

**OFFICE OF SURFACE MINING
RECLAMATION AND ENFORCEMENT**

**Annual Evaluation Summary Report
for the**

**NORTH DAKOTA PUBLIC SERVICE COMMISSION
Regulatory Program**

Evaluation Year 2010

(July 1, 2009 to June 30, 2010)



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(Cover photo: The Antelope Valley Power Plant, adjacent to the Coteau Freedom Mine)

I. Introduction

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) created the Office of Surface Mining Reclamation and Enforcement (OSM) in the Department of the Interior. SMCRA provides authority to OSM to oversee the implementation of and provide Federal funding for State regulatory programs that have been approved by OSM as meeting the minimum standards specified by SMCRA. This report contains summary information regarding the North Dakota program and the effectiveness of the North Dakota program in meeting the applicable purposes of SMCRA as specified in Section 102. This report covers the period of July 1, 2009 to June 30, 2010. Detailed background information and comprehensive reports for the program elements evaluated during the period are available for review and copying at the OSM Casper Field Office (CFO).

The following is list of acronyms used in this report:

AOC	Approximate Original Contour
CFO	OSM's Casper Field Office
CO	Cessation Order
EY	Evaluation Year
FAM	OSM's Federal Assistance Manual
GIS	Geographic Information System
GPS	Global Positioning System
NDCC	North Dakota Century Code (Law)
NDAC	North Dakota Administrative Code (Rules)
NDPSC	North Dakota Public Service Commission
NOV	Notice of Violation
NTTP	National Technical Training Program
OSM	Office of Surface Mining Reclamation and Enforcement
REG-8	OSM Directive REG-8
SMCRA	Surface Mining Control and Reclamation Act of 1977
TDN	Ten-Day Notice
TIPS	Technical Innovation and Professional Services
WR	OSM Western Region

II. Overview of the North Dakota Coal Mining Industry

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 1.0 percent). The mineable beds in the Williston Basin vary in thickness from three to 30 feet; economic stripping ratios range from 1.5:1 to 11:1. All active coal mines in North Dakota are currently large-scale surface mines that provide for mine-mouth or regional electrical generation facilities and a nearby coal gasification facility.

The first commercial mines in North Dakota opened in Morton County in 1873. As the railroad developed across the State, demand for coal increased and was supplied by underground mines. North Dakota was one of the first states to shift from underground to large-scale commercial surface mining. By 1927, 40 percent of the State's production was by surface mining methods, compared to 2 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 2010, it produced 29.93 million tons (Appendix A, 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.

In 2009, North Dakota mines provided direct and indirect employment for approximately 28,400 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. The coal industry generates an estimated \$98.9 million in state tax revenue.

III. Overview of the Public Participation Opportunities in the Oversight Process and the State Program

The North Dakota coal reclamation and enforcement program allows for and encourages public input and participation throughout the program. 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. OSM'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/Issues/Innovations in the North Dakota Program

The North Dakota Public Service Commission continues to administer a very efficient and successful coal regulatory program as set forth in Section 102 of SMCRA. North Dakota's permanent regulatory program has been in-place since 1980.

North Dakota's regulatory program is handled by a relatively small number of staff (Appendix A, Table 7) 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 OSM. The Reclamation Division carries out its duties using the appropriate technical expertise and with a high level of professionalism.

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 as well as two large active permits for the Freedom Mine and one active permit for the Beulah Mine are in an electronic format. Much of the monitoring data submitted by the mining companies is now submitted in an electronic format. Most incoming correspondence is also scanned and filed electronically using a structure that is very similar to the paper filing system.

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

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

At the beginning of this evaluation year (EY2010), the NDPSC reported a total of 31 inspectable units. During the course of the year, five inspectable units have achieved final bond release; including permits BCGH-8801, BNCR-8006, HKHK-8105, BNLS-8109, and ROJK-8701(see Appendix A, Tables 2 and 4).

Overall, North Dakota has an excellent coal regulatory program. NDPSC staff continues to implement the program in a highly 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 as Determined by Measuring and Reporting End Results

OSM Directive REG-8 *Oversight of State Regulatory Programs* (REG-8) dictates that OSM oversight of State programs will focus on the on-the-ground/end-result success of the State programs in achieving the purposes of SMCRA. To further the concept of reporting end-results and on-the-ground success, each OSM field office is required by REG-8 to prepare findings from performance standard evaluations of 1) off-site impacts, 2) reclamation success and 3) customer service. These evaluations are required to report the number and degree of off-site impacts, the number and percentage of inspectable units free of off-site impacts; the number of acres that meet the bond release requirements and have been released by the State for the various phases of reclamation; and the effectiveness of customer service provided by the State. In addition to this required information, the CFO and NDPSC agreed to further evaluate reclamation success with specific evaluations, as allowed in REG-8 and as addressed in the Regulatory Performance Agreement in effect for the evaluation year. Specific evaluations were conducted to compare and evaluate the number of acres reclaimed (seeded) to the number of acres mined (disturbed).

A. Off-Site Impacts

For the purpose of oversight, an 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. As a part of this oversight NDPSC and CFO developed an oversight work plan to evaluate and document the effectiveness of the North Dakota program in protecting the environment and the public from negative off-site impacts resulting from mining operations in North Dakota.

Several sources of information have been selected for identifying off-site impacts. These include but are not limited to: State and OSM 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 NDPSC and CFO.

