

# OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT



## KNOXVILLE FIELD OFFICE ANNUAL EVALUATION REPORT FISCAL YEAR 2014



**OFFICE OF SURFACE MINING  
RECLAMATION AND ENFORCEMENT**

**Annual Evaluation Report**

for the

Regulatory and Abandoned Mine Land Programs

Administered by the Knoxville Field Office

of

**TENNESSEE and GEORGIA**

for

Fiscal Year 2014

October 1, 2013 to September 30, 2014

Prepared by:  
Knoxville Field Office

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## EXECUTIVE SUMMARY

### Tennessee and Georgia Federal Programs

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) provides authority for the Office of Surface Mining Reclamation and Enforcement (OSMRE) to implement a Federal regulatory program in the states without approved regulatory programs. In Tennessee, OSMRE implemented the Federal regulatory program in October 1984 when the State repealed its surface mining law. OSMRE conducts full Federal program functions from the Knoxville Field Office (KFO) with primary regulatory responsibilities for inspection, enforcement, and permitting in the state of Tennessee. KFO also has regulatory responsibilities for surface coal mining activities in the state of Georgia because they never adopted an approved state program under SMCRA.

## REGULATORY

### Accomplishments

The following items highlight KFO's major accomplishments during Fiscal Year (FY) 2014:

- Lands Unsuitable for Mining Petition - On October 1, 2010, the state of Tennessee submitted a Lands Unsuitable for Mining petition for the North Cumberland Wildlife Management Area and Emory River Tracts Conservation Easement. The petition requests OSMRE designate more than 67,000 acres of mountainous terrain as unsuitable for surface coal mining in support of a conservation project called "Connecting the Cumberlands." OSMRE determined the state of Tennessee's petition was complete in November 2010.

In concert with three cooperating Federal agencies (U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, and U.S. National Park Service), OSMRE initiated development of a combined Petition Evaluation Document/Environmental Impact Statement (PED/EIS) document. OSMRE entered into an Interagency Agreement with the Denver Service Center which will provide project management services to assist OSMRE for the life of the project and has completed the process of securing contractor services to prepare and publish the PED/EIS. The draft document is currently scheduled to be published in the fall of 2015. The final document is scheduled to be published in the summer of 2016.

- Reforestation – Industry planted 213,585 trees on 404 acres of reclaimed mined land in Tennessee during FY 2014. This year marks the second year KFO achieved full utilization of the Forestry Reclamation Approach, with 100 percent of all trees planted on Forestry Reclamation Approach prepared areas. This success is in part due to KFO outreach efforts with the industry, citizens, and academics interested in the reforestation of mined land.
- Interagency Coordination –The Local Interagency Working Group held a joint hearing in Knoxville, Tennessee at the Tennessee Department of Environment and Conservation (TDEC) office. Two nongovernmental groups concerned about the environmental impacts of a proposed 55-acre underground mine in Claiborne County, Tennessee requested the hearing. In addition to KFO, representatives from TDEC, the Nashville District U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service Cookeville Field Office, and Region 4 of the U.S. Environmental Protection Agency were present.

- Cost Recovery – KFO continued preparing for implementation of the cost recovery rule in anticipation of final rule promulgation. To help organize and implement the financial portions of the cost recovery rule, OSMRE developed the Cost Recovery Support Solution to assist in project tracking. The Cost Recovery Support Solution tracks each project from the beginning when the initial cost estimate is developed to the final close-out of the account when the project is finished.
- Youth Initiative – KFO employed three interns and two AmeriCorps participants during the year. These staff worked in the areas of geology, geographic information systems, hydrology, inspection, and administration. They provided valuable assistance with projects related to the Lands Unsuitable for Mining petition, Laserfische, GeoMine, SPOT Global Positioning System, and water quality database. KFO also hired a former AmeriCorps participant as a fulltime employee.

### National Measurements

- Coal Production - Tennessee ranked twenty-first in the production of coal among the 26 coal producing states in calendar year 2013. Over the past 10-year period, coal production has declined from 2.76 million tons in calendar year 2004 to 1.20 million tons in calendar year 2013 (the last year data was available). This is an overall decrease of 43 percent. However, there was an increase in the number of active coal producing mines from four (two underground mines and two surface mines) in FY 2013, to six (three underground mines and three surface mines) in FY 2014. There has been no coal production in the state of Georgia since the mid-1980s.
- Inspections - KFO successfully conducted the required number of inspections at all active, inactive, and abandoned mine sites in Tennessee and Georgia. In Tennessee, KFO reclamation specialists conducted 1,322 inspections at 153 inspectable units, including Notice of Intent to Explore sites, and 2 inspections at 1 abandoned mine site in Georgia. KFO issued 120 enforcement actions citing 164 violations as a result of these inspections. Reclamations specialists observed six measurable off-site impacts at four of the cited permits.
- Bond Releases - KFO approved bond releases on 1,383 acres for Phase I reclamation, 180 acres for Phase II reclamation, and 689 acres for Phase III reclamation.

### Customer Service/Stakeholder Outreach

- KFO experienced a decline in the number of citizen complaints received during recent years. Complaints have declined 60 percent during the last 5 years. The four complaints received this year were promptly investigated and responses were provided to the complainants within 10 days after the investigations were concluded.
- KFO ensures citizens, environmental groups, and industry representatives have access to all regulatory program files including permitting, bonding, inspection, and enforcement files. Managers and staff have open-door policies for members of the public interested in issues that may arise. In FY 2014, KFO responded to assistance requests from several dozen individuals and groups ranging from simple questions concerning coal mine permits to

requests related to complex water quality and inspection issues. Citizens receiving assistance continue to give KFO high marks on feedback under the Government Performance and Results Act (GPRA). KFO also solicits input from numerous local, State, and Federal agencies that may have an interest in a proposed permitting action. To facilitate communication with interested parties, KFO maintains a mailing and contact list which includes 10 different State and Federal agencies and 23 citizens and citizen groups.

### **Outstanding Issues**

- Proposed Endangered Species Listing – The northern long-eared bat (*Myotis septentrionalis*) is a species proposed for listing by the U.S. Fish and Wildlife Service; however, a final decision on its listing is not expected before April 2, 2015. There were no new species proposed for listing that would affect Tennessee permit applicants in 2014.

### **Technical Assistance and Grants**

- KFO maintains a geographic information system that is used to evaluate permit applications, assist with investigations, and capture monitoring data in Tennessee. The KFO geographic information system is a valuable resource which also supports the OSMRE GeoMine initiative, a national geographic data base which captures mining and other environmental data. Each year, the KFO geographic information system specialists process numerous requests from citizens, citizen groups, industry, and other Federal and state agencies for data. OSMRE has relied heavily on the system during review of the North Cumberland Wildlife Management Area, Lands Unsuitable for Mining petition.
- KFO staff members continue to serve on various projects and teams of interest to the Appalachian Region and OSMRE. During FY 2014, KFO staff expended numerous hours working on OSMRE initiatives such as Cost Recovery; the Stream Protection Rule; and the North Cumberland Wildlife Management Area, Lands Unsuitable for Mining petition.

### **ABANDONED MINE LANDS**

- OSMRE awarded TDEC \$2.7 million in Federal grant funding to operate its abandoned mine land program. The TDEC Land Reclamation Section completed one waterline extension project, two reclamation projects, and one gob pile project. Prior to construction, the water quality in the waterline project area exceeded secondary drinking standards for iron and manganese. As a result, five households received potable water. Reclamation of the three non-water projects ensured 366 citizens are no longer exposed to potential safety risks from abandoned mine lands.
- TDEC reclaimed 359.7 GPRA acres. The GPRA holds Federal agencies accountable for using resources wisely and achieving program results. The GPRA requires agencies to develop plans for goals they intend to accomplish, measure how well the agency is achieving these goals, and make appropriate decisions based on the information gathered.
- The Abandoned Mine Land Emergency program was transferred to the TDEC, Land Reclamation Section on October 1, 2010. Tennessee agreed to implement the program in

accordance with the provisions of the Federal Assistance Manual. Tennessee had no emergency projects during FY 2014.

## REGULATORY

### 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 OSMRE to oversee the implementation of and provide Federal funding for state regulatory programs that have been approved by OSMRE as meeting the minimum standards specified by SMCRA. The Act also provides authority for OSMRE to implement a Federal regulatory program in the states without approved regulatory programs. In Tennessee, OSMRE implemented the Federal regulatory program in October 1984 when the State repealed its surface mining law. OSMRE also has regulatory authority responsibilities for surface coal mining activities in the state of Georgia where an approved state program was never adopted under SMCRA.

This report contains summary information regarding the Tennessee and Georgia Federal programs and the effectiveness of the Federal programs in meeting the applicable purposes of SMCRA as specified in Section 102. This report covers the period of October 1, 2013, to September 30, 2014. Detailed background information and comprehensive reports for the program elements evaluated during this period are available for review on the OSMRE website at <http://odocs.OSMRE.gov/>. These reports are also available for review and duplication at the OSMRE, Knoxville Field Office located at 710 Locust Street, Second Floor, Knoxville, Tennessee 37902. The phone number is (865) 545-4103. The Field Office Director is Earl Bandy, email address [EBandy@osmre.gov](mailto:EBandy@osmre.gov).

The following acronyms are used in the regulatory section of this report:

AMD	Acid Mine Drainage
ARRI	Appalachian Regional Reforestation Initiative
CCWF	Coal Creek Watershed Foundation
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FRA	Forestry Reclamation Approach
FY	Fiscal Year
GIS	Geographic Information System
GPRA	Government Performance and Results Act
IUL	Inspectable Units List
KFO	Knoxville Field Office
LIWA	Local Interagency Working Agreement
LUM	Lands Unsuitable for Mining
NCWMA	North Cumberland Wildlife Management Area
NOI	Notice of Intent to Explore
NPDES	National Pollution Discharge Elimination System

OSMRE	Office of Surface Mining Reclamation and Enforcement
PED/EIS	Petition Evaluation Document/Environmental Impact Statement
SMCRA	Surface Mining Control and Reclamation Act of 1977
TDEC	Tennessee Department of Environment and Conservation
TWRA	Tennessee Wildlife Resources Agency
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service

## II. Overview of Tennessee and Georgia Coal Mining Industries

Tennessee’s coal resources are found in 22 counties. They extend from the Kentucky border to the Alabama border in the east central portion of Tennessee as illustrated in Figure 1. Mining in the northern counties is primarily in the steep slope areas of the Cumberland Mountain range. Mining in the southern counties is generally confined to area-type operations due to the relatively flat terrain associated with the Cumberland Plateau.



**Figure 1: Location of Tennessee coalfields.**

Tennessee’s recoverable coal reserves of 0.5 billion short tons exist in bituminous coal beds that range from less than 28 inches to 42 inches in thickness at depths of up to 1,000 feet. Tennessee coal is primarily used for generating electric power.

Tennessee ranked twenty-first in coal production among the 26 coal producing states in calendar year 2013. Coal production declined from a high of approximately 11.26 million tons in 1972 to 1.15 million tons reported during calendar year 2012. Coal production increased to 1.20 million tons in calendar year 2013. This was primarily due to a significant increase in underground mine production. Figures 2 and 3 on page 11 depict the recent trend in Tennessee coal production.

### Total Tennessee Coal Production 2007-2013

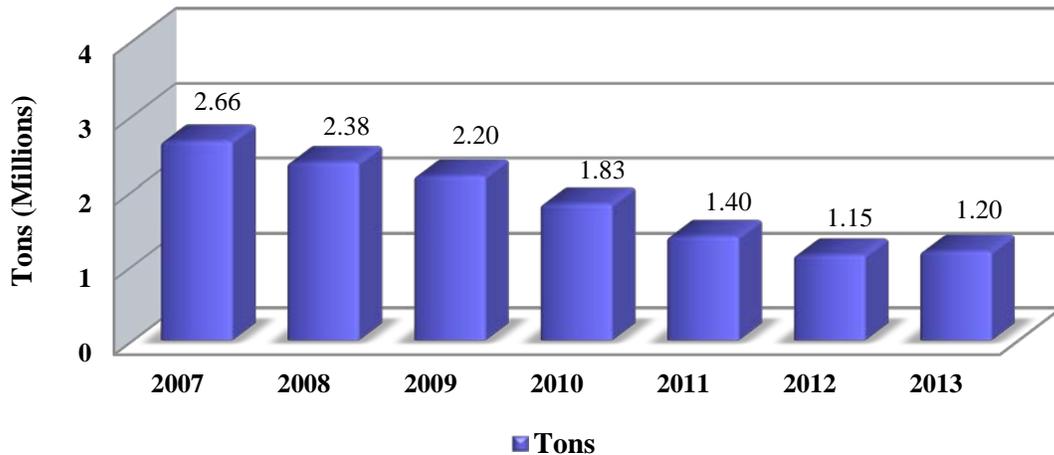


Figure 2: Total Tennessee coal production 2007 to 2013.

