

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 EY2016, North Dakota reported that twenty six out of twenty six (100%) inspectable units were free of off-site impacts. (Appendix 1, Table 5).

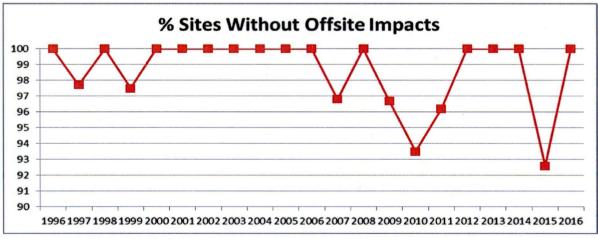


Figure 2: Percentage of sites free of off-site impacts.

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 regraded 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 revegetation 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	2016	9	9	9							
2007	219	219	347	TOTAL	19,420	15,754	15,741							

Figure 3: Phases of Bond Release of Disturbed Lands (acres) from 1976 to 2016.

During the course of this evaluation year, mines in North Dakota achieved final bond release for a total of 27.54 acres. All 27.54 acres were released from Permit NACT-8503 at the Freedom Mine as part of Bond Release No. 4. (See Appendix 1, Table 6). Of the 27.54 acres that had all bond released, only 9 acres were previously disturbed by mining activities. The remaining 18.54 acres were not disturbed.

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 25% (19,420 acres) of the disturbed lands (78,013 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 (78,013 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 (78,013 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 (78,013 acres) in North Dakota have received Phase III (final) Bond Release. Just under half of the reclaimed lands that have been seeded for 10 or more years (32,131 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 (78,013 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 (78,013 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 (78,013 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 (1999-2016), final bond release has been achieved on 15,690 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 potentially 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.

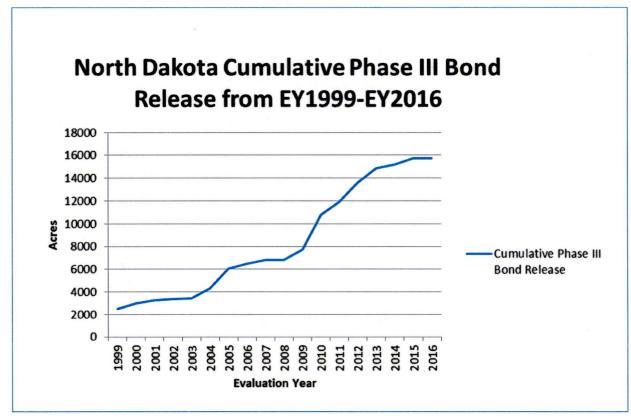


Figure 4: Trend of Increasing Bond Release in North Dakota

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 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 133,527 acres are permitted, with approximately 78,013 acres (58%), disturbed by mining activity to date. Of these disturbed acres, approximately 54,094 acres have been backfilled, graded, top-soiled and seeded; or 69% 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.

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.

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	ACRES RECLAIMED to VEGETATION (graded/soiled/seeded)	Cumulative 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

Figure 5: North Dakota Reclamation Summary

Source of data: ND-PSC

Figure 5 (above) provides the actual acres disturbed and reclaimed to vegetation (graded/resoiled/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 reclamation is occurring at a contemporaneous rate.

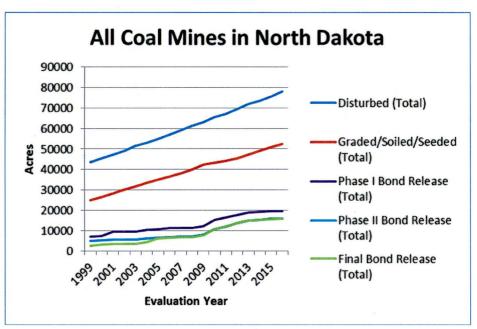


Figure 6: Rates of Disturbance at Coal Mines in North Dakota Source of data: ND-PSC

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 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 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 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 EY2016, 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 EY2016:

- Reclamation Division staff responded to numerous inquiries about mining company responsibilities and reclamation requirements.
- A few landowners submitted comments on permit renewal and significant revision applications.
- A landowner with property downstream of a mine requested a formal hearing following the approval of a significant revision application. The landowner raised concerns about discharges of water from ponds and the mining company's request for an easement to allow additional water to pass through his property. However, both the landowner and mining company requested an indefinite postponement of the hearing to allow more time for the parties to otherwise resolve the matter. If the matter is not resolved in a few months, a formal hearing will be schedule to address the concerns.

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. 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 EY2016, 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". The proposed rule Federal Register notice was sent to OSMRE Headquarters for processing and publication on June 9, 2016.

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 EY2016, North Dakota reported 21, 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 EY2016 is 104 complete inspections and 168 partial inspections.