Two off-site impacts were identified during the reporting period (see Appendix A, Table 4). An off-site impact occurred at the BNI Center Mine, when a 60" culvert eroded and deposited a small amount of sediment downstream. The integrity of the overlying gravel road was also in question. This seems to be an isolated event and no systematic problems were identified. The State issued NOV-1001 (Notice of Violation) and the culvert and road have been repaired. Another off-site impact occurred at the Dakota Westmoreland Beulah Mine. In this case, improper

maintenance of a haul road, combined with a major precipitation event, led to a small amount of sediment being deposited on undisturbed areas, including an area beyond the permit boundary. The State issued NOV-1002 in response to this incident. The sediment was removed from the affected area, disturbed areas were reseeded, a silt fence was repaired and additional silt fences were installed. A company plan for berm maintenance was also initiated.

B. Reclamation Success

Reclamation success will be determined based on the number of acres that meet the bond release standards. In addition to the nationwide information reported, Field Offices and States may conduct specific evaluations. Table 5 of Appendix A catalogues the acreage of land released from bond for Phase I, II, and III. The information collected to measure Reclamation Success is listed below for the following areas:

a. Land form/Approximate Original Contour (AOC)

MEASUREMENT: AOC achievement will be measured by the acres of Phase I bond released. Approximately 24% (16,163 acres) of the disturbed lands (66,075 acres) have received Phase I Bond Release.

b. Land Capability

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

MEASUREMENT: Proper replacement of soil resources will be measured by acres of Phase II bond release. Approximately 18% (11,807 acres) of the disturbed lands (66,075 acres) have received Phase II Bond Release.

MEASUREMENT: Vegetation stability will be measured by acres of Phase II bond release. Approximately 18% (11,807 acres) of the disturbed lands (66,075 acres) have received Phase II Bond Release.

MEASUREMENT: Achievement of postmining land uses will be measured by acres of Phase III bond release. Approximately 18% (11,742 acres) of the disturbed lands (66,075 acres) have received Phase III Bond Release.

MEASUREMENT: Successful revegetation will be measured by acres of Phase III bond release. Approximately 18% (11,742 acres) of the disturbed lands (66,075 acres) have received Phase III Bond Release.

c. Hydrologic Reclamation

MEASUREMENT: Achievement of surface water quality and quantity restoration can be measured by acres of Phase III bond release. Approximately 18% (11,742 acres) of the disturbed lands (66,075 acres) have received Phase III Bond Release.

MEASUREMENT: Achievement of groundwater recharge capacity and ground water quantity and quality restoration can be measured by acres of Phase III bond release.

Approximately 18% (11,742 acres) of the disturbed lands (66,075 acres) have received Phase III Bond Release.

d. Contemporaneous Reclamation

According to the measurements used in REG-8 and reviews of current reclamation plans, our 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. Both State and Federal regulations do not require that an operator file for bond release at any prescribed time. Therefore, operators typically do not file for Phase III bond release until completion of the entire mining operation. As a result, the number of acres released from Phase III bond is small compared to the number of acres actually regraded, soiled and seeded. It should also be noted that these REG-8 measurements are not the only measurements that can be used to determine reclamation success.

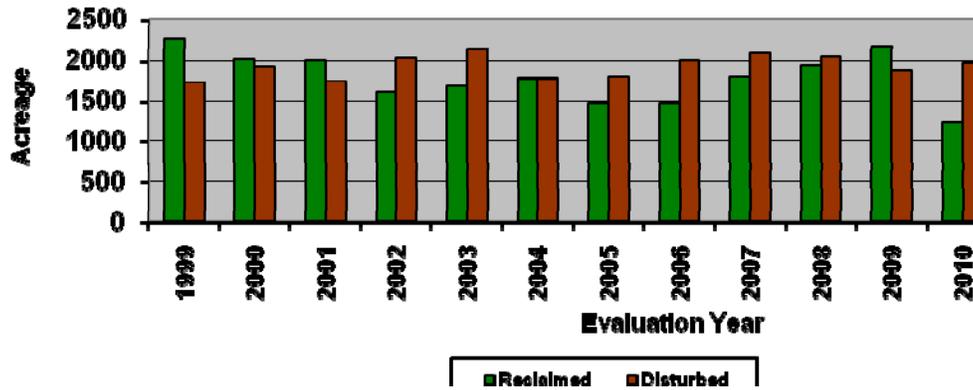
CFO believes another general measurement for contemporaneous reclamation is a comparison of the rate at which lands are being permanently reclaimed (seeded) to the rate of disturbance. This evaluation year mining companies in North Dakota disturbed more land than they have reclaimed (see Figure 1). However, the cumulative ratio of reclaimed lands to disturbed lands in North Dakota has remained steady over the past three years and has increased over the past decade (see Chart 1). This fact when coupled with the REG-8 measurements support the CFOs conclusion that North Dakota is reclaiming land as contemporaneously as possible.

The following graphs and chart are used to show the rate at which lands are being permanently reclaimed (seeded) compared to the rate of disturbance.

MEASUREMENT: The Casper Field Office elected to measure contemporaneous reclamation by evaluating the rate at which disturbed lands are regraded, resoiled and seeded to the rate of mining.

The CFO is continuing to review the acres disturbed and the acres reclaimed for active surface coal mines in North Dakota.