During FY 2014, six mines produced coal in Tennessee, three surface mines covering 1,225 acres and three underground mines comprised of 188 acres. The permitted acreage for the underground mines does not include the shadow area, which is the footprint of the underground disturbance transposed to the surface area above.

### Tennessee Surface and Underground Mine Coal Production 2007-2013

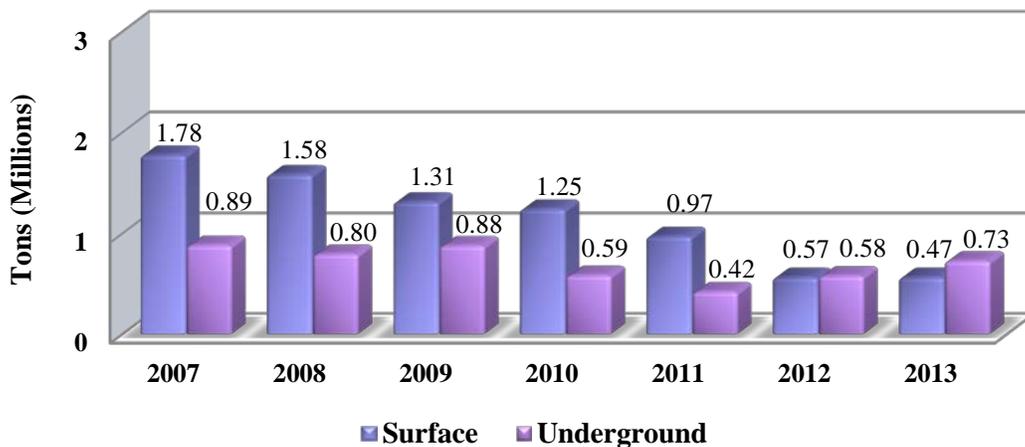


Figure 3: Tennessee surface and underground mine coal production 2007 to 2013.

KFO currently inspects only one abandoned mine site in Georgia. It is located in Dade County in the northern portion of the state. Ten acres of this surface mine were disturbed during the mining operation. There has been no coal production or permitting activity in Georgia since the mid-1980s.

### **III. Overview of the Public Participation and Outreach Efforts in the Tennessee Federal Program**

The Tennessee Federal Program provides numerous public participation opportunities. KFO encourages public participation and continually strives to inform the public of ways to participate in the regulatory program.

- **Public/Citizen Participation in the Regulatory Process**

Citizens, environmental groups, and industry representatives have access to regulatory program files including permitting, bonding, inspection, and enforcement. Managers and staff have open-door policies for citizens who are interested in discussing SMCRA issues that arise.

During the permitting process, KFO staff members are available to meet informally with individual citizens or organizations that express concerns or have an interest in pending permit applications, permit renewals, or revisions to existing permits. The purpose of these meetings is to answer questions relative to their concerns and to provide information and/or explanations with respect to permitting actions. As a part of this informal public participation process, KFO maintains a contact list of individuals and organizations who have expressed an interest in being notified of permitting actions under consideration by KFO. In FY 2014, KFO met with individual citizens or representatives of environmental groups on at least 25 occasions and discussed numerous issues during telephone conversations and inquiries.

Formal public participation opportunities are also afforded for all new permit applications, permit renewals, and significant permit revisions reviewed by KFO. In FY 2014, KFO received one public conference and site visit request for a new permit application and held four site visits for requests that were received in response to permitting activities prior to the FY 2014 reporting period. One public conference was also conducted in FY 2014.

The OSMRE website located at <http://www.osmre.gov> provides information and resources of interest to citizens. Citizens can find Federal Regulations, a list of frequently asked questions, and guidance on how to submit comments to the agency. Citizens can also obtain resources and information regarding ongoing issues related to the Tennessee Federal Program and other Appalachian Regional states at <http://www.arcc.osmre.gov>.

- **Agency Participation in the Regulatory Process**

In addition to encouraging public participation in the SMCRA regulatory process, KFO also solicits input from numerous local, State, and Federal agencies that may have an interest in a proposed permitting action. KFO maintains a mailing and contact list which includes 10 State and Federal agencies and 23 citizens and citizen groups. Those on the list are notified of proposed permitting actions. Local or county mailing and contact lists are also maintained for each of the 20 historical coal producing counties in Tennessee.

Each of these county lists generally includes 8 to 10 local agencies or officials that are notified of proposed permitting actions.

In addition to providing written notification to these agencies, KFO continues to participate in periodic meetings with agencies such as TDEC, U.S. Fish and Wildlife Service (USFWS), Tennessee Wildlife Resources Agency (TWRA), Environmental Protection Agency (EPA), U.S. Army Corps of Engineers (USACE), and National Park Service. The meetings are held to discuss issues related to coal mining in Tennessee. Numerous interagency meetings were held during the year in response to proposed permitting actions, concerns, and issues or to clarify existing policies.

- **Outreach Efforts with Customers and Stakeholders**

KFO continues to improve its relationships with customers and stakeholders by providing increased opportunities for participation in regulatory functions. KFO meets regularly with State and Federal agencies, citizens, landowners, and industry representatives to discuss concerns and to foster better working relationships. These efforts have resulted in KFO receiving beneficial input during the development of field office policies, procedures, and guidance documents; and more operators are taking the initiative to anticipate and address potential problems before they develop into violations. Feedback from customers indicates there has been enhanced communication with industry and citizens since outreach efforts began.

KFO routinely meets with individual coal company representatives or their consultants before they submit permit applications. The purpose of these meetings is to discuss potential issues that may arise during the permitting process and to resolve concerns or problems related to regulatory requirements. KFO instituted a pre-application process within the Local Interagency Working Agreement (LIWA) whereby the applicant meets with OSMRE, USACE, EPA, USFWS, and TDEC while the SMCRA application is being developed. The purpose of this meeting is to ensure all agencies with regulatory responsibilities have the opportunity to review the proposed application and request needed information before the application is submitted. Two LIWA pre-application meetings were held in FY 2014. The LIWA group also conducted three site visits concerning proposed and/or newly received applications.

KFO conducted its yearly industry meeting at Cove Lake State Park. Approximately 30 industry representatives attended the daylong meeting. Representatives from USFWS delivered a presentation on the Endangered Species Act (ESA) which included implementation requirements of the ESA on SMCRA permitting actions. The group discussed issues concerning data collection, timing and length of reviews, and various regulatory requirements including the Clean Water Act, the ESA, and the Migratory Bird Treaty Act.

#### IV. Major Accomplishments/Issues/Innovations in the Tennessee Federal Program

- **Inspection Frequency**

##### Active Sites

KFO is responsible for conducting complete and partial inspections of coal mining and reclamation operations in Tennessee and Georgia in accordance with 30 CFR 842.11(c). This requirement specifies OSMRE must conduct an average of at least one complete inspection per calendar quarter and an average of at least one partial inspection per month of each active coal mining and reclamation operation. With respect to inactive coal mining and reclamation operations, OSMRE must conduct an average of at least one complete inspection per calendar quarter and such partial inspections as are necessary to ensure effective enforcement of the regulatory program and SMCRA. KFO successfully conducted the required number of inspections of all active, inactive, and abandoned coal mining and reclamation operations in Tennessee during FY 2014.

Reclamation specialists conducted 454 complete inspections and 825 partial inspections of active sites for a total of 1,279 inspections. Table 1 on page 15 summarizes the number of required complete and partial inspections and the number of inspections that were conducted. The totals for required complete and partial inspections in Table 1 are approximations based on the number of sites on the Inspectable Units List (IUL) at the end of the fiscal year and are derived from Table 10 of Appendix 1. Over the course of the year, some sites that were active became inactive and some sites were released from the IUL. As a result, the actual number of required inspections is less than the number depicted in Table 1.

<b>Table 1 Number of Required Inspections and Number of Conducted Inspections</b>				
<b>Mine Status</b>	<b>Number of Complete Inspections Required Yearly</b>	<b>Number of Complete Inspections Conducted</b>	<b>Number of Partial Inspections Required Yearly</b>	<b>Number of Partial Inspections Conducted</b>
<b>Active</b>	312	302	624	731
<b>Inactive</b>	116	115	0	69
<b>Abandoned</b>	11	37	0	25
<b>Total</b>	<b>439</b>	<b>454</b>	<b>624</b>	<b>825</b>

Table 2 on page 15 summarizes the number of inspectable units requiring inspections, the total number of inspections conducted, and the number and percentage of inspectable units that met the required inspection frequency. The data used to derive the number of permits requiring inspections and the number of inspections conducted was derived from Tables 2, 6, and 10 of Appendix 1.

<b>Table 2 Inspection Frequency Calculations</b>	
Number of Inspectable Units Requiring Inspections	<b>118</b>
Number of Inspections Conducted	<b>1,279</b>
Number of Inspectable Units meeting Frequency	<b>118</b>
Percentage of Inspectable Units Meeting Frequency	<b>100%</b>

Abandoned Sites

Abandoned sites in Tennessee and Georgia are inspected by KFO on a site specific inspection frequency in accordance with the criteria and determination established in 30 CFR 842.11 (e) and (f), which is known as the abandoned site rule. There were 11 Tennessee abandoned sites on the IUL at the end of FY 2014. All are permanent program permits. Initial reclamation was completed on all the sites but they cannot be released from the IUL either due to the presence of acid mine drainage (AMD) or because they are being evaluated for success of recent reclamation efforts. The majority of these sites have existed longer than 20 years. Most are covered to a large extent with naturally occurring vegetation and are stable. Significant reclamation work is needed on the one permanent program Georgia site. Plans are underway to reclaim the site with civil penalty funds so it can be removed from the IUL.

Bond Forfeited Sites

KFO forfeited and collected the bond for three permanent program permits during FY 2012. Reclamation of all three sites, which totaled 102 acres, was conducted in FY 2013. Reclamation specialists conducted field inspections while the sites were undergoing reclamation in order to evaluate and report on the success of contracted reclamation work. There were no reported off-site impacts from these sites during FY 2013. After determining the sites were successfully reclaimed, KFO released them from the IUL in FY 2014.



**Bond forfeiture site released from the IUL in FY 2014.**

## Notice of Intent to Explore Sites

Reclamation specialists conducted 25 complete inspections and 18 partial inspections on 19 Notice of Intent to Explore (NOI) sites. SMCRA does not require a minimum inspection frequency for NOI sites. KFO released six reclaimed NOI's from the IUL during FY 2014.

- **Civil Penalty Projects**

The civil penalty funds OSMRE collects for violations can be used to reclaim mine sites under certain criteria. Reclamation activities occurred at one civil penalty fund project in Tennessee during FY 2014. The Wheel Ridge Reclamation Project resulted in the reclamation of three mine sites located in the Lick Fork, Capuchin Creek, and Smith Creek watersheds of Scott County and Campbell County. Permits for these mining operations were issued and bonded by the state of Tennessee prior to OSMRE assuming SMCRA primacy in Tennessee. KFO inherited bonds that were inadequate from the outset. After OSMRE assumed primacy, the permittees abandoned the sites. Forfeited bond monies were used to conduct initial site reclamation. Civil penalty funds were acquired in FY 2014 to complete site reclamation. The reclamation work consisted of removing two ponds, converting three ponds into wetlands, restoring affected stream channels, installing riprap lined channels and diversion ditches, revegetating bare areas, and planting 500 trees. At the end of FY 2014, reclamation appeared successful. The sites are expected to be released from the IUL in the spring of 2015.



**Reclaimed basin.**



**Rocklined drain by reclaimed basin.**

- **North Cumberland Wildlife Management Area, Lands Unsuitable for Mining Petition:**

### Background

On October 1, 2010, the state of Tennessee filed a petition with OSMRE to designate the ridgelines within the North Cumberland Wildlife Management Area (NCWMA) and the

Emory River Tracts Conservation Easement in Anderson, Campbell, Morgan, and Scott Counties as unsuitable for surface coal mining operations. The State filed the petition on behalf of TWRA and TDEC under OSMRE's Federal program regulating surface mining operations in Tennessee. As described at 30 CFR Part 942, the State alleges the NCWMA may be adversely affected by surface coal mining operations in the following ways:

- (a) Surface mining is incompatible with their existing land use plans or programs; and
- (b) Surface mining affects fragile or historic lands in which such operations could result in sufficient damage to important historic, cultural, scientific, and esthetic values and natural systems.

OSMRE responded to the petitioner by letter dated October 29, 2010, with a request for additional information in order to finalize the completeness review. The petitioner responded to OSMRE's request on November 8, 2010. OSMRE reviewed the additional information, and the petition was deemed administratively complete and was accepted for processing on November 23, 2010.