The NDPSC continues to conduct frequent and thorough inspections. North Dakota conducted 86 complete inspections and 519 partial inspections on all active mine sites during this evaluation year. North Dakota also conducted 20 complete inspections and 70 partial inspections on all inactive mine sites during this evaluation year. This comes to a total of 106 complete inspections and 589 partial inspections conducted during EY2016. 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 EY2016, North Dakota inspectors issued a total of two NOVs and no cessation orders.

NOV-1502

A rain event on June 22, 2015 caused significant erosion downstream of a low flow culvert located in Permit NACC-1302 of the Coyote Creek Mine. During an earlier inspection, NDPSC inspectors alerted Coyote Creek personnel to actions that were inconsistent with the existing permit. Permit NACC-1302 called for the installation of four, 10-foot by 10-foot box culverts, followed by installation of a 36-inch low flow steel culvert. NDPSC personnel noted that 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. These actions contributed to the downstream erosion that occurred during the June 22nd, 2015 rain event. These actions all occurred during EY2015 and have been recorded in last year's evaluation report. However, NOV-1502, written in as a result of these actions was issued on July 7, 2016, during EY2016 and is thus recorded in this report.

Remedial actions were completed by mine personnel on July 9, 2015 and NOV-1502 was terminated on August 10, 2015. A formal hearing with the NDPSC was held on August 27, 2016. The Commission affirmed NOV-1502 and assessed a \$1000 penalty to Coyote Creek Mining Company.

NOV-1503

According to NDCC 24-07-03, section lines are considered public roads open for public travel. During NDPSC's annual overflight, conducted on June 25, 2015, inspectors observed topsoil and stockpiling operations that intersected the north-south section line between the SW¼ of Section 28 and the SE ¼ of Section 29, in Permit BNCR-9702. A follow-up inspection conducted on July 9, 2015 confirmed that approval had not been obtained from the Oliver County Commission to

close the section line prior to conducting mining operations. NOV-1503 was issued on July 9, 2015 for conducting mining operations prior to obtaining appropriate approval to close the section line, in violation of NDAC 69-05.2-04-01.3(2)(b).

Appropriate approval was attained and remedial actions were sufficient to terminate NOV-1503 on September 22, 2015. A penalty in the amount of \$1,000 was assessed for this NOV.

OSMRE Oversight Inspection Activity

The CAO conducted three complete oversight inspections and four partial oversight inspections. Complete inspections were conducted at the Freedom Mine, Permit NACT-0401, Center Mine, Permit BNCR-1101, and Coyote Creek Mine, Permit NACC-1302. Partial inspections were conducted at the Freedom Mine, Permit NACT-9101, Center Mine, Permit BNCR-9702, and the Beulah Mine, Permits KRSB-8603 and KRSB-8802. Both inspections at the Center Mine were considered unannounced independent inspections without more than 24-hour advance notice to the NDPSC. No Ten Day Notices (TDNs) or Cessation Orders (COs) were issued by the OSMRE during EY2016.

OSMRE Inspections

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

Inspection Types

Complete	Complete Partial		Joint	Non-Joint	Independent
3	4	0	7	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 EY2016:

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

In North Dakota, coal processing and conversion wastes are buried in mined-out pits located off-permit and managed according to a State Health Department solid waste or special use permit. Non-coal mine wastes and non-coal wastes from non-mining may be buried within permit boundaries, but State Health Department rules require that certain waste products, such as grease, lubricants, paint, or flammable liquids be taken off-permit for disposal or recycling. Certain types of non-coal mine wastes do not require a solid waste management permit to be buried within the mine permit. These include rocks, boulders, dirt, trees and brush, inert waste from abandoned farmsteads, select wood items such as pallets, lumber, lath, cable spools and fence posts, brick, cured concrete, and plastic materials, including pipe. Any toxic or hazardous wastes must be disposed of off-site at appropriate sites permitted by the State Health Department. Tires are shipped off-site and recycled.

Each mining permit includes plans for the handling and disposal of both coal and non-coal waste. Adherence to these plans is inspected and monitored and 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). Policy Memoranda are also published by the NDPSC as guidance for operators.

Performance Standards for Waste Materials as found in NDAC 69-0.5.2-19 were examined in conjunction with North Dakota Policy Memoranda No. 15 and No. 21. Adherence to applicable state laws and rules was examined by spot checking operations at two North Dakota mines. These field verifications took place as part of OSMRE inspections at the Center Mine on March 29, 2016 and at the Freedom Mine on March 30th, 2016. Each permit was inspected and plans for the handling and disposal of both coal and non-coal waste were reviewed. Field conditions were inspected and compared to both the approved waste disposal plans and applicable State Laws and Rules. BNI Coal, operator of the Center Mine, and North American Coal, operator of the Freedom Mine, were both determined to be in compliance with all applicable state laws and rules regarding waste disposal 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 Waste Disposal 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. 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)

During the evaluation year, two NDPSC reclamation staff attended NTTP's Enforcement Procedures class.