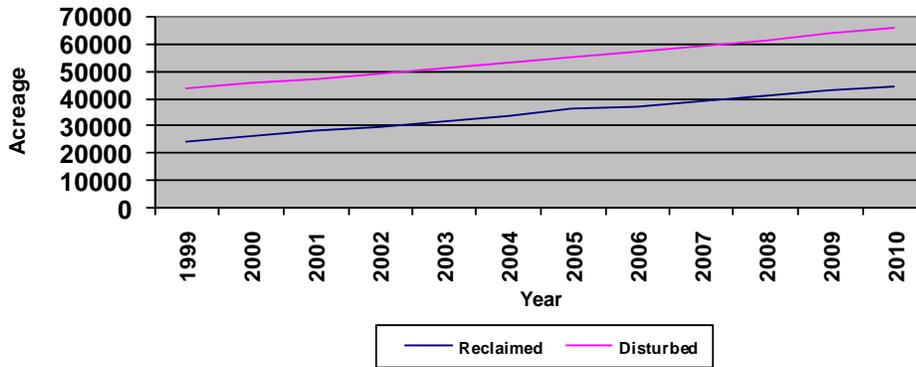
Figure 1. Annual Disturbance vs. Reclamation



Source of data: NDPSC

Figure 1 illustrates the annual disturbance and reclamation for the aggregate of all mines within the State. Note that the amount of reclamation has decreased over the past year.

Figure 2. Cummulative Disturbance vs. Reclamation



Source of data: NDPSC

Figure 2 illustrates the cumulative disturbance and reclamation for the aggregate of all mines within the State. Note the lines mostly parallel each other.

Chart 1
North Dakota Reclamation Summary

EVAL. YEAR	ACRES DISTURBED	Cumulative Acres Dist.	ACRES RECLAIMED	Cumulative Acres Recl.	RATIO OF RECLAM VS DISTURB	Cumulative RATIO OF RECLAM VS DISTURB
1999	842	43,513	462	24,560	0.55	0.56
2000	928	45,426	708	26,568	0.75	0.58
2001	853	47,164	1,121	28,560	1.31	0.61
2002	1,241	49,190	1,026	30,176	0.83	0.61
2003	2,142	51,332	1,678	31,892	0.78	0.62
2004	1,772	53,104	1,775	34,077	1.00	0.64
2005	1,796	55,100	1,458	36,667	0.81	0.67
2006	2,004	57,136	1,463	37,000	0.73	0.65
2007	2,085	59,220	1,787	39,147	0.86	0.66
2008	2,045	61,237	1,934	41,081	0.95	0.67
2009	1,873	64,110	2,164	43,245	1.15	0.67
2010	1,965	66,075	1,227	44,472	0.62	0.67

Source of data: ND-PSC

Chart 1 provides the actual acres disturbed and reclaimed annually for all mines. A notable drop in the rate of reclamation has occurred during the past year, however, 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 CFO feels that reclamation in North Dakota is occurring as contemporaneously as practicable. This past year has seen a significant increase in the development of new mine areas, and a resulting delay in final reclamation. This can be seen as a predictable aspect of the mining process. When mining ceases in a pit area, a large spoil area behind the final pit cannot be reclaimed as quickly as desired. This is because the spoil material must be transported and used to backfill the final pit to meet AOC requirements. This can cause a short term delay in final reclamation. However, as the spoil piles are regraded and the final pit is properly backfilled to AOC requirements, large acreages will likely be reclaimed in future years. Likewise, as new areas are developed, several pits must be mined before a large enough area is available to move and regrade boxcut spoils to ensure the AOC requirements are met. Once enough boxcut spoil has been placed in its final location to meet AOC requirements, large areas become available for soil respreading and seeding. It should be noted that large final pit areas of the Freedom, Falkirk, and Beulah Mines are currently in the process of being reclaimed. Also, some larger areas in new pit sequences, including boxcut pits at the Freedom Mine should soon be at final grade to allow soil re-spreading to begin. The CFO will continue to report: reclamation success and inventory the status of disturbed lands for future reports.

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.

One verbal complaint was received by the Reclamation Division near the end of the 2009 evaluation year, but was still under investigation at the close of EY2009. The complainant had concerns that coal outcrop drilling by the mine operator had affected his water well. The NDPSC finished investigating this complaint during EY2010 and came to the conclusion that the drilling did not affect the water well.

A written complaint was received by OSM on June 1, 2010. Ten-day notice # X10-010-448-001 was issued to the NDPSC to transmit citizen complaint ID # CC10-010-001. This complaint alleges that mining activities have contributed to flooding and crop damage on an adjacent farm. NDPSC conducted a six week review of pumping and monitoring well records. NDPSC determined that water contained by a nearby sediment pond was the likely cause of seeps on the complainant's property. The mining company has agreed to remove the pond in question as expediently as possible. The large size of the pond requires that approval be obtained from the Mine Safety and Health Administration.

The Reclamation Division responded to numerous requests for information from landowners, mining companies, government agencies and others. A permit application for a proposed new mine was also filed during the evaluation year.

The regulatory program in North Dakota is administered by the North Dakota Public Service Commission. 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- 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. OSMRE Assistance

A. National Technical Training Program

During the evaluation period, five Reclamation Division staff and two AML program staff attended a total of seven NTTTP training courses. One AML staff participated as an NTTTP instructor for the AML Drilling and Grouting class during this reporting period. One Reclamation staff member attended the Instructor's Training Course and may serve as an instructor in the future.

B. Technical Innovation and Professional Services

During the evaluation year two Reclamation Division staff and one AML program staff attended a total of three TIPS training courses. No staff members participated as TIPS instructors.