On three different occasions during 2012, OSMRE met with the petitioner. These meetings were intended to obtain additional information that would facilitate a full and complete analysis of the proposed Lands Unsuitable for Mining (LUM) petition. The petitioner provided a number of clarifications to their petition. All additional information and clarifications obtained were documented and placed in the LUM administrative record for public review.

#### Public Outreach

On January 14, 2011, OSMRE proceeded to process the petition by mailing notices to the petitioner, interested State and Federal agencies, landowners, and other interested parties. The notice stated that the petition had been accepted for processing. The parties were also notified that the action on the petition is a major Federal action, and it would require OSMRE to prepare a combined PED/EIS. OSMRE announced the acceptance of the petition to the public through legal notices in the local newspapers. In addition, the petition was made available for review at KFO; the Anderson County Planning and Zoning Office in Clinton, Tennessee; the Morgan County Clerk's Office in Wartburg, Tennessee; the Campbell County Mayor's Office in Jacksboro, Tennessee; and the Scott County Assessor of Property Office in Huntsville, Tennessee.

KFO conducted three scoping meetings at various locations in proximity to the proposed LUM petition area during March 2011. These meetings were intended to be a "fact finding forum" where both the public and industry could learn about the proposed petition and could present their issues and concerns related to the petition to OSMRE.

#### Agency Participation

OSMRE invited Federal agencies to participate as cooperating agencies in the development of the LUM PED/EIS document. Three agencies, the National Park Service, USFWS, and EPA accepted the invitation. Each of the agencies has been fully participating in the development of the PED/EIS document.

## Technical Evaluation

The LUM petition area is part of the NCWMA, comprised of the Royal Blue, Sundquist, and New River Units; and part of the Emory River Tracts Conservation Easement. The total acreage impacted by the LUM petition for the combined NCWMA and Emory River Tract is approximately 167,075 acres. The petition area, including the ridgelines and a 600-foot buffer zone on each side of the ridgelines identified by the State, is approximately 67,326 acres. The PED/EIS proposes to evaluate the environmental impacts of the proposed action and each of the alternatives, on the existing environment of the NCWMA and Emory River Tract areas.

OSMRE contracted for data and technical services to assist the agency in characterizing the existing environmental conditions and uses within the NCWMA and Emory River Tract. To help characterize the hydrologic regime within the NCWMA and Emory River Tract, OSMRE purchased equipment, undertook field data collection, and sought analytical services from various vendors. Light Detection and Ranging or “LiDAR” and high resolution photography was purchased to provide terrain and land cover information for the project area. Coal data and related information was obtained to assist in the preparation of a coal reserve model for the area. Contracts were secured and studies completed to assist OSMRE in the evaluation of the various resources of the area including socioeconomic, recreational, aquatic, and aesthetic. The evaluation included both viewshed modeling and soundscape (noise) analysis of the LUM petition area.

OSMRE was developing the draft PED/EIS when, in July 2012, the agency learned of Tennessee’s objections to the PED/EIS alternatives under analysis. OSMRE subsequently met with the State to discuss their concerns. After considering the issues and concerns expressed by the State, a decision was made to revise the alternatives being analyzed in the document. A revised range of alternatives was developed and in May 2013, was approved for analysis.

OSMRE began developing documents to secure contractual services to prepare the PED/EIS. OSMRE also entered into an Interagency Agreement with the Denver Service Center to provide National Environmental Policy Act and project management services to OSMRE. In July 2014 KFO secured contractor services to prepare and publish the PED/EIS. The draft document is currently scheduled to be published in the fall of 2015 and the final in the summer of 2016.

## Competing Land Uses in the NCWMA and Emory River Tract

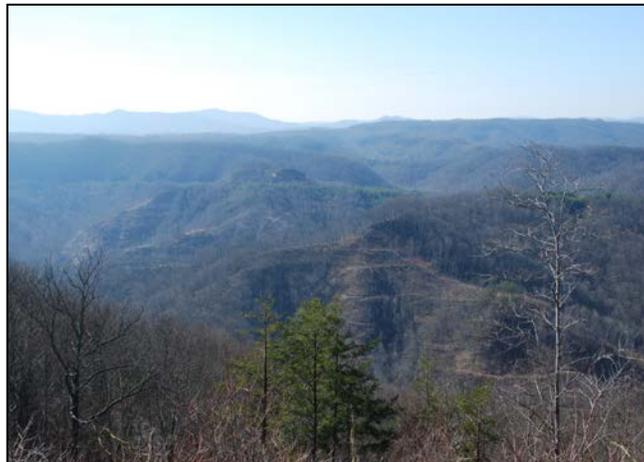
The State’s petition expresses the need to preserve the natural beauty and fragile nature of the NCWMA and Emory River Tract (Figure 4 on page 21). The Cumberland Trail State Park passes through the NCWMA and represents part of a trail system that will extend from Tennessee’s southern border with Georgia to the State’s northern border with Kentucky. The State’s petition has indicated that there are several threatened and endangered species of plants within the NCWMA.

The State has implemented a multiple use wildlife management plan on the NCWMA and Emory River Tract. The primary uses for this land are hunting and off-road vehicle recreation but other recreational activities such as hiking, camping, mountain biking, rock climbing, fishing, etc. are also permitted.



**Figure 4: Scenic view in the NCWMA.**

The land has also been used for natural resource extraction such as coal mining, oil and gas well drilling, quarrying, and logging. Logging activity permitted by agreement as part of the original purchase is also being extensively conducted on the NCWMA and Emory River Tract. OSMRE has conducted field tests to determine the impact of various types of land use, such as mining and logging, on the sediment loads to receiving streams. The agreement that allows logging on the Sundquist Unit and portions of the Royal Blue Unit of the NCWMA is set to expire in 2017, at which time, timber management reverts to TWRA. Examples of the past and recent land use practices are evident in Figure 5.



**Figure 5: View of recent logging activities in the NCWMA.**

#### Next Steps in the Lands Unsuitable for Mining Petition Evaluation

KFO anticipates significant progress will be made in developing the draft PED/EIS document in FY 2015. KFO expects to complete a preliminary document for review and comment by both OSMRE and cooperating agencies, incorporate agency input into the draft document, prepare the draft document for public review, and release the document to the public in order to begin the review and comment process.

- **Off-Site Impact Study**

In FY 2014, KFO continued a study of off-site impacts in Tennessee. Data from the past 6-year period (FY 2009 through FY 2014) was evaluated in order to determine trends and causes and is summarized in Figures 6 and 7 on page 23.

Reclamation specialists routinely collect and report off-site impact data when issuing enforcement actions as a result of SMCRA mandated mine site inspections. The process of compiling off-site impact data includes conducting reviews of databases and enforcement files and interviewing reclamation specialists who have knowledge of mine site histories.

A total of 128 off-site impacts to people, land, water, and structures were identified during the 6-year study period. The study revealed the vast majority of impacts during this period were to water, followed by land, people, and structures. Off-site impacts to water most often occurred when sediment or iron laden drainage or low pH runoff left mine sites and entered receiving streams. Many of the impacts to land resulted from slides and sediment deposited off the permit area or encroachment off the permit area. People and structures were adversely affected when mining operations impacted public roads.

Data collected during FY 2014 shows all of the off-site impacts observed during the year were to water and land. The overwhelming majority of impact causes were attributed to operator error. The study also revealed there was a general increase in total impacts over the first 5 years of the study period and a significant decrease in the number of impacts in FY 2014. KFO believes the significant decrease in off-site impacts in FY 2014 was because three companies under common ownership ceased active operations in Tennessee during the year. During the previous 6-year study period, the same three companies were responsible for 46 percent of the observed off-site impacts. KFO continues to work with these companies and pursue alternative strategies to reduce the number of violations and related impacts on their mines sites. KFO will also continue to collect and study data to determine the most effective ways to reduce off-site impacts at all mine sites.

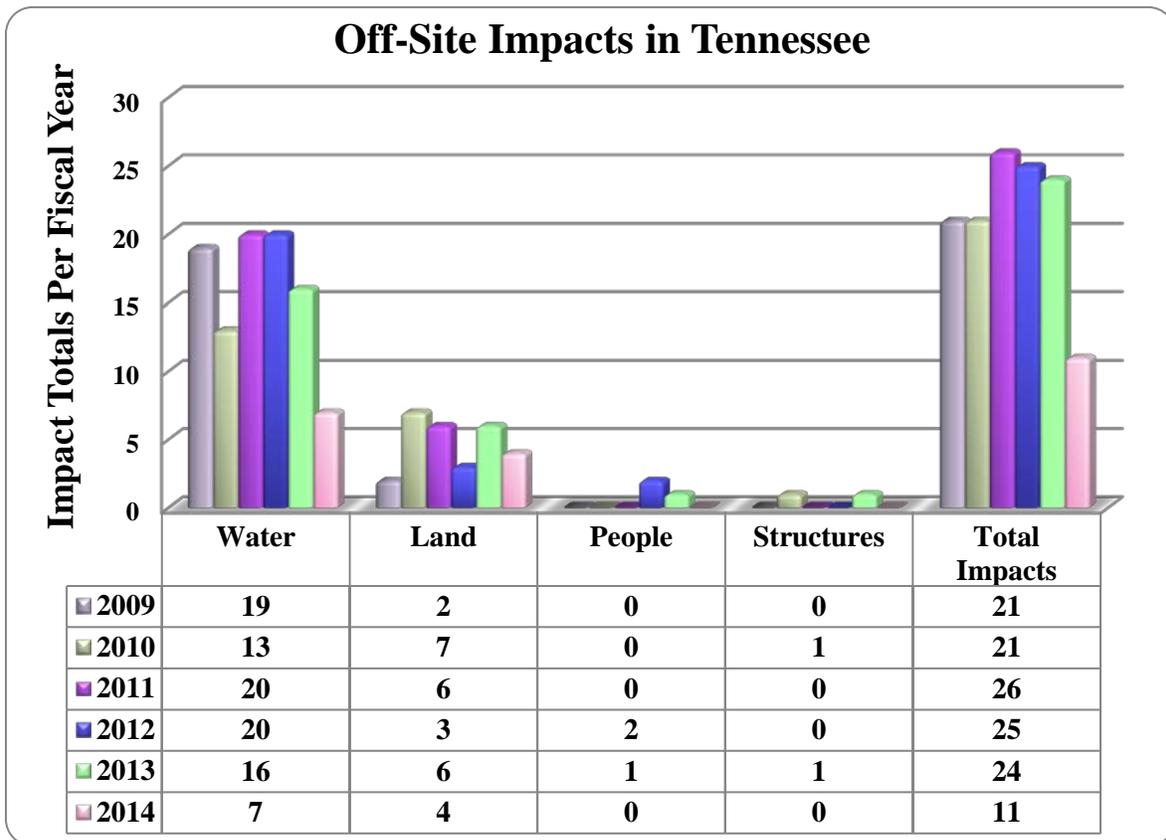


Figure 6: Off-site impacts in Tennessee during FY 2009 to FY 2014.

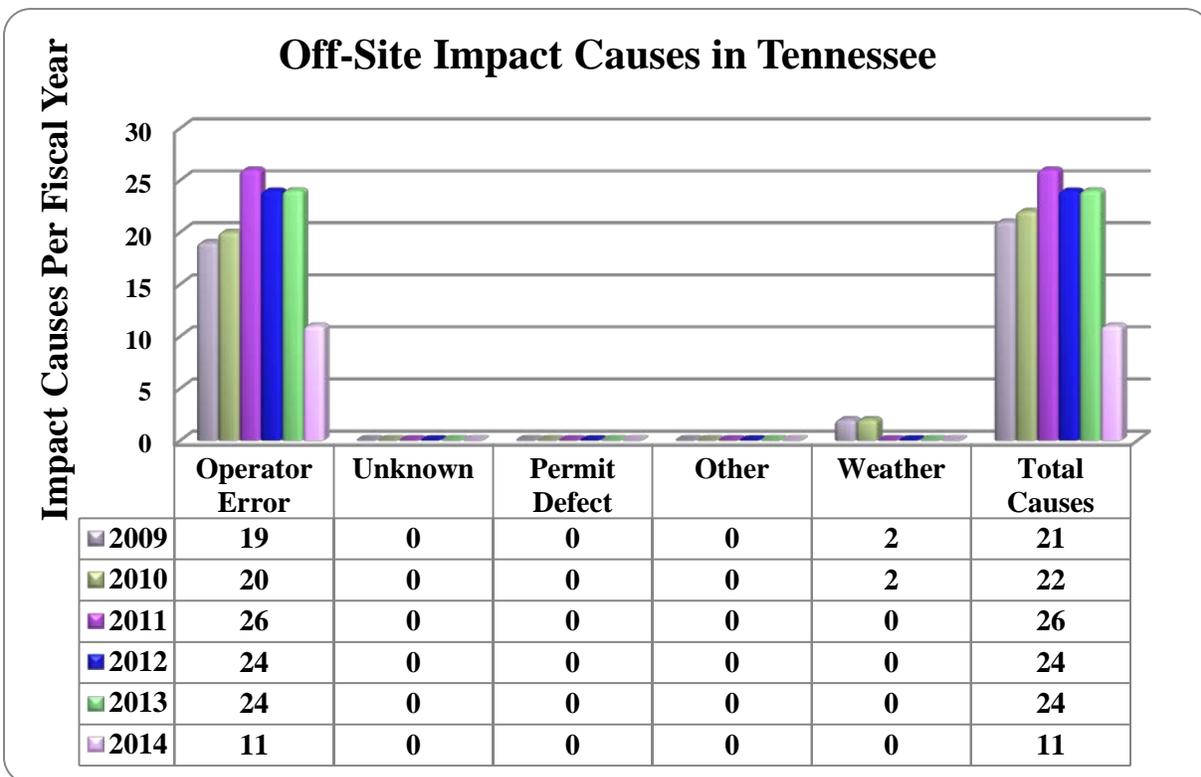


Figure 7: Off-site impact causes in Tennessee during FY 2009 to FY 2014.