B. Technical Innovation and Professional Services (TIPS)

During the evaluation year, one NDPSC reclamation staff member attended the TIPS HEC-RAS 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 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 2016 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 2015 fiscal year (July 1, 2015 to June 30, 2016) with a budget of \$1,421,218. OSMRE awarded the program \$909,580, 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 2016 fiscal year (July 1, 2016 to June 30, 2017) of \$1,512,456. OSMRE awarded the program \$967,972, 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 EY2016, no off-site impacts occurred. During this evaluation year, NDPSC issued two Notices of Violation (NOV-1502 at the Coyote Creek Mine and NOV-1503 at the Center 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 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.

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TABLE 1

COAL PRODUCED FOR SALE, TRANSFER, OR USE A (Millions of short tons)										
Calendar Year	Surface Mines	Underground Mines	Total							
2012	27.8	0.0	27.8							
2013	27.7	0.0	27.7							
2014	28.8	0.0	28.8							
2015	28.9	0.0	28.9							

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

	Numbers of Permanent Program Permits and Initial Program Sites													
Mines and Other Facilities	Permanent Program Permits			Initial Program Sites				Permanent Program Permits (Permit Area)		Initial P Sit	_			
	Active	Inactive	Aban- doned	Total	Active	Inactive	Aban- doned	Total	Insp. Units ¹ ²	Federal Lands	State/ Tribal and Private Lands	Federal Lands	State/ Tribal and Private Lands	Total Area
Surface Mines	21	5	0	26	0	0	0	0	26	17,632	115,895	0	0	133,527
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	21	5	0	26	0	0	0	0	26	17,632	115,895	0	0	133,527

Permanent Program Permits and Initial Program Sites (Number on Federal Lands: 15)

Total Number:

26

Average Acres per Site:

5.135.65

Average Number of Permanent Program Permits and

Total Number:

1.00

Average Acres per IU: 5,135.65

Initial Program Sites per Inspectable Unit (IU):

Permanent Program Permits in Temporary Cessation:

Total Number:

Number More than 3 Years:

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:	2	0	0

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.

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 OSM pursuant to the Federal Lands Program, but excludes exploration sites that are regulated by the Bureau of Land Management

TABLE 3

		Numbers of Permits					
Special Category of Mining	30 CFR Citation Defining Permits Allowing Special Mining Practices	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 **Surface Mines Underground Mines** Other Facilities Totals Issued/ Issued/ App. Issued/ App. Issued/ App. App. **Type of Application** Acres Acres1 Acres Acres Appvd Appvd Appvd Appvd Rec. Rec. Rec. Rec. **New Permits** 0 0 0 0 0 0 0 0 0 Renewals 6 7 0 6 Transfers, sales, and 0 0 0 0 0 0 0 0 assignments of permit rights 0 0 0 0 Small operator assistance 0 0 0 0 **Exploration** permits Exploration notices² 2 Revisions that do not add 25 22 25 0 0 0 22 acreage to the permit area Revisions that add acreage to the permit area but are not 0 0 0 0 0 0 0 0 0 0 0 incidental boundary revisions Incidental boundary 32 0 0 0 0 0 0 0 0 32 revisions 28 32 0 0 0 0 0 0 28 35 32 33 **Totals** 0.0 Number: 0 Permits terminated for failure to initiate operations: Acres: 27.0 Acres of Phase III bond releases (Areas no longer considered to be disturbed): Acres: Permits in temporary cessation Notices received: 0 Terminations: 0 Midterm permit reviews completed Number: 2 ¹Includes only the number of acres of proposed surface disturbance ²State 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 DEGREE OF IMPACT			People			Land			Water		Structures		
		Minor	Moderate	Major	Minor	Moderate	Major	or Minor	or 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 Units¹: 26

Inspectable Units with one or more off-site impacts: 0

Exploration Inspectable Units with one or more off-site impacts²:

Inspectable Units free of off-site impacts:

% of Inspectable Units free of off-site impacts⁴:

100

26

OFF-SITE IMPACTS AT BOND FORFEITURE SITES

RESOURCES	AFFECTED		People			Land			Water			Structures	
DEGREE OI	FIMPACT	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 Units³:

0

0

0

Inspectable Units with one or more off-site impacts:

Inspectable Units free of off-site impacts:

% of Inspectable Units free of off-site impacts⁴:

0

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

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

100

TABLE 5 (Continued)

TOTAL OFF-SITE IMPACTS INCLUDING BOND FORFEITURE SITES

RESOURCES AFFECTED			People		Land			Water			Structures		
DEGREE OF	FIMPACT	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major
TYPE OF IMPACT EVENT	NUMBER OF EVENTS	All											
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 ⁵ :	26	
Inspectable Units with one or more off-site impacts:	0	
Exploration Inspectable Units with one or more off-site impact	ets: 0	
Inspectable Units free of off-site impacts:	26	

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.