VII. General Oversight Topic Reviews

A. State Program Amendments

Overall, North Dakota's program is consistent with SMCRA and the Federal regulations. State Program Amendment SATS # ND-051-FOR, which addresses rule and statutory changes that allow the revegetation responsibility period to be reduced from ten years to five years for eligible lands that are re-mined, is currently under review by OSM. Also, on October 2, 2009, OSM notified NDPSC that, under 30 CFR 732.17(d), certain North Dakota provisions pertaining to ownership and control and the use of OSM's Applicant Violator System need to be revised. NDPSC has indicated that they intent to submit a draft set of proposed rule changes late in 2010.

At this time, there are no other outstanding programmatic issues unresolved in the North Dakota program. Both OSM and the NDPSC are trying to streamline and improve the amendment approval process through better cooperation and communication on both the Federal and State levels.

B. Inspection and Enforcement

The North Dakota Public Service Commission continues to conduct frequent and thorough inspections. North Dakota conducted 80 complete inspections and 443 partial inspections on all active mine sites during this evaluation year. North Dakota also conducted 30 complete inspections and 57 partial inspections on all inactive mine sites during this evaluation year. They have exceeded the number of inspections required on all mine sites during this evaluation year. The required number of State inspections was calculated using 26 inspectable units. While North Dakota began EY 2010 with 31 inspectable units, five of these units achieved Phase III bond release, and thus, no longer require inspection.

As part of OSM's oversight improvement efforts, OSM announced in November 2009 that it would immediately increase the number of oversight inspections in EY 2010. The Casper Field Office conducted three complete inspections and ten partial inspections of coal mining operations in North Dakota during this evaluation year, including one unannounced independent inspection. This was an 85 percent increase in the number of inspections conducted by CFO over the previous evaluation year. The increase in inspection frequency had no effect on the number of enforcement actions taken by either the State or CFO. During EY 2009, NDPSC issued five NOV's and no CO's, while CFO did not issue any enforcement actions, or Ten-Day Notices (TDNs). During EY2010, the number of enforcement actions issued by NDPSC dropped to two NOV's and no CO's, while CFO, again, did not issue any enforcement actions. A single TDN was sent to the State by the CFO as the result of a citizen's complaint. Despite an increase in the frequency of Federal oversight inspections, the number of Federal enforcement actions has remained constant and the number of State enforcement actions has actually decreased. This helps to illustrate the effectiveness of North Dakota's Regulatory Program.

NDPSC and OSM personnel participated in an annual overflight of the four major mines, and various AML sites. Photographs and a GPS tracklog were taken to document current conditions at each mine.

North Dakota inspection reports are complete, accurately document site conditions and mine activity, and give the status of any violations. The reports have continuity with previous reports. All performance standards were reviewed and documented during complete inspections and the reports contain a discussion of the current mine status. Each partial inspection report documents mining and reclamation activities, performance standards and permit requirements that were reviewed, as well as those portions of the mine that were inspected.

The NDPSC maintains an inspectable units list and an inspection database sufficient to meet its program requirements.

C. Grants Management

On May 20, 2010, CFO conducted an evaluation plan performance review, which evaluated two performance measures. The first measure investigated whether State inventory records are adequate and the second measure looked to see if there have been any recent audit (A-133 Audit) findings for the North Dakota Regulatory Program to resolve.

This review found that the North Dakota Regulatory Program uses the OSM Form 60 to report purchases made by Federal grant funds to OSM. This property inventory report is submitted to OSM on an annual basis. The North Dakota Regulatory Program also follows the three year record retention period of office records as stipulated by Chapter 1-43 of OSM's Federal Assistance Manual (FAM). In sum, the North Dakota Regulatory Program keeps a comprehensive inventory of all purchases made using funds from its annual Federal Regulatory Program, Administrative and Enforcement Grant. The North Dakota Program follows OSM's policies and procedures for the use, management and disposition

of property, equipment and supplies purchased under any OSM Assistance Agreement and are in compliance with Chapter 1-410 Property, of the FAM.

During this on site review the latest Single Audit Report available was for Fiscal Years ended June 30, 2007 and 2008. These reviews included a sampling of expenditures from all NDPSC divisions, including the Reclamation and AML Divisions. However, no detailed reviews of the North Dakota Regulatory or Abandoned Mine Land grants were included as part of this audit.

With regard to A-133 Audits, the NDPSC Reclamation Division Program Director explained that they had been told that the Reclamation Division did not meet the audit threshold of major programs established by the State Auditor's Office. A discussion with the North Dakota Auditor's Office confirmed this on June 18, 2010. The North Dakota Auditor's Office stated that the NDPSC Programs funded by OSM were considered Type B low risk programs by the State Auditor's Office. Type B programs do not meet the bi-annual threshold of nine million dollars like Type A programs that are always subject to audit. The State Auditor's Office performed a risk assessment of the North Dakota Program on May 19, 2010 and no major findings or items of interest for required audits were discovered. There were no audit findings requiring resolution for the North Dakota Regulatory Program when this review was conducted.

The FY2009 Regulatory Grant was closed during EY2010 with final closeout reports submitted within the timeframes required by the OSM Federal Assistance Manual and no deficiencies noted.

VIII. National Priority Oversight Topics

As authorized by Directive REG-8; Approximate Original Contour (AOC), and Determination of Required Bond Amount were selected as national priority review topics for EY2010.

An evaluation was undertaken to assess how the North Dakota Program AOC requirements are applied at the permitting stage and how the requirements in the permit are implemented and enforced. Another evaluation was undertaken to address how North Dakota is complying with the state program counterparts to 30 CFR 800.14 and 800.15(d), which govern determination of required bond amounts.

A. Approximate Original Contour

The OSM WR Team reviewed the NDPSC Regulatory Program for implementation of AOC at four mine sites. The permits reviewed included: 1) Beulah Mine, Permit KRSB-8603; 2) Coteau-Freedom Mine, Permit NACT-9501; 3) Coteau-Freedom Mine, Permit NACT-0201; and 4) Falkirk Mine, Permit NAFK-9601. All are active surface mines in North Dakota. A representative of OSM conducted field verification of AOC at the Beulah Mine, Permit KRSB-8603 and the Coteau-Freedom Mine Permit NACT-9501.

AOC Findings

Currently there is no formal agreement between OSM and North Dakota regarding the definition and interpretation of AOC. North Dakota's reclamation law requires the mine operators to reshape all areas affected by surface coal mining operations to the gentlest topography consistent with adjacent unmined landscape elements, with maximum postmining graded slopes that do not exceed the AOC. The State has not received any comments or citizen complaints relating to AOC or post-mining land use directed to the State program or OSM. Nor are there any outstanding required amendments or 30 CFR 732 letters related to AOC or post mining land uses associated with AOC waivers.

The State has a process in its regulations that defines its interpretation of AOC and the evaluation of backfilling and grading. Each permit presented data that was consistent with State regulation language and requirements for characterizing mining lands; the interpretation of this data enabled both OSM and the State to identify if the mine was following rules with respect to AOC or if a variance would be required. Permit documents reflected the State's interpretation of AOC in clear, concise verbiage that often followed State regulatory language. There were sufficient maps and figures in each permit showing pre and post-mining contours, area hydrology, and soil maps. The area of disturbance for the mines reviewed by the OSM team did not have significant relief and post-mining terrain variation with respect to AOC and the topography was mostly flat with some undulation. Additionally, there were some mined lands that have been designated as "prime farmland" and permit language demonstrated in detail that these areas would be reclaimed to "prime farmland", as well as being reclaimed to AOC. Backfill and grading sections of permit reclamation plans demonstrated spoil swell factors resulting from various types of mining operations, which were used to determine if the mine had thin or thick overburden conditions that could lead to the need for out-of-pit spoils disposal or a variance from AOC. There were no variances to AOC for any of the permits reviewed by the Team.

The State performs routine on-site inspections of post-mining AOC and also reviews and verifies data on AOC reclamation contained in annual reports submitted by each mine operator. North Dakota requires its operators to submit an as-built post-mining terrain configuration prior to the operator performing any replacement of topsoil and subsoil or seeding of reclaimed lands. The operator may begin topsoil and subsoil replacement only after the State has approved the as-built post-mining terrain and performed an onsite inspection of the area. The State routinely uses the post-mining terrain approval process as part of its Phase 1 bond release criteria. OSM and the State cooperatively perform site inspections prior to bond release for tracts that contain leased Federal coal that was mined. OSM also performs yearly inspections of select mines in North Dakota.

After conducting a detailed review, OSM found that the State of North Dakota's process for evaluation of mining permits is adequate to ensure that backfilled and



graded areas will be reclaimed to AOC and that further follow-up action is not needed.

Field Verification Findings

The OSM Western Region Team conducted a field verification of lands reclaimed to AOC at the Beulah Mine, Permit KRSB-8603 and the Freedom Mine, Permit NACT-9501, in North Dakota on March 3rd 2010.

Field conditions at both mines included very cloudy skies and fog, and ground was covered with snow depths of up to two feet. The Team conducted two point-to-point transects at each mine. The snow coverage at the two mines made visual verification of AOC difficult. The Team walked zig-zag traverses at the two mines and attempted to verify the presence of a reconstructed drainage at the Coteau-Freedom Mine. However, the drainage was covered by snow and verification was limited to collection of data points along its reach. North Dakota generally has flat terrain and reclamation to AOC would be expected to be flat. Snow-covered surfaces were generally flat with some undulation. The post-mining land use is for farming and ranching and it appears that lands reclaimed to AOC support this use. There did not appear to be any problems with the State inspection program for inspection of AOC.

B. State Calculation of Required Bond Amounts

The OSM bonding oversight review team reviewed the State's bond cost calculations, and the operation and reclamation plans for the Beulah Mine, Center Mine and the Falkirk Mine. In North Dakota, most "mines" are made up of multiple permits, and each permit is bonded independently or consolidated with other permits at the mine.

Bond Adequacy Findings

The NDPSC uses their guidance document, Policy Memorandum No. 16, to specify the costs to be included with each reclamation cost estimate submitted to them for approval. The variable cost estimates are reviewed and updated, if necessary, in July of each year. This guidance document sets equipment type, costs and production factors, as well as labor rates and materials. North Dakota uses state-accepted sources to update their reclamation costs. Through the Phase I, II and III bond releases, the PSC retains \$200/acre on all undisturbed acres within the permit.

The reclamation cost estimates in approved permits are reviewed by the Reclamation Division at permit midterm, renewal, when significant mine plan or reclamation plans are proposed, or when significant changes are made to Policy Memorandum No. 16 to ensure the bond amounts remain adequate. If they are found to be inadequate, the permittees are required to increase the bond amount.

The NDPSC does not follow the OSM Bonding Handbook line items for Indirect Costs, but does consider the same types of costs in their reclamation cost estimates. Overall, OSM determined the range of North Dakota's comparable "Indirect" costs from the permits reviewed, to be in the range of 22-30% of their respectively calculated Direct costs.

Policy Memorandum No. 15 provides guidance on the release of lands used for ash disposal, as was the case in one of the reviewed permits.

No financial assurance is provided for postmining pollutional discharges as no postmining discharges exist nor are any such discharges expected. There are no outstanding required program amendments or 30 CFR 732 notifications related to bonding, nor have there been any public inquiries regarding bond adequacy. North Dakota has had only one bond forfeiture, which occurred in 1994, for a very small mine.

The bond amounts reviewed in North Dakota were adequate to complete reclamation as approved in the operation and reclamation plans.

APPENDIX A: Tabular Summaries of Data Pertaining to Mining, Reclamation and Program Administration

NOTE:

These tables present data pertinent to mining operations and State and Federal regulatory activities within North Dakota. They also summarize funding provided by OSM and North Dakota staffing. Unless otherwise specified, the reporting period for the data contained in all tables is the same as the evaluation year. Additional data used by OSM in its evaluation of North Dakota's performance is available for review in the evaluation files maintained by the Casper OSM Office.

TABLE 1			
Coal Produced for Sale, Transfer, or Use			
(Millions of Short Tons)			
Period	Surface Mines	Underground Mines	Total
Coal production^A for entire State:			
Calendar Year			
CY 2007	29.674	0.000	29.674
CY 2008	29.780	0.000	29.780
CY 2009	29.933	0.000	29.933
<p>^A Coal production as reported in this table is the gross tonnage which includes coal that is sold, used, or transferred as reported to OSM by each mining company on form OSM-1 line 8(a). 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 States or other sources due to varying methods of determining and reporting coal production.</p> <p>Provide production information for the latest three full evaluation years to include the last full evaluation year for which data is available.</p>			

TABLE 2

**Inspectable
Units**
As of June 30, 2010

Coal mines and related facilities	Number and Status of Permits										Permitted Acreage ⁸ (100's of acres)			
	Active or temporarily inactive		Inactive Phase II bond release		Abandoned		Totals		Nbr.of Insp. Units ^A	Federal Lands		State/Private Lands		All Lands
	IP	PP	IP	PP	IP	PP	IP	PP		IP	PP	IP	PP	Total
	IP	PP	IP	PP	IP	PP	IP	PP	IP	PP	IP	PP	Total	
LANDS FOR WHICH THE STATE IS THE REGULATORY AUTHORITY														
Surface mines	0	20	1	10	0	0	1	30	31	0	148.5	0.5	900.8	1,049.8
Underground mines	0	0	0	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	0.0	0.0
Total	0	20	1	10	0	0	1	30	31	0	148.5	0.5	900.8	1,049.8
Total number of permits:											31			
Average number of permits per inspectable unit (excluding exploration sites):											1.00			
Average number of acres per inspectable unit (excluding exploration sites):											3,386.45			
Number of exploration permits on State and private lands:									0	On Federallands ^C :		0		
Number of exploration notices on State and private lands:									4	On Federallands ^C :		0		
<p>IP: Initial regulatory program sites PP: Permanent regulatory program sites</p> <p>A Inspectable units include multiple permits that have been grouped together as one unit for inspection frequency purposes by some State programs.</p> <p>B When a single inspectable unit contains both Federal lands and State/Private lands, enter the permitted acreage for each land type in the appropriate category.</p> <p>C Includes only exploration activities regulated by the State pursuant to a cooperative agreement with OSM or by OSM pursuant to a Federal lands program. Excludes exploration regulated by the Bureau of Land Management.</p> <p>D North Dakota began EY2010 with 31 inspectable units. By the end of the evaluation year, 5 permits (inspectable units) had achieved Phase III bond release, resulting in 26 inspectable units on June 30, 2010.</p>														

TABLE 3

State Permitting Activity

As of June 30, 2010

Type of Application	Surface mines			Underground mines			Other facilities			Totals		
	App. Rec.	Issued	Acres	App. Rec.	Issued	Acres ^A	App. Rec.	Issued	Acres	App. Rec.	Issued	Acres
New Permits	1	0	0	0	0	0	0	0	0	1	0	0
Renewals	4	1		0	0		0	0		4	1	
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 ^B											4	
Revisions (exclusive of incidental boundary revisions)		21			0			0			21	
Revisions (adding acreage but are not incidental boundary revisions)	1	1	890	0	0	0	0	0	0	1	1	890
Incidental boundary revisions	0	0	0	0	0	0	0	0	0	0	0	0
Totals	6	23	890	0	0	0	0	0	0	6	27	890

OPTIONAL - Number of midterm permit reviews completed that are not reported as revisions: 5

^A Includes only the number of acres of proposed surface disturbance.

^B State approval not required. Involves removal of less than 250 tons of coal and does not affect lands designated unsuitable for mining.

TABLE 4

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 AND TOTAL NUMBER OF EACH TYPE	Blasting	0	0	0	0	0	0	0	0	0	0	0	0
	Land Stability	0	0	0	0	0	0	0	0	0	0	0	0
	Hydrology	2	0	0	2	0	0	2	0	0	0	0	0
TYPE OF IMPACT AND TOTAL NUMBER OF EACH TYPE	Encroachment	0	0	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0	0	0
	Total	2	0	0	2	0	0	2	0	0	0	0	0
Total number of inspectable units (excluding bond forfeiture sites):					31								
Inspectable units free of off-site impacts:					29								
Inspectable units with off-site impacts:					2								
OFF-SITE IMPACTS ON 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 AND TOTAL NUMBER OF EACH TYPE	Blasting	0	0	0	0	0	0	0	0	0	0	0	0
	Land Stability	0	0	0	0	0	0	0	0	0	0	0	0
	Hydrology	0	0	0	0	0	0	0	0	0	0	0	0
TYPE OF IMPACT AND TOTAL NUMBER OF EACH TYPE	Encroachment	0	0	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0
Total number of inspectable units (only bond forfeiture sites):					0								
Inspectable units free of off-site impacts:					0								
Inspectable units with off-site impacts:					0								

TABLE 5

Annual State Mining and Reclamation Results

Bond Release phase	Applicable performance standard	During this Evaluation Year		
		Total acreage released	Acreage also released under Phase I	Acreage also released under Phase II
A	B	C	D	E
Phase I	- Approximate original contour restored - Topsoil or approved alternative replaced	2,836		
Phase II	- Surface stability - Establishment of vegetation	2,221	0	
Phase III ^c	- Post-mining land use/productivity restored - Successful permanent vegetation - Groundwater recharge, quality and quantity restored - Surface water quality and quantity restored	2,370	2,221	2,221
Bonded Acreage^A			Acres during this evaluation year	
Total number of new acres bonded during this evaluation year			890	
Number of acres bonded during this evaluation year that are considered remining, if available			0	
Number of acres where bond was forfeited during this evaluation year			0	
Bonded Acreage Status			Cumulative Acres	
Total number of acres bonded as of the end of last review period (June 30, 2009) ^B			106,457	
Total number of acres bonded as of the end of this review period (June 30, 2010) ^B			104,977	
Sum of acres bonded that are between Phase I bond release and Phase II bond release as of June 30, 2010 ^B			4,235	
Sum of acres bonded that are between Phase II bond release and Phase III bond release as of June 30, 2010 ^B			115	
Disturbed Acreage			Acres	
Number of Acres Disturbed during this evaluation year			1,965	
Number of Acres Disturbed at the end of the evaluation year (cumulative)			66,075	
^A Bonded acreage is considered to approximate and represent the number of acres disturbed by surface coal mining and reclamation operations. ^B Bonded acres in this category are those that have not received a Phase III or other final bond release (State maintains jurisdiction).				

Brief explanation of columns D & E. The States will enter the total acreage under each of the three phases (column C). The additional columns (D & E) will "break-out" the acreage among Phase II and/or Phase III. Bond release under Phase II can be a combination of Phase I and II acreage, and Phase III acreage can be a combination of Phase I, II, and III. See "Instructions for Completion of Specific Tables," Table 5 for example.

TABLE 6

State Bond Forfeiture Activity
(Permanent Program Permits)

Bond Forfeiture Reclamation Activity by SRA	Number of Sites	Dollars	Acres
Sites with bonds forfeited and collected that were unreclaimed as of June 30, 2009 (end of previous evaluation year) ^A	0		0
Sites with bonds forfeited and collected during Evaluation Year 2010 (current evaluation year)	0	\$0	0
Sites with bonds forfeited and collected that were re-permitted during Evaluation Year 2010 (current evaluation year)	0		0
Sites with bonds forfeited and collected that were reclaimed during Evaluation Year 2010 (current evaluation year)	0		0
Sites with bonds forfeited and collected that were unreclaimed as of June 30, 2010 (end of current evaluation year) ^A	0		0
Sites with bonds forfeited but uncollected as of June 30, 2010 (current evaluation year)	0		0
Surety/Other Reclamation (In Lieu of Forfeiture)			
Sites being reclaimed by surety/other party as of June 30, 2009 (end of previous evaluation year) ^B	0		0
Sites where surety/other party agreed to do reclamation during Evaluation Year 2010 (current evaluation year)	0		0
Sites being reclaimed by surety/other party that were re-permitted during Evaluation Year 2010 (current evaluation year)	0		0
Sites with reclamation completed by surety/other party during Evaluation Year 2010 (current evaluation year) ^C	0		0
Sites being reclaimed by surety/other party as of June 30, 2010 (current evaluation year) ^B	0		0

^A Includes data only for those forfeiture sites not fully reclaimed as of this date

^B Includes all sites where surety or other party has agreed to complete reclamation and site is not fully reclaimed as of this date

^C This number also is reported in Table 5 as Phase III bond release has been granted on these sites

TABLE 7	
State Staffing	
(Full-time equivalents at end of evaluation year)	
Function	EY 2010
Regulatory Program	
Permit Review	4.70
Inspection	1.95
Other (administrative, fiscal, personnel, etc.)	1.90
Regulatory Program Total	8.55
AML Program Total	4.55
Total	13.10

TABLE 8		
Funds Granted To North Dakota		
BY OSM		
(During the Current Evaluation Year)		
(Actual Dollars, Rounded to the Nearest Dollar)		
Type of Funding	Federal Funds Awarded During Current Evaluation Year	Federal Funding as a Percentage of Total Program Costs
Regulatory Funding		
Administration and Enforcement Grant	\$ 798,743	64.00 %
Other Regulatory Funding, if applicable	\$ 0	0.00 %
Subtotal	\$ 798,743	
Small Operator Assistance Program	\$ 0	100 %
Abandoned Mine Land Reclamation Funding ^A	\$ 3,498,697	100 %
Totals	\$ 4,297,440	
^A Includes funding for AML Grants, the Clean Streams Initiative and the Watershed Cooperative Agreement Program.		

TABLE 9		
State Inspection Activity		
During Current Evaluation Year		
Inspectable Unit	Number of Inspections Conducted	
Status	Complete	Partial
Active ^A	80	443
Inactive ^A	30	57
Abandoned ^A	0	0
Total	110	500
Exploration	6	0
^A Use terms as defined by the approved State program.		

TABLE 10		
State Enforcement Activity		
During Current Evaluation Year		
Type of Enforcement Action	Number of Actions^A	Number of Violations^A
Notice of Violation	2	2
Failure-to-Abate Cessation Order	0	0
Imminent Harm Cessation Order	0	0
^A Do not include those violations that were vacated.		

TABLE 11		
Lands Unsuitable Activity		
During Current Evaluation Year		
	Number	Acreage
Number Petitions Received	0	0
Number Petitions Accepted	0	0
Number Petitions Rejected	0	0
Number Decisions Declaring Lands Unsuitable	0	0
Number Decisions Denying Lands Unsuitable	0	0

TABLE 12 Optional	
Post Mining Land Use Acreage (after Phase III bond release)	
Land Use	Acreage Released during this Evaluation Year
Cropland	1,072
Pasture/Hayland	149
Grazing Land	354
Forest	36
Residential	0
Fish & Wildlife Habitat	0
Developed Water Resources	13
Public Utilities	0
Industrial/Commercial	73
Recreation	0
Other (please specify): <u>Undisturbed lands</u>	640
Other (please specify): <u>Public roads and associated rights of way</u>	33
Other (please specify):	0
Total	2,370

APPENDIX B: North Dakota's Comments and Casper Field Office Responses

The following letter, dated August 13, 2010, includes comments and suggestions from NDPSC for improvement to OSM's 2010 Regulatory Oversight report on the North Dakota Regulatory Program.



Public Service Commission
State of North Dakota

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August 13, 2010

Mr. Jeff Fleischman, Director
Casper Field Office
Office of Surface Mining
PO Box 11018
Casper, WY 82602 - 5004

RE: Draft 2010 Oversight Report for the Coal Regulatory Program

Dear Mr. Fleischman:

The following are the Reclamation Division's comments on OSM's draft 2010 Oversight for North Dakota's coal regulatory program. Overall, we agree with nearly all of the comments made in the draft report, but we believe some of the comments in the Contemporaneous Reclamation discussion do not accurately reflect conditions at some of the mines. We have also noted a few minor items that should be corrected.

Contemporaneous Reclamation

The discussion on page 6 implies there are reclamation delays since mines emphasize coal production over reclamation. On page 8 of the draft report, a statement is made that reclamation efforts have fallen behind in the past year due to development of new areas. This discussion goes on to state that the Freedom and Falkirk Mines are directing their equipment and manpower to the development of large new areas. While the opening of new areas will result in some reclamation delays, this does not necessarily mean the mining companies are reducing their reclamation efforts. We believe that delays in reclamation are inherent when mining ceases in one area and starts in another, but that reclamation must lag in order to properly reclaim final pit areas and the boxcut spoil areas of a new pit sequence.

When mining ceases in a pit area, a large spoil area (5-8 pit widths) behind the final pit cannot be reclaimed contemporaneously since spoil material from these areas must be transported and used to backfill the final pit to meet AOC requirements. Although this will cause a short term delay in final reclamation of the affected area that is likely to be many pits in width, large acreages will be reclaimed in a future year(s) that greatly exceeds what that mine disturbs that year. Likewise, when a new pit area is developed, the mining company will have to mine several pits before a large enough mined area is available to move and regrade the boxcut spoils to ensure the AOC requirements are met. Once enough of the boxcut spoil has been placed in its final location to

Mr. Jeff Fleischman
Page 2
August 13, 2010

meet AOC requirements, large areas are then available for soil respreading and seeding. It should be noted that large final pit areas of the Freedom, Falkirk and Beulah Mines are currently in the process of being reclaimed. Also, some larger areas in new pit sequences, including boxcut pits, at the Freedom Mine should soon be at final grade to allow soil respreading to begin.

Provisions in North Dakota's reclamation laws and rules recognize that variances from the contemporaneous reclamation requirements are sometimes needed and there are procedures that mining companies must follow to request them. Areas with approved variances from the contemporaneous reclamation requirements are identified and justified in the reclamation plan.

Other Comments

- 1) In the second paragraph on page 2 of the draft report, we recommend updating the sentence on recoverable coal to indicate that the most recent report by the State Geological Survey estimates a recoverable coal reserve of 25 billion tons in North Dakota.
- 2) The NTPP training discussion on page 9 should be revised to reflect that one of the PSC's AML staff members participated as an instructor for the AML Drilling and Grouting course. Also, we recommend noting that a Reclamation Division staff member attended OSM's Instructor Training so he can serve as an instructor in the future.
- 3) In the AOC discussion, we recommend revising the last sentence on page 13 to read "**there did not appear to be any problems**" with the State inspections for AOC, rather than stating "there did not appear to be a systematic problem" with AOC inspections. The OSM reviewers found no problems with our AOC inspection process.

Thank you for the opportunity to review the draft report. If you have any questions, please contact me at (701) 328-2251.

Sincerely,



James R. Deutsch
Director
Reclamation Division

jrdfosm2010oversight2010Comments_dft_Reg_report

CFO agrees with all of NDPSC's suggested changes and the appropriate sections of the report have been modified.

CFO contacted NDPSC corresponded by phone on August 20th and August 23rd to clarify a few discrepancies in the REG-8 Tables. The following modification was made to the report:

Table 5: The total number of acres bonded was modified from 104,925 to 104,977. The original number did not account for 52 acres of bonded acreage from Interim Permit 37 at the Center Mine.