- **Trust Funds**

Trust funds or annuities are intended to guarantee treatment of long-term postmining pollutional discharges associated with sites permitted under the Tennessee Federal Program. The primary purpose of such trusts is to protect the environment and the health and welfare of the public. Trusts should also provide an economical way through which the trust or annuity will be invested and managed for the long-term operation of water control and treatment facilities associated with coal mine sites.

OSMRE conducted annual reviews of the Lexington Coal Company trust funds for the Gladly Fork, Energy Wash Facility, Big Brush II, and Pine Ridge East treatment trusts in FY 2014. The trusts experienced a positive growth year and remained ahead of projections. A total of \$10.8 million was invested at the end of 2014 in these four trust funds to provide long-term treatment of pollutional discharges emanating from Lexington Coal Company sites.

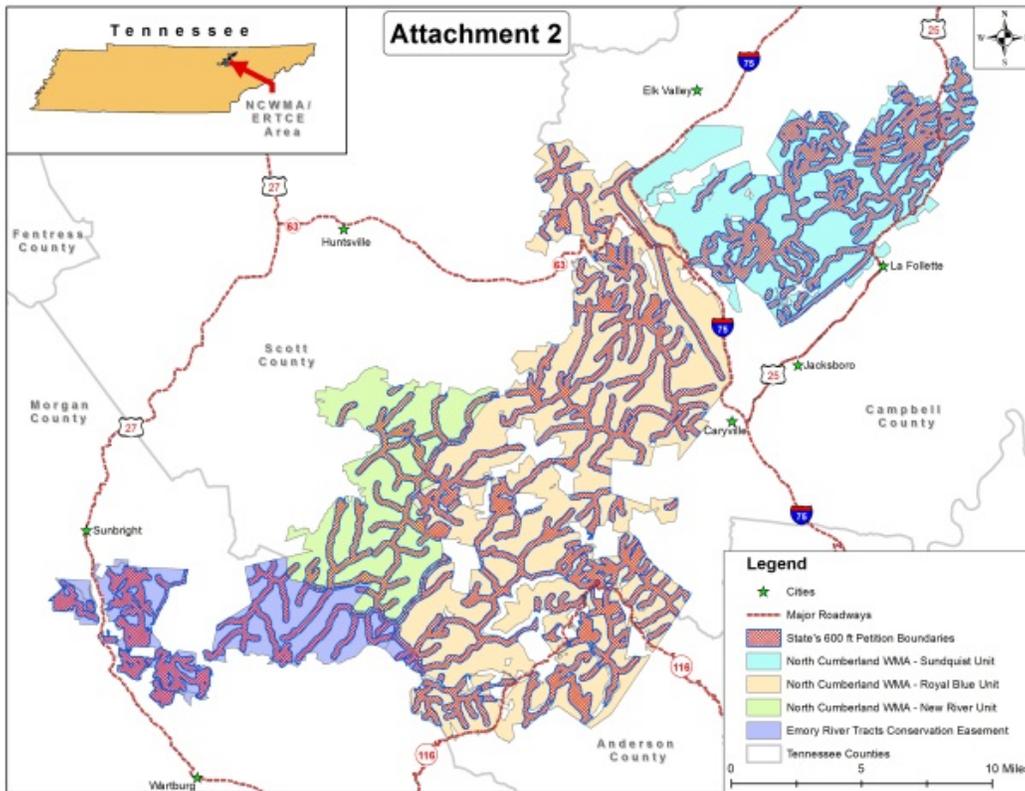
Lexington Coal Company was sold in FY 2012 and became Lexington Coal Company, LLC. The new owners acquired the assets and liabilities of the former owner and have maintained the sites as required by existing settlement agreements. The new owners performed proactive maintenance on two of the four sites in 2014. The work further reduced operating costs and resulted in zero notices of violation on the four sites.

- **Federal Regulatory Geographic Information System**

KFO continued its review of the NCWMA and Emory River Tracts Conservation Easement LUM petition which had been submitted by the state of Tennessee. The KFO Geographic Information System (GIS) provided critical support for the processing and review of the petition in many areas. At the same time, the KFO GIS supports the Federal Program for Tennessee and provides assistance to parties outside KFO.

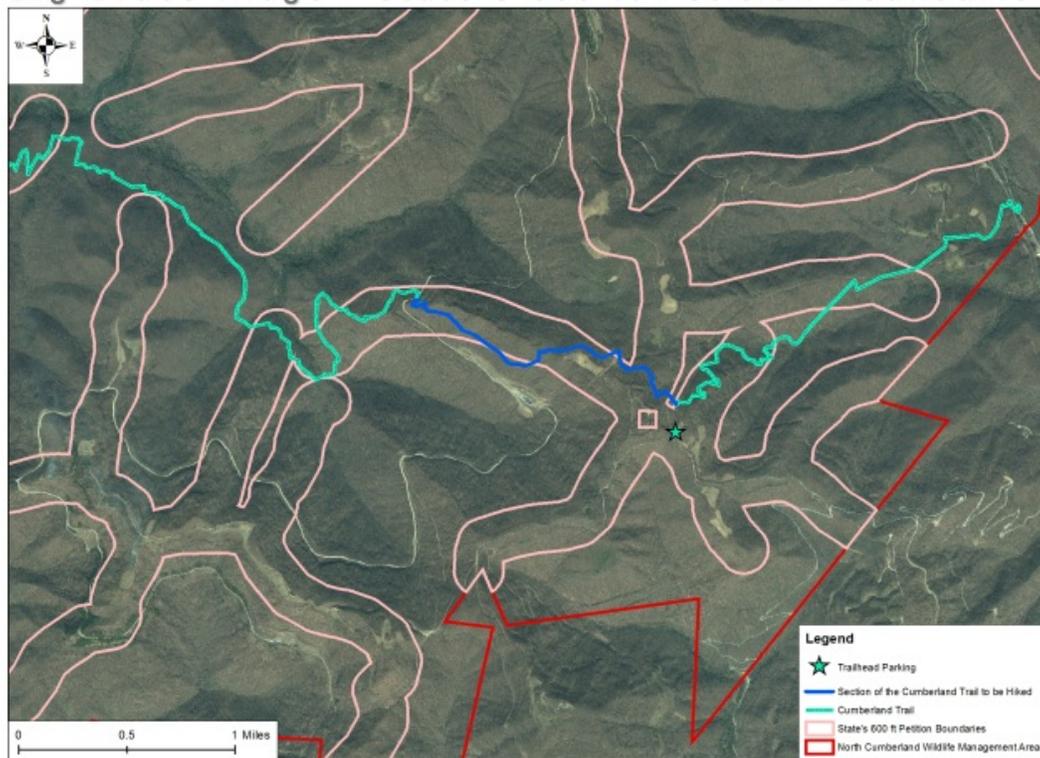
Evaluation Assistance for the North Cumberland Wildlife Management Area, Lands Unsuitable for Mining Petition

- Shared existing LUM datasets with the contractor who is developing a coal reserve analysis.
- Created a dataset of abandoned mine land highwalls by using available aerial and Light Detection and Ranging imagery.
- Developed maps of abandoned mine land highwalls and boundaries of petition alternatives.
- Prepared presentations and maps to be used in meetings with the OSMRE Director and the U.S. Department of the Interior Chief of Staff (Figures 8 and 9 on page 25).



**Figure 8: General location of the NCWMA/Emory River Tract and the 600-foot LUM petition boundaries.**

**Big Bruce Ridge - State's 600 ft Petition Boundaries**



**Figure 9: Section of the Cumberland Trail that was hiked during a LUM tour.**

### Tennessee Federal Program Support

- Assisted KFO staff with pre-mining site visits, midterm permit reviews, and AMD mine site treatment analysis.
- Assisted KFO staff with permit review technical investigations including cumulative hydrologic impacts and terrestrial impact analysis.
- Input data and maintained KFO GIS datasets related to permitted mine sites (new permits; permit boundary revisions; bonded areas; and geologic, surface-water monitoring, and ground-water monitoring data).
- Provided GIS technical support to the inspection staff for mine site inspections, bond release evaluations, and Forestry Reclamation Approach projects.
- Provided cartographic assistance for the KFO Annual Report.

### Assistance to Outside Parties

- Responded to mining industry consultants' requests for mining data needed to prepare coal mining permit applications.
- Responded to TDEC's request for surface- and ground-water quality data and to citizens' requests for coal mining data.
- Responded to requests from OSMRE Appalachian Region Pittsburgh technical staff working on Tennessee coal mining projects.
- Continued to share datasets of surface coal mine boundaries, underground mine extents, and environmental resource locations with GeoMine.

### Quarterly Ground-Water, Surface-Water, and Discharge Monitoring Report Update

- During FY 2014, KFO developed, reviewed, and implemented a new quarterly water quality monitoring form that improved the data entry process within OSMRE. A new Microsoft Excel based form was designed and created by two staff members in December 2013. With the help of TDEC, the new form was customized to accurately portray the monitoring requirements attributed to each permitted mining operation under both its respective National Pollution Discharge Elimination System (NPDES) and SMCRA permits. The format of the new monitoring form allows for direct uploading of data into OSMRE databases without the need to hand-key the data. Careless mistakes can be avoided and the error rate of data input within OSMRE is reduced dramatically. The first round of new quarterly monitoring forms was released in early 2014. Additional rounds were released throughout the year as permits were updated. All OSMRE KFO permits have been updated with the newest quarterly monitoring form. Data received by KFO will be in the new format beginning the third quarter of 2014.

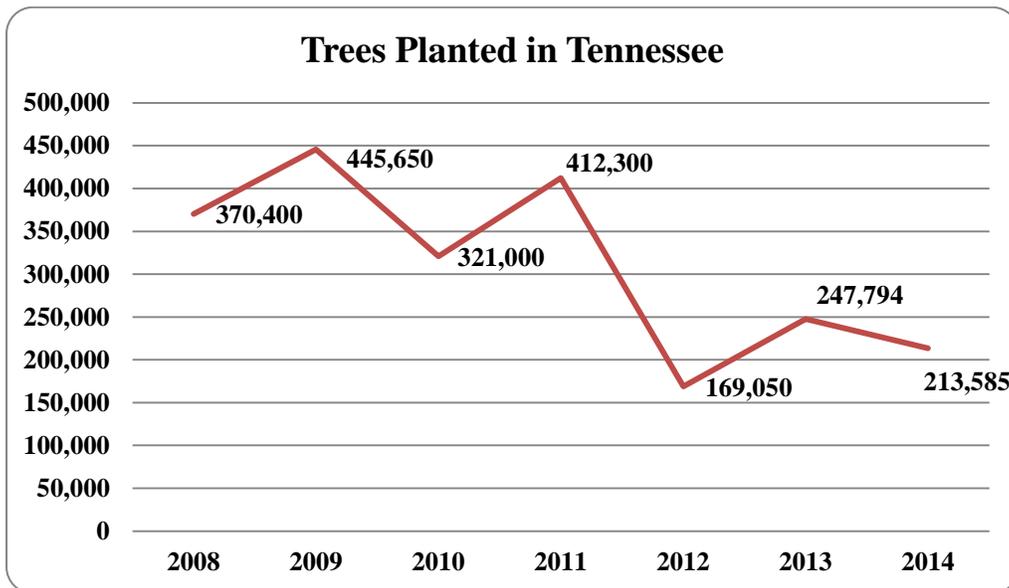
### OSMRE KFO O: Drive Project Development

- Developed a permit file structure to store individual permit information associated with an active permit.
- Provided a folder for the permit application, permit maps, technical review files, etc. for each active permit.
- Created an ArcGIS Base Map for each permit to show the permit boundary, haulroad, auger area, surface disturbance, underground workings, etc.

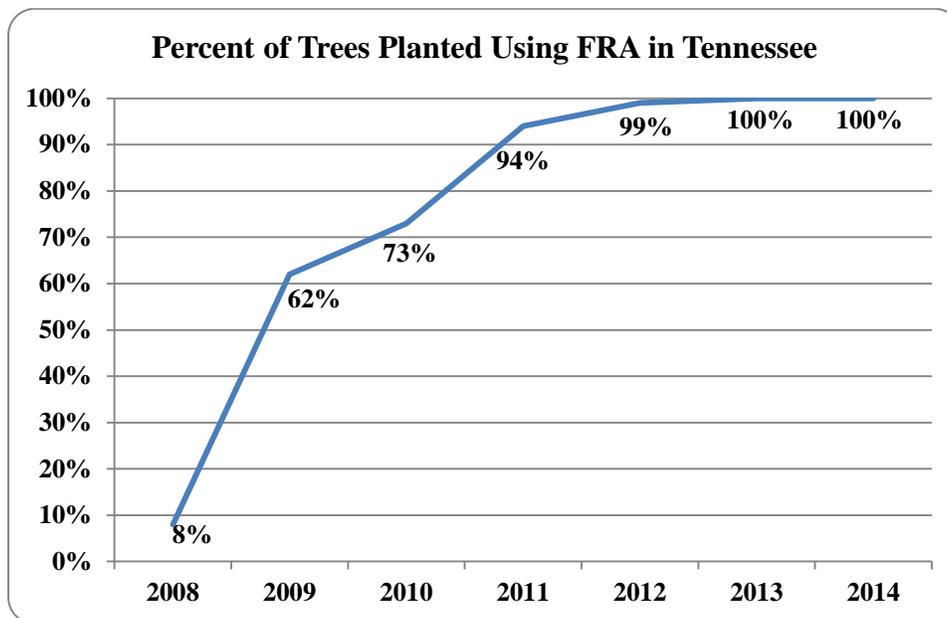
- Added documents to the file structure and updated the base map each time the permit changed, for example, when a revision was approved.
- **Tennessee Reforestation Initiative**

The Appalachian Regional Reforestation Initiative (ARRI) is a cooperative effort among OSMRE, state, and Federal agencies in the coal producing states of the Appalachian Region; industry; environmental organizations; academia; and local citizens. The goals of the initiative are to plant more high value hardwood trees on reclaimed coal mines and to increase the survival and growth rates of the planted trees by using the Forestry Reclamation Approach (FRA). The FRA is a science based method designed to help restore native hardwood forest habitat and enhance natural succession of native forest plants on previously mined land. Additional information about the FRA is available on the ARRI website <http://arri.osmre.gov/>. Two staff members from KFO serve as members of the ARRI Core Team and the ARRI Science Team, and continue to provide leadership and active support in promoting and achieving the ARRI goals.

A total of 213,585 trees were planted on 404 acres of reclaimed mined land in Tennessee in FY 2014 (Figure 10). This year marks the second year KFO achieved full FRA utilization, with 100 percent of all trees planted on FRA areas (Figure 11 on page 28).



**Figure 10: Total number of trees planted per year in Tennessee.**



**Figure 11: Percent of trees planted on FRA prepared sites in Tennessee per year.**

Excellence in Reforestation Award

KFO annually recognizes exemplary performance and execution of the FRA for the previous calendar year. This year, Kopper Glo Mining, LLC’s Log Mountain Mine was Tennessee’s 2013 ARRI Excellence in Reforestation State Award winner for implementation of FRA techniques.

The Kopper Glo Mining, LLC Log Mountain Mine is a steep slope contour and area mining operation in Claiborne County, Tennessee. Portions of the permit area were mined prior to SMCRA, leaving highwalls and open pits. All available spoil was retained for highwall elimination during this remining operation. Orphan benches were used as permanent spoil storage areas. As a result, the company was able to reclaim orphan highwalls and avoid building hollow fills.

Spoil was backfilled in lifts with compaction achieved by loaded trucks passing over the previously placed material. Once the backfill reached the desired height, growth medium was dumped over the backfill. The growth medium was left uncompacted by using the one-pass dozer method advocated by the FRA. Organic material, including root balls, and surface rock were incorporated into the tree growth medium to enhance development of the native forest habitat.

The approved revegetation plan includes a ground cover mix that will provide initial soil stabilization. The ground cover mix is compatible with growing seedlings. The plan also calls for planting native hardwood trees to facilitate the restoration of native hardwood forest habitat. This in turn will accommodate the wildlife postmining land use and provide habitat for the endangered Indiana Bat. Of the 150 acres that were mined, 100 percent was reforested according to the FRA. The FRA techniques employed at the Log Mountain Mine site are expected to result in successful reforestation based on survival

rates of plantings in previous years. For the above reasons, Kopper Glo Mining, LLC will be presented the Excellence in Reforestation State Award in November 2014.



**Reclaimed steep slope prepared using the FRA at Kopper Glo Mining, LLC Log Mountain Mine.**

#### FRA Community Involvement and Scientific Research

The KFO ARRI members continue to be very active in community outreach. The ARRI Core Team and Science Team members regularly coordinate with researchers and others in gathering data on mine sites. This year, ARRI members escorted Australian regulatory authorities, University of Tennessee researchers, and Virginia Tech researchers on FRA sites in order to gather data. Research and investigation conducted on FRA mine sites included the evaluation of soil development and the potential for differing rock strata to produce total dissolved solids. KFO's ARRI Science Team member also served as a peer reviewer for two new Forestry Reclamation Advisories and one article published in the Journal of the American Society for Mining and Reclamation.

#### Arbor Day 2014

KFO held its annual Arbor Day event on April 17, 2014, at Kopper Glo Mining, LLC's Log Mountain Mine in Claiborne County, Tennessee. The event was organized by ARRI core team members from KFO, the Coal Creek Watershed Foundation (CCWF), and Kopper Glo Mining, LLC. This is the second Arbor Day event Kopper Glo has hosted. The Log Mountain Mine is only one of the company's many mines employing the FRA.

CCWF enlisted over 60 fifth through seventh graders from Clairfield and White Oak schools for this year's event. Before the event, OSMRE staff and CCWF members visited the students in their classroom and taught them about the history of mining and about reclamation and reforestation. To better understand the entire process of reforestation, the students grew American chestnut seedlings, provided by CCWF, in their classroom.

At the Arbor Day event, ARRI core team members and CCWF members taught the students about the importance of being good environmental stewards. The students also learned about reforestation and proper tree planting techniques. The students used the techniques they learned to plant their classroom grown chestnuts along with 1,600 other native hardwood seedlings.

A local TV station interviewed the students to find out what reforestation meant to them. Many expressed their hope that people in the future would enjoy the forest their class had planted. The video posted by WBIR can be viewed at the following link:  
<http://www.wbir.com/media/cinematic/video/7843695/students-reclaim-the-land-by-planting-trees/>.



**OSMRE inspector helps students plant an American chestnut seedling grown in their classroom.**



**ARRI Core Team member and a local student are interviewed about this year's planting event. (Photo courtesy CCWF.)**



**The planting crew. (Photo courtesy of CCWF.)**

- **Local Interagency Working Agreement**

Representatives from KFO, TDEC, USACE, USFWS, and EPA established a LIWA on December 20, 2010. The purpose of the LIWA is to improve interagency communication and coordination during the coal mine permitting process in Tennessee under the respective State and Federal permitting, enforcement, and compliance reviews required by the Clean Water Act, SMCRA, and the ESA.

On May 6, 2014, the LIWA group held a joint hearing on the proposed Kopper Glo, Inc., Cooper Ridge Deep Mine. Personnel from TDEC, EPA, USACE, and OSMRE attended the hearing. Several other public conferences were held in 2014 in response to requests by several nongovernment entities. The majority of these hearings resulted from permit renewal or revision applications and the public comment afforded to potentially affected citizens.

- **Cost Recovery**

On March 26, 2013, OSMRE proposed a rule to revise the Federal and Indian Lands Program regulations for the purpose of adjusting the existing permit fees and to assess new fees to recover the actual costs for permit administration and permit enforcement activities provided to the coal industry (see March 26, 2013, Federal Register 78 FR 18429). In anticipation of implementing the Cost Recovery Rule during FY 2014, KFO instituted changes to better track all permitting costs and project hours. Changes to time keeping improved KFO estimates on the amount of hours expended for major cost categories. The Cost Recovery Support Solution is an electronic tracking system that will assist in monitoring individual assignments as this effort moves forward. Implementation of the final rule is anticipated in FY 2015.

- **Endangered Species**

The northern long-eared bat (*Myotis septentrionalis*) remains a species proposed for listing by the USFWS. A notice for a 6-month extension of the final listing determination was published in the Federal Register on June 30, 2014. At that time, the USFWS reopened the comment period on the proposal to list the bat as endangered. The 60-day period ended on August 29, 2014. A final decision on listing the northern long-eared bat is expected to be made no later than April 2, 2015. The entire Tennessee coal field is included in the northern long-eared bat's range. As such, KFO continues to receive comments and recommendations from the USFWS, regarding protection and enhancement of the northern long-eared bat, on new permits, permit renewals, and significant revisions. Until the USFWS makes a final listing decision, KFO has been advised the "Range-Wide Indiana Bat Protection and Enhancement Plan Guidelines," with minor revision, should be used as guidance for permit applicants as they develop their mining and reclamation plans.

KFO continues to work with the USFWS to monitor mining impacts on the blackside dace (*Phoxinusumberlandensis*), Cumberland darter (*Etheostoma susanae*), Indiana bat (*Myotis sodalis*), gray bat (*Myotis grisescens*), and various mussel species. KFO also

works with applicants to formulate mining and reclamation plans that will benefit these endangered species.

- **Youth Initiative**

KFO employed a total of three interns and two AmeriCorps participants during FY 2014. They worked in areas of geology, GIS, hydrology, inspection, and administration. They assisted with projects at KFO related to the LUM petition, Laserfische, GeoMine, SPOT Global Positioning System device setup, and water quality database compilation. They also played an important role in assisting staff with various tasks such as entering data for hydrologic reviews and database development, scanning historical records, gathering information for Freedom of Information Act requests, and assisting the Technical Group and Inspection Group staff with data collection in the field. KFO also hired a former AmeriCorps participant as a fulltime employee.



**Intern analyzing mine site water quality.**

- **Wounded Warrior Project**

KFO is pleased to announce, it converted OSMRE’s first “Wounded Warrior” participant to a full time position during FY 2014. The Wounded Warrior Project helps veterans, wounded during active duty, obtain employment. This employee was trained as a Program Assistant. She plans and carries out assignments to improve the efficiency of computer and data management support and provides administrative and technical assistance to the Inspection Group. In completing her duties, she directly enhances the ability of KFO to accomplish its assigned mission.

## **V. Success in Achieving the Purposes of SMCRA**

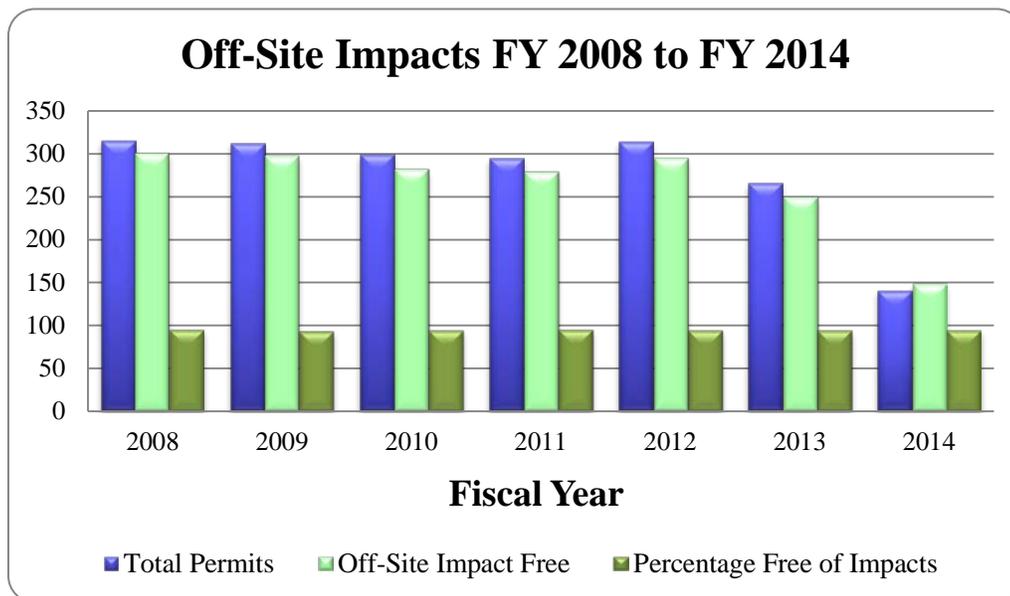
One of KFO’s goals is to further the success of reporting end results. As a part of that effort, KFO collects findings from performance standard evaluations related to the number and extent of observed off-site impacts, the number of mined and reclaimed acres that meet bond release requirements, and the effectiveness of KFO’s customer service efforts. Comprehensive reports

for the program elements evaluated during FY 2014 are available in OSMRE’s Odocs database located at <http://odocs.osmre.gov/>. The reports are also available for review and duplication at the OSMRE Knoxville Field Office located at 710 Locust Street, Knoxville, Tennessee 37902. The KFO phone number is (865) 545-4103.

## A. Off-Site Impacts

### Active Sites

SMCRA is designed to prevent adverse impacts to the public and to environmental resources adjacent to coal mining operations. While conducting inspections during FY 2014, KFO reclamation specialists evaluated all active and abandoned mine sites on the IUL to determine if off-site impacts had occurred. Reclamation specialists reported off-site impacts resulting from SMCRA violations via the Inspection and Enforcement Tracking System, Mine Site Inspection form. The data was then transferred to a database, and a summary report was developed for year-end reporting purposes. In addition to inspection data collection, citizen’s complaint files were evaluated and interviews with reclamation specialists were conducted to determine if off-site impacts from other sources had occurred. For the second consecutive year, KFO found 94 percent of inspectable units in Tennessee (140 out of 149 inspectable units) were free of off-site impacts as illustrated in Figure 12 below and Figure 13 on page 34.



**Figure 12: KFO off-site impacts FY 2008 to FY 2014.**

KFO identified nine permits with off-site impacts in FY 2014. These permits were the source of 10 events that impacted 11 resources. Land and water were the only resource types that were reported to be impacted (Figure 14 on page 34). Seven off-site impacts to water occurred. Three minor impacts and four moderate impacts resulted from sediment laden runoff or AMD leaving the mine sites. Four minor impacts to land resulted from mining disturbance or sedimentation occurring outside the approved permit boundary. No impacts to people or structures were reported during FY 2014.

### FY 2014 Off-Site Impacts: Permits Impacted

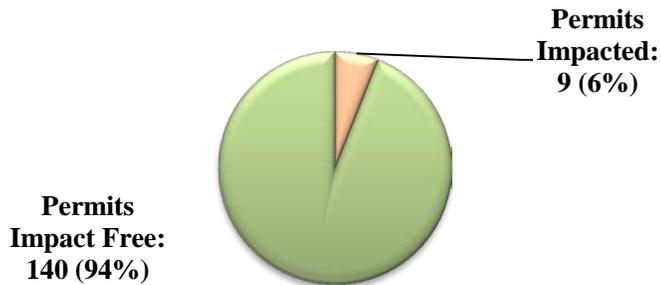


Figure 13: Permits with off-site impacts in FY 2014.

### FY 2014 Off-Site Impacts: Types of Impacts

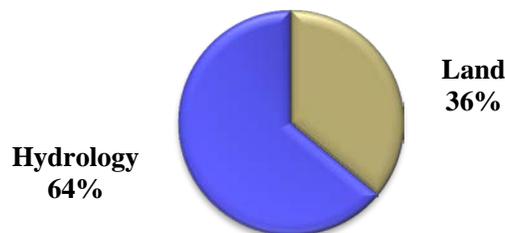


Figure 14: Types of off-site impacts in FY 2014.

Reclamation specialists considered permittee negligence as the reason for all off-site impacts in FY 2014. KFO therefore plans to increase efforts to work with industry in order to prevent future off-site impacts.

#### Bond Forfeiture Sites

Off-site noncompliant drainage continues to occur at five bond forfeiture sites. Discharges from the five sites, which are included in the totals in the above section, have pH levels ranging from 4.0 to 5.5, iron levels as high as 10.0 mg/L, and/or manganese levels as high as 6.1 mg/L. During the upcoming year, KFO will evaluate options for addressing water quality issues at these sites. Options KFO may consider include the use of treatment trust funds or civil penalty funds to install treatment systems or implement other remedial measures.

KFO forfeited and collected the bond for three permanent program permits during FY 2012. Contractors conducted reclamation of all three sites, totaling 102 acres, in FY 2013. There were no reported off-site impacts from the sites during FY 2014. KFO determined reclamation at the sites was successful and released them from the IUL.



**Bond forfeiture site reclaimed in FY 2013 and released in FY 2014.**

## **B. Reclamation Success**

Reclamation success under SMCRA is measured by the bond release process. The ultimate goal is Phase III bond release. KFO has implemented bond release policy and procedures to ensure all actions adhere to regulatory and permit requirements. At each phase of bond release, the permittee is required to submit a complete application, which must include a newspaper public notice, landowner notification letters, a permittee certification, and a bond release map. A complete bond release site evaluation and permit review is conducted at each phase of bond release. Mine sites must meet the following requirements:

- Phase I – Backfilling and grading have been completed, drainage control is in place, and temporary structures except ponds and roads have been removed.
- Phase II – Vegetation has been successfully established, all temporary structures have been removed, no contribution of suspended solids outside the permit area is occurring, and permanent ponds have been properly maintained.
- Phase III – All mining and reclamation activities have been successfully completed according to SMCRA, supporting regulations, and the permit. Vegetation has been established to support the approved postmining land use for the full liability period and this determination is supported by statistical analysis.

KFO policy concerning bond release procedures requires the bond release specialist and assigned reclamation specialist to review the bond release application for deficiencies. They also determine if any further reclamation work is needed at the site and if bond is needed to complete any remaining work. Additionally, KFO staff members review hydrologic and biologic data to ensure the site is not causing, or is not likely to cause, material damage outside the permit area.

KFO processed 49 bond release applications during FY 2014 and approved 20 applications, consisting of three Phase I, eight Phase II, and nine Phase III bond

releases. These actions resulted in KFO returning all or a portion of the bond on 2,252 acres of reclaimed mine lands (Appendix 1, Table 6).

Following the review process outlined above, KFO returned 26 applications because they were incomplete and disapproved three bond release applications. No bond release applications were withdrawn.



**Site reclaimed with minimal compaction and planted with native hardwoods.**



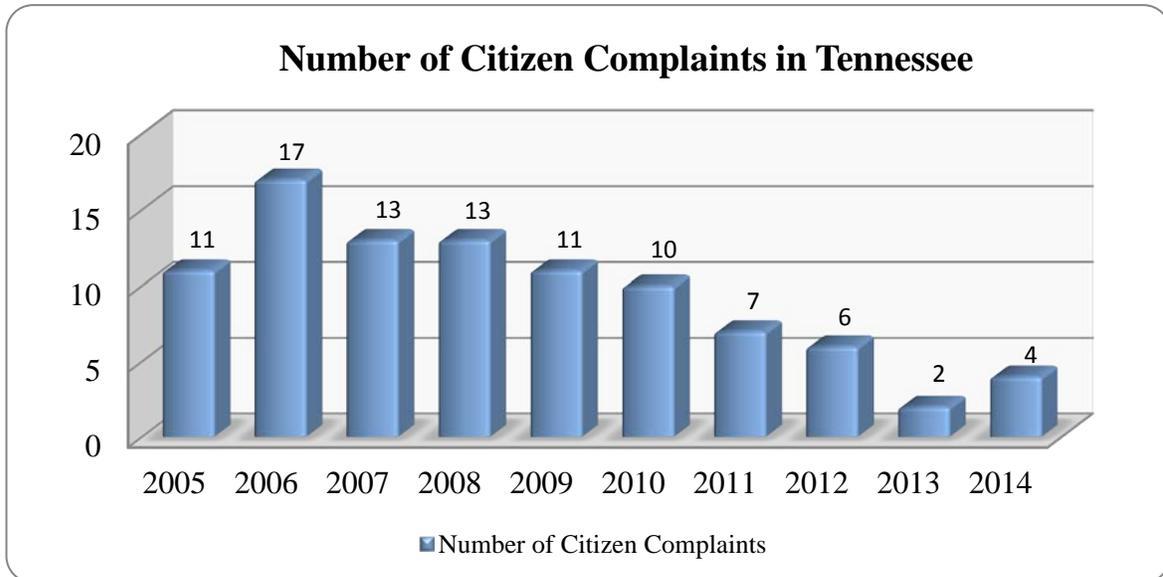
**Sediment basin converted to a wetland.**

### **C. Customer Service**

#### Citizen's Request for Inspection

The regulations provide citizens the opportunity to request a Federal inspection. A citizen may request a Federal inspection by providing a written statement or oral report giving OSMRE reason to believe an unauthorized condition or practice or violation exists which creates an imminent danger to the health or safety of the public, or is causing or could reasonably be expected to cause significant, imminent environmental harm to land, air, or water resources. These reports must be investigated and a response provided to the citizen regarding the investigation findings and any associated actions within 10 days of the investigation conclusion. The citizen providing the information may also request an informal review of KFO's decisions.

There has been a general decline in the numbers of citizen's requests for inspections (citizen's complaints) received by KFO in recent years as illustrated by Figure 15 on page 37. There were 10 requests for inspections in FY 2010, compared to only 4 requests during FY 2014. This amounts to an overall reduction in complaints of 60 percent during the past 5 years. KFO responded to all complaints received in FY 2014 in a timely manner as required.



**Figure 15: Number of citizen complaints in Tennessee from 2005 to 2014.**

Pending Litigation

**Triple H Coal LLC, Permit Application 3184 Denial**

KFO denied Permit Application 3184 on January 9, 2013, due to the likelihood the site would produce a postmining discharge in need of treatment. In addition, numerous versions of the toxic-material handling plan were reviewed and deemed infeasible to implement and prevent a postmining water quality issue. On February 6, 2013, Triple H Coal, LLC filed a request for administrative review of OSMRE's decision to deny issuance of permit application 3184. In their appeal, Triple H contends that OSMRE's actions are "... arbitrary, capricious, an abuse of discretion, not supported by evidence, and is contrary to law and regulation." On July 25, 2013, KFO received responses to the first set of interrogatories from counsel for Triple H.

In July 2014, both parties agreed to indefinitely extend a proposed trial date due to the proximity of the permit boundary to the NCWMA LUM petition boundary. Once a decision on the LUM designation is reached, the plaintiffs will evaluate the impact to the coal reserves and the denied permit application. A new trial date with the Office of Hearings and Appeals will be set at some future date after the LUM decision.

**Endangered Species Act Lawsuit (Defenders of Wildlife v. Jewell, E.D. TN)**

On May 16, 2013, four environmental groups sued OSMRE and USFWS in U.S. District Court in Nashville, Tennessee over alleged harm to two species listed under the ESA, the threatened blackside dace and the endangered Cumberland darter. The suit alleges take of the species is being caused by high-conductivity wastewater from two surface mines and that OSMRE and USFWS have violated the ESA by not undertaking formal consultation under Section 7 of the ESA on each mining permit. The Complaint also

asserts the 1996 Biological Opinion by USFWS on the SMCRA regulatory program is invalid and OSMRE must reinitiate formal consultation on the SMCRA program.

In June 2013, OSMRE and USFWS met with a U.S. Office of the Solicitor attorney to determine steps forward. The meeting focused on reviewing and revising the current ESA Standard Operating Procedure used by Federal and State entities involved in reviewing coal mining permits in Tennessee. On August 6, 2013, OSMRE met with USFWS to discuss the status of agreements the agencies made in a joint response to the Notice of Intent to Sue that preceded the lawsuit, to review and discuss the permitting process in Tennessee with respect to ESA-listed species, and to ensure the best available science and technology is used in the permitting process. A smaller technical group was formed to evaluate and resolve any technical issues related to the application review process. On November 26, 2013, the judge granted the U.S. Department of Justice's motion to change the venue from the Middle District of Tennessee to the Eastern District. The Eastern District subsequently set a scheduling conference for June 27, 2014.

On July 18, 2014, U.S. Department of Interior solicitors filed a response to lend further support to the motion to dismiss the lawsuit. The Department of Interior response seeks to dismiss the lawsuit in two main areas: attempting SMCRA permit challenges under ESA without exhausting the legal review provisions of SMCRA and failure to identify specific ESA damages on the two permits identified in the lawsuit. Mine operators have not started mining coal on one permit. The other permit has been reclaimed. The operator neither mined further nor applied for a permit renewal to continue mining.

#### **Mountainside Coal Co., Permit 3110 Bond Release Denial**

On September 5, 2013, KFO received a notice from the Office of Hearings and Appeals that Mountainside Coal Company had appealed KFO's bond release denial of August 16, 2013. The appeal stems from a denial of the Phase I, II, and III bond release request for bond increment 3 due to evidence of postmining water quality in need of treatment. Numerous water quality violations at several ponds have been recorded in recent years. The plaintiffs allege the pollutional discharges at the site are not a factor in whether the bond should be released for increment 3.

The site is currently on the Tennessee AMD list. KFO will further evaluate the site and request that Mountainside Coal Company begin developing the necessary treatment system designs to ensure treatment in perpetuity. A hearing date has not been set.

#### **Davis Creek Energy LLC, Permit 3207, Revision 17 Denial**

KFO received notice on August 16, 2013, from the Office of Hearing and Appeals that Davis Creek Energy, LLC had appealed the permit revision 17 denial. Permit revision 17 proposed changing the status of Pond 005 from temporary to permanent. The denial was based on several key facts: 1) The highwall was created to facilitate mining and pond creation; 2) The highwall is 60 to 70 feet high and poses a postmining danger to humans and wildlife; and 3) The approved reclamation plan included elimination of the highwall and pond. No hearing date has been set but both parties have been in negotiation to settle the matter.

## Notice of Intent to Sue

### **Crossville Coal, Inc., Turner Surface Mine, Permit 3189/3190**

KFO received notice on September 12, 2013, that two citizen groups, the Sierra Club and SOCM, intend to file a lawsuit against Crossville Coal, Inc. alleging numerous NPDES water quality violations at nine outfalls. The groups also allege elevated concentrations of several parameters in the receiving streams down gradient of the mine site. The groups cite violation of 30 CFR 816.41 and 816.42 with respect to the numerous water quality violations. KFO had previously identified the issues cited by the citizen's groups, elevated down gradient parameters and NPDES violations, and took steps to alleviate the issue. KFO entered into a settlement agreement with Crossville Coal in January 2009, requiring significant permit modifications. The settlement agreement required Crossville Coal to immediately reclaim the surface mine site, develop a reclamation time table, develop and install a treatment system capable of treating water accumulating in surface pits, and establish a single bond to cover the overlapping surface and underground mines. The required bond would be \$3.9 million. The company is making steady progress and is nearing completion of the treatment system. Water quality leaving the treatment system has no detectable iron or manganese despite a flow rate of several hundred gallons per minute. It is expected reclamation will be complete in FY 2015.

## **VI. Technical Assistance**

A number of KFO employees, primarily Technical Group staff, serve on projects, teams, and assignments that are of common interest to the Appalachian Region and to all of OSMRE. Several of these technical assistance activities are cooperative efforts with the Program Support Division within the Appalachian Region. During FY 2014, the Technical Group spent approximately 65 percent of their time on permitting activities with 35 percent of this time considered cost recoverable under the proposed rule. During the current year, KFO employees:

- Participated in the National Blasting Work Group.
- Served as instructors for National Technical Training Program Courses and for Technical Innovation and Professional Services or "TIPS" Training Courses.
- Participated in ARRI activities.
- Worked on the Stream Protection Rule and the associated EIS.
- Provided technical support to OSMRE's Lexington and Charleston Field Offices for oversight and Federal Lands issues.
- Provided technical support to Bureau of Land Management concerning Federal Lands issues such as leasing and National Environmental Policy Act requirements.
- Provided technical support for a joint OSMRE/State initiative to apply geospatial technology in the implementation of the SMCRA regulatory program.
- Participated on the Dam Safety Team.
- Participated on the Impoundments Team.
- Participated in various activities related to the NCWMA LUM petition.
- Worked on projects related to the Cost Recovery Rule implementation.
- Conducted Internal Control Reviews related to Bonding and the Federal Program.
- Provided support for GeoMine activities.

# ABANDONED MINE LAND RECLAMATION

## I. General

### A. Introduction

The Tennessee Abandoned Mine Land (AML) program receives Federal funding under the 2006 Surface Mining Control and Reclamation Act of 1977 (SMCRA) amendment. These changes authorize the state of Tennessee to receive minimum program funding for their approved state reclamation program. The Tennessee Department of Environment and Conservation (TDEC), Land Reclamation Section is the state agency responsible for receiving such AML funds and implementing the approved Tennessee AML Reclamation Plan. Tennessee's AML program is "uncertified" in that TDEC has not been certified under Section 411(a) of SMCRA that reclamation of all eligible coal mining problems has been completed. Since Tennessee has the authority to manage the AML program, the primary role of the Office of Surface Mining Reclamation and Enforcement (OSMRE) is to:

- Monitor TDEC's compliance with the requirements of its approved AML Reclamation Plan, SMCRA, applicable 30 CFR regulations, grant requirements, applicable 43 CFR regulations, and applicable Office of Management and Budget circulars governing financial management.
- Assess TDEC's progress in addressing problems identified in its Electronic Abandoned Mine Land Inventory System (e-AMLIS).
- Ensure TDEC maintains its capability to fulfill SMCRA responsibilities,
- Assist TDEC in implementing its responsibilities.
- Report on the evaluation of TDEC's program.
- Work with TDEC to resolve, in a reasonable and timely manner, program and implementation issues identified through oversight.
- Pursue corrective actions provided by SMCRA, Federal rules, and OSMRE policy if TDEC is not meeting program requirements.

The following acronyms are used in the AML section of this report:

AMD	Acid Mine Drainage
AML	Abandoned Mine Land
ATP	Authorization to Proceed
e-AMLIS	Electronic Abandoned Mine Land Inventory System
FY	Fiscal Year
GPRA	Government Performance and Results Act
KFO	Knoxville Field Office
NEPA	National Environmental Policy Act
OSMRE	Office of Surface Mining Reclamation and Enforcement
SMCRA	Surface Mining Control and Reclamation Act of 1977
TDEC	Tennessee Department of Environment and Conservation
TIPS	Technical Innovation and Professional Services

## **B. Program Administration**

Based on 2006 SMCRA amendments, Tennessee was required to amend their AML program to reflect statutory, regulatory, policy, procedural, and organizational changes that have occurred since 1984, when the State's AML program amendment was withdrawn. TDEC submitted a new program amendment to OSMRE on April 5, 2011, and it was included in the Federal Register, ("Tennessee Abandoned Mine Land Program, Proposed Rule," 77 FR 5740, February 6, 2012). The program amendment was published in the Federal Register in February 2013.

For each proposed AML construction project, TDEC submits to OSMRE an environmental document package that includes an environmental document, AML eligibility statement, applicable supplemental information, National Environmental Policy Act (NEPA) consultation correspondence, and a new or updated Problem Area Description, if needed. TDEC will also submit an e-AMLIS printout showing the AML features as "unfunded" and the estimated budget for the project. Additional details on OSMRE's e-AMLIS are found in Section III.

TDEC manages its program in a cost effective and efficient way. All projects comply with applicable laws and regulations, are well designed and constructed using the best technology available, and are completed with minimal disturbance to the environment. All projects are monitored to ensure they meet contract specifications, project objectives, and program goals.

## **II. Noteworthy Accomplishments**

In Fiscal Year (FY) 2014, TDEC reclaimed AML features through construction contracts and joint ventures with land owners in accordance with State and Federal law. TDEC reclaimed safety hazards, in doing so provided beneficial land reclamation to the community as well as the landowner. TDEC worked with other government agencies and private organizations to leverage additional funding for pollution abatement from mine drainage. Although small in comparison to surrounding states, Tennessee has a diverse and effective AML program. Since 2001, TDEC's AML reclamation program has expended approximately \$17 million in reclaiming over 1,490 Government Performance and Results Act (GPRA) acres while reducing the number at risk by AML hazards by approximately 4,370 people.

### **A. Overall Performance for FY 2014**

#### **Federal AML Program:**

- Completed Bellview Phase II Reclamation Project on October 29, 2013 (\$789,284.56 to reclaim 85 acres).
- Completed Wolf Ridge Gob Pile Reclamation Project on October 18, 2013 (\$262,599.25 to reclaim 5 acres).
- Completed Cherry Branch III Reclamation Project on June 20, 2014 (\$877,278.50 to reclaim 70 acres).
- Completed Seiber Flats Waterline Extension Project on June 13, 2014 (\$418,631 to service five residences).

### **Ongoing Federal AML Program Projects:**

- Brushy Mountain Waterline Replacement Project (potable water to 300 households – approximately \$400,000, Authorization to Proceed (ATP) issued June 23, 2014).
- Fall Creek Falls Community Reclamation Project (71 acres reclaimed - approximately \$976,000, ATP issued February 18, 2014).
- Stinking Creek Waterline Extension Project, Phase III (potable water to 24 households, 1 church, and 1 business - approximately \$400,000, ATP issued February 12, 2014).
- Jellico Waterline Replacement Project (potable water to 350 households and numerous businesses - approximately \$300,000, ATP issued March 19, 2013).

### **State AML Program:**

- Completed Gloria Road repair October 21, 2013 (\$9,475).
- Completed Rattlesnake Treatment System repair, acid mine drainage (AMD) set-aside, May 7, 2014 (\$9,000).
- Completed Babinec subsidence project June 20, 2014 (\$4,630).
- Completed Airshaft Hollow project July 10, 2014 (\$2,979).
- Completed Seiber subdrain July 15, 2014 (\$4,278.85).



**Images of Cherry Branch III Reclamation Project.**

### **III. Utilization of OSMRE Technological Assistance**

TDEC completed two Technical Innovation and Professional Services (TIPS) distance learning classes in FY 2014: Intro to GIS for Mining and Reclamation (one person) and Galena Slope Stability (one person). TDEC requested that TIPS provide a geographic information system handheld device for field work. TIPS provided TDEC with a laptop for field use. TDEC hopes to utilize TIPS services more in FY 2015.

#### **IV. Public Participation and Outreach**

OSMRE's March 28, 2013, Directive AML-22, Evaluation of State/Tribe AML Programs, establishes policies, procedures, and responsibilities for monitoring, assisting, and evaluating state/tribe AML Programs. OSMRE's monitoring or oversight of state/tribe AML Programs serves to provide information, assistance, and feedback to states/tribes, OSMRE, and the public to ensure the purposes and goals of the AML program are being responsibly, efficiently, and effectively met.

OSMRE continues to improve oversight of state programs, to maximize opportunities for public participation and make oversight-related information more available to the public. OSMRE's website, located at <http://www.arcc.osmre.gov/about/states/tn.shtm>, contains information for public use and a link to TDEC. In addition to contact information, there is general information on the website about OSMRE's and TDEC's mission and program. The website gives the public immediate information regarding TDEC's Regulatory and AML programs.

OSMRE solicited comments from the public and Federal and State agencies on the Evaluation Year 2014 State/Federal Performance Agreement and Reclamation Plan. A copy of the agreement was placed on the OSMRE webpage and a 30-day comment period began. All comments were considered during finalization of the plan and performance agreement. The Tennessee Historical Commission requested that OSMRE and TDEC take into consideration the proposed project's effect on historic properties and archaeological sites through a NEPA cultural resources review and Section 106 compliance of the National Historic Preservation Act. TDEC and OSMRE assured the Commission that OSMRE followed the NEPA process as part of standard procedures. The Commission had no further concerns. Through the Evaluation Year 2014 Performance Agreement, signed July 1, 2013, OSMRE and TDEC will continue to provide outreach to industry and citizens concerned about abandoned mine lands. A signed copy of the agreement can be found at <http://www.arcc.osmre.gov/about/states/tn.shtm>.

#### **V. Result of FY 2014 Reviews**

OSMRE reviewed all projects seeking ATPs for FY 2014 and concluded that TDEC managed federally funded AML projects in accordance with Tennessee's approved AML program and the approved plan.

The Land Reclamation Section of TDEC was awarded an AML grant for the period March 1, 2013, to February 28, 2016, in the amount of \$2,792,597.30 with subaccounts for \$436,121 administrative costs; \$1,107,890.32 in non-water supply project costs; \$795,000 in water supply project costs; and \$453,585.98 in AMD set-aside costs.

OSMRE will conduct a review of TDEC drawdowns and disbursements of OSMRE grant funding in early 2015. The review will include drawdowns occurring for FY 2014.

### *AML Program Management*

The Knoxville Field Office (KFO) reviewed TDECs completed projects for FY 2014 and concluded TDEC:

- Obtained construction rights of entry from all known property owners.
- Conducted required OSMRE Applicant Violator System checks prior to issuing the contract, in all cases sampled, to verify contractors are not barred from receiving contracts.
- Obtained completed contractor affidavits certifying all materials used in construction met the technical specification standards before approving payment for work performed.
- Initiated and completed the NEPA consultation process.
- Obtained permits required pursuant to NEPA consultation and ensured all permits were obtained prior to project construction.
- Obtained OSMRE approval to add AML features to the project work scope.
- Documented AML project construction in inspection reports from project start through project release.
- Abated all AML hazard features included in the construction contracts.
- Required use of non-invasive revegetation species included on the list agreed upon by State and Federal agencies for use on all AML projects.
- Entered AML feature units and costs data into the e-AMLIS in a timely manner.
- Tracked administrative processes from start through their completion (such as the bid process, realty work, and e-AMLIS data entry), and captured data to support OSMRE data reporting (e.g., recording people no longer at risk).

The revised Directive AML-1 requires OSMRE approval to add any new Priority 1, 2, or 3 coal problem feature to e-AMLIS or to elevate a Priority 3 coal problem to a higher priority. TDEC's AML Manager notified AML staff to be aware of the new requirements of the revised December 12, 2012, OSMRE Directive AML-1, when preparing AML project documents. OSMRE also requires a signed eligibility statement for OSMRE approval and the approved features must be entered into e-AMLIS prior to reclamation for additional features found during project construction.

### *AMD Set-Aside*

AML funds are authorized by SMCRA to address remediation of AMD emanating from eligible abandoned mining operations and to pay for costs associated with program administration, planning, design, construction, and construction monitoring. The total amount of grant funds Tennessee transferred to its state AMD set-aside program account is \$453,585.98 for the FY 2014 grant. Tennessee's set-aside funds remains in the account collecting interest. The set-aside funding will be used to leverage matching funds from other agencies whenever possible in order to address abandoned mine land AMD problems emanating from the Tennessee coalfields. The funds are maintained in a separate interest-bearing Tennessee Surface Mine Reclamation Fund account established under Tennessee Code 59-8-326, which is dedicated to receive AMD set-aside funds in accordance with 402 (g)(1)(D) of the Act and 30 CFR 876.12. These funds are used solely for AMD reclamation.

### ***AML Water Supply Projects***

TDEC provides AML funding for water supply projects that are administered by local county government public service authorities. AML funds are combined with funding from other Federal and State sources in order to generate sufficient funding to establish efficient, safe, and potable water supplies to households in various coalfield communities. The projects provide municipal domestic water supplies to areas where private domestic water supplies, such as dug or drilled wells or springs, have been impacted by pre-SMCRA coal mining operations. Other Federal, State, and local governmental funding is used to fund non-AML impacted areas of a larger water supply project. AML funds a portion of the cost of these water replacement projects based on the mining impacts found in ground-water quality studies. The funds are most commonly used to install water storage tanks, booster pump stations, and extend or enhance existing water trunk lines and water facilities serving AML impacted areas. The projects improve the overall quality of life and welfare for persons living in coalfield communities. Failed or contaminated water sources and wells can be abandoned for the safe and reliable water service provided by the public service authority system extensions. The projects are compatible with comprehensive area-wide development plans. The waterlines also provide fire protection to all areas along the distribution lines and all residences in the involved communities.

During FY 2014, TDEC requested ATP on three waterline projects: Stinking Creek Phase III Waterline Extension Project, Seiber Flats Waterline Extension Project, and Brushy Mountain Waterline Replacement Project.

The Seiber Flats Waterline Extension Project is located in the Seiber Flats Community in Anderson County, Tennessee. The project involved the extension of the public water system in order to provide safe, potable, and reliable water to five households in the area by adding 11,700 feet of waterline. This project was funded from the FY 2013 grant and expended \$320,000. Construction was complete as of June 13, 2014.

The Stinking Creek Waterline Extension Project is located in Campbell County, Tennessee in the upper reaches of the Clear Fork of the Cumberland River watershed. The project involved the extension of the public water system in order to provide safe, potable, and reliable water to 24 households, 1 church, and 1 business in the area by adding 16,020 feet of waterline. This project was funded from the FY 2013 grant and expended \$400,000. Construction is ongoing and will be completed during FY 2015.

The Brushy Mountain Waterline Replacement Project is located in the Petros Community in Morgan County, Tennessee. The project involved the extension of the public water system in order to provide safe, potable, and reliable water to 300 households in the area by adding 2,766 feet of waterline from Brushy Mountain Mine #1 (mined from 1895-1938) to the Brushy Mountain water plant. This project was funded from the FY 2013 grant and expended \$400,000. Construction is ongoing and will be completed during FY 2015.

### ***Non-Water Supply Projects***

During this fiscal year, TDEC submitted to OSMRE four non-water projects: Fall Creek Falls Community Reclamation Project, Bellview Phase II Reclamation Project, and Wolf Ridge Gob Pile Reclamation Project.

Bellview Phase II Reclamation Project reclaimed a total of 85 acres: 3,700 linear feet of P2 dangerous highwall, seven P2 hazardous water bodies, 1,750 linear feet of P3 highwall, 2.3 acres of P3 pits, 17 acres of P3 spoil area, and 1 acre of P3 scattered residential waste. AML funding came from the FY 2010 grant for \$789,284.56. The project was completed on October 29, 2013. Wolf Ridge Gob Pile Reclamation Project reclaimed a total of 5 acres and 24,424 cubic yards of spoil: 1 acre of P1 Dangerous Piles or Embankments and one P1 Portal. The project area consisted of a barren refuse pile and nearby highwall located on a heavily traveled recreational vehicle trail. The gob pile was over 60 feet high making the site very dangerous. P3 reclamation consisted of the elimination of 1,000 linear feet of highwall, 2 acres of pits, and 1 acre of spoil area. AML funding came from the FY 2010 AML grant with an amount of \$262,599.25. The project was completed on October 18, 2013.

Cherry Branch Phase III Reclamation Project reclaimed a total of 70 acres: 2,150 linear feet of P2 dangerous highwall, four P2 hazardous water bodies, 4,750 linear feet of P3 highwall, seven P3 pits, and 53 acres of P3 spoil area. The project was funded from the FY 2011 AML grant with an amount of \$877,278.50. Construction was completed on June 10, 2014.

Fall Creek Falls Community Reclamation Project will reclaim 7,777 linear feet of P2 highwall, six P2 hazardous water bodies, and 25 acres of P3 spoil area. The project is located in Van Buren County, Tennessee. TDEC requested funding from the FY 2012 AML grant of \$976,000. Construction is ongoing and will be completed during FY 2015.

As a result of Tennessee AML's hard work and dedication, a total of 359.7 GPRA acres were reclaimed, 329 households received potable water (not including 1 business and 1 church), and 366 people are no longer exposed to potential safety risks from abandoned mine lands.

### ***Electronic AML Inventory System (e-AMLIS)***

OSMRE's e-AMLIS tracks, nationally, all AML inventory. It also tracks accomplishments in reclaiming the Inventory. TDEC has direct access to the e-AMLIS, which allows them to routinely update AML problem data in the system. OSMRE's December 12, 2012, revised Directive AML-1, Abandoned Mine Land Inventory, implements program changes and modifications brought about by the Tax Relief and Health Care Act of 2006, which included the 2006 SMCRA amendments. The revised Directive also reflects changes to the OSMRE e-AMLIS. States and tribes are responsible for implementing procedures to maintain the Inventory for their state/tribe that are consistent with OSMRE's Directive AML-1.

TDEC must enter into the e-AMLIS all required supporting documentation to meet the requirements for completing a Program Area Description since the use of paper forms was eliminated by OSMRE's Directive AML-1. A complete submission includes the information entered into the e-AMLIS data fields, Priority Documentation Forms, cost information, maps, and any supporting narrative. The revised Directive requires OSMRE's approval to add any new Priority 1, 2 or 3 coal problem feature to e-AMLIS or to elevate a Priority 3 coal problem to a higher priority. It also requires a signed eligibility statement for OSMRE approval and the approved features must be entered into e-AMLIS prior to reclamation for additional features found during project construction. TDEC advised its AML staff of the requirements of the revised Directive. The e-AMLIS allows TDEC and KFO management to process new AML problems and update existing problems in a quicker, more streamlined manner, which in turn promotes accuracy and facilitates OSMRE's ATP approval process.

**Knoxville Field Office  
Annual Evaluation Report  
Fiscal Year 2014**

**APPENDIX 1**

**Summary of Core Data to Characterize the Regulatory Program**

The following tables and charts present data pertinent to mining operations and Federal regulatory activities within Tennessee and Georgia. Unless otherwise specified, the reporting period for the data contained in the tables is October 1, 2013, through September 30, 2014. Additional data used by KFO in its evaluation of performance is available for review in the evaluation files maintained by KFO.

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## Summary of Core Data to Characterize the Regulatory Program (Continued)

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TABLE 1

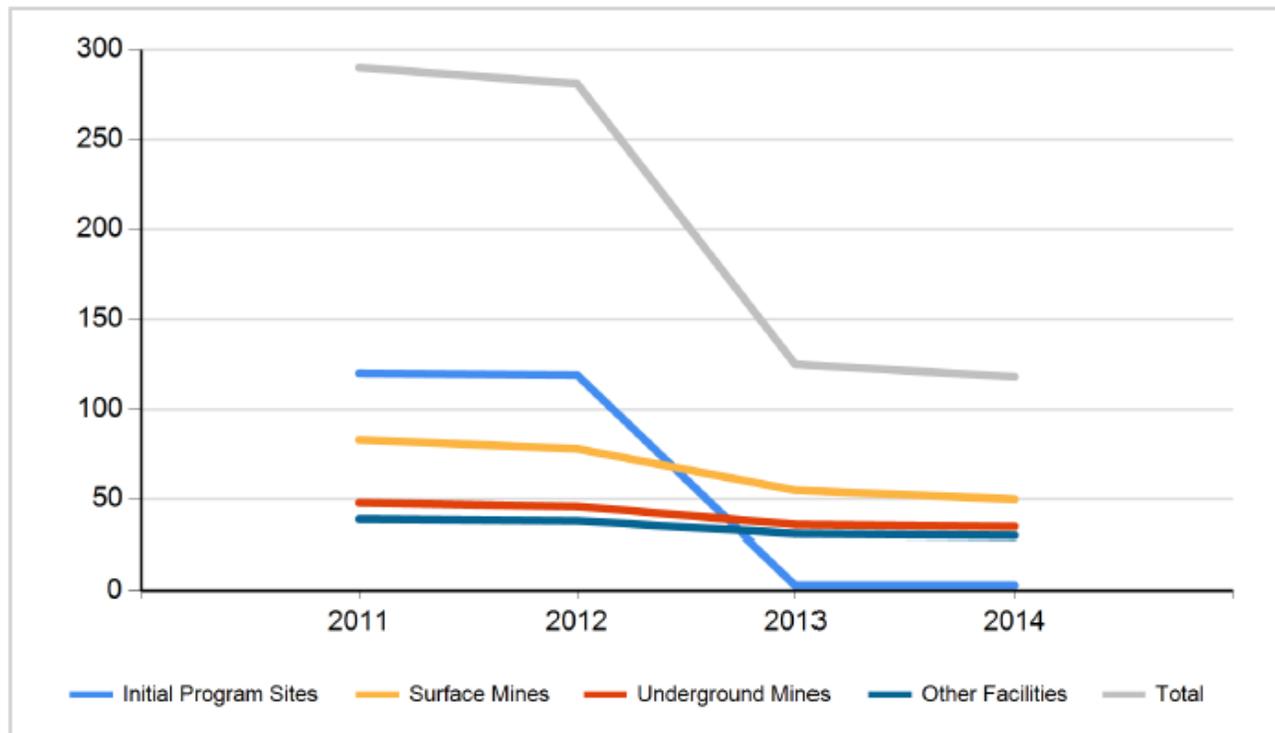
COAL PRODUCED FOR SALE , TRANSFER, OR USE <sup>A</sup>			
(Millions of short tons)			
Calendar Year	Surface Mines	Underground Mines	Total
2010	1.2	0.6	1.8
2011	1.0	0.4	1.4
2012	0.6	0.6	1.2
2013	0.5	0.7	1.2

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

TABLE 2

PERMANENT PROGRAM PERMITS, INITIAL PROGRAM SITES, INSPECTABLE UNITS, AND EXPLORATION														
Mines and Other Facilities	Numbers of Permanent Program Permits and Initial Program Sites									Area in Acres <sup>3</sup>				Total Area
	Permanent Program Permits				Initial Program Sites				Permanent Program Permits (Permit Area)		Initial Program Sites			
	Active	Inactive	Abandoned	Total	Active	Inactive	Abandoned	Total	Insp. Units <sup>1, 2</sup>	Federal Lands	State/Tribal and Private Lands	Federal Lands	State/Tribal and Private Lands	
Surface Mines	38	7	5	50	2	0	0	2	52	201	23,742	0	138	24,081
Underground Mines	20	10	5	35	0	0	0	0	35	161	1,121	0	0	1,282
Other Facilities	17	12	1	30	1	0	0	1	31	0	1,598	0	0	1,598
<b>Total</b>	<b>75</b>	<b>29</b>	<b>11</b>	<b>115</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>137</b>	<b>362</b>	<b>26,461</b>	<b>0</b>	<b>138</b>	<b>26,961</b>
Permanent Program Permits and