% of Inspectable Units free of off-site impacts⁴:

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 forefeiture sites that were reclaimed during the Evaluation Year and (4) the number of bond forefeiture sites that were unreclaimed at the end of the Evaluation Year.

TABLE 6

	Arc	eas of Phase I, II,	and III Bond Relea	ases During the E	Evaluation Year (I	$\mathbf{E}\mathbf{Y}$)	
Phase I Releases	ases Phase II Releases Pha			Phase III Releases			
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	Total Acres Release	ed During the EY
0	HIGHERLES	0			27	Phase I	27
PARE PER	0			27		Phase II	27
			27			Phase III	27
Tumber of Permanent During the Evaluation		h Jurisdiction Termi	nated Under Phase III	Bond Release	0	Other Relea	ses - Acres
nitial Program Sites v	with Jurisdiction Term	inated During the Ev	valuation Year		0	Administrative Adjustments	0
lumber of Inspectable	e Units Removed				0	Bond Forfeiture	0

	Total Acres at Start of EY	Total Acres at End of EY	Change in Acres During EY
New Area Bonded for Disturbance			5,583
Total Area Bonded for Disturbance	127,971	133,527	5,556
Area Bonded for Disturbance without Phase I Bond Release	124,991	130,547	5,556
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 a	nd Reclamation Operations		
Disturbed Area	75,483	78,013	2,530

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 occuring	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

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.

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

	(Actual Dollars Rounded	to the Nearest Dollar)
Type of Funding	Federal Funds Awarded	Total Program Cost	Federal Funds Awarded as a Percentage of Total Progam Costs
Regulatory Funding			
Administration and Enforcement Grant	909,580		
Other Regulatory Funding, if applicable	0		
Subtotal (Regulatory Funding)	909,580	1,512,456	60
Small Operator Assistance Program Grant Funding	0	0	
Abandoned Mine Land Reclamation Funding	2,796,000	2,796,000	100
Watershed Cooperative Agreement Program	0	0	
TOTAL	3,705,580		

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		finspections I annually		per of ctions ucted	IUs Met (Inspection Requir			ial Inspection Requirement		plete and Partia uency Requirem	
		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	86	519	21	100	21	100	21	21	100
Inactive	5	20	0	20	70	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	106	589	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 Caculated 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

STATE OR TRIBAL ENFORCEMENT ACTIVITY							
Number of Actions 1	Number of Violations						
2	2						
0	0						
0	0						

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

		OSM OVERSIG	HT ACTIVI	ΓY	
		versight Inspecti			
	Complete		Partial		
	Joint	Non-Joint	Joint	Non-Joint	Total
Oversight Inspections	3	0	4	0	7
	Technica	l Assistance	C	ther	Total
Site Visits	0		0		
Viol	ations Obser	ved by OSM and	l Citizen Req	uests for Inspec	tion ¹
		Type of Action			Total number of each action
How many violation	ons were observ	ed by OSM on oversi	ght 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 Cessa	ation Orders did OSM	issue?		0
How many Immine	ent Harm Cessa	tion Orders did OSM	issue?		0
OSM Action f	or Delinquen	t Reporting or Nor	n-Payment of I	Federal AML Rec	elamation Fees
How many Ten-Da reclamation fees di		elinquent reporting or	non-payment of	Federal AML	0
How many Notices reclamation fees di		or delinquent reportin	g or non-paymen	nt of Federal AML	0
		te Cessation Orders tion fees did OSM iss		porting or non-	0

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

³ Number of Ten-Day Notices issued not including those to refer citizen requests for inspection.

North Dakota

EY 2016, ending June 30, 2016

Action Plan ID	Problem Type¹	Problem Title	Problem Description	Date Action Plan Initiated	Scheduled Completion Date	Actual Completion Date
None						

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 Use ¹	Acres Released
Cropland	0.00
Pasture/Hayland	0.00
Grazingland	0.00
Forestry	0.00
Residential	0.00
Industrial/Commercial	9.00
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 - Roads	0.00
Other - Undisturbed	18.54
Other -	0.00
Sub-Total Other	18.54
Total	27.54

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

North Dakota Annual Evaluation Report Evaluation Year 2016

North Dakota had the following comments on the EY2016 Report:

Jim Deutsch, Director of the North Dakota Regulatory Program responded on August 31 with comments concerning the draft copy of the OSMRE oversight report. Suggestions for improvement of the report included grammatical corrections as well as a verification of the number of acres that are permitted and bonded in North Dakota. This office appreciates the efforts of the North Dakota Regulatory Program and it's staff in providing information and assistance for this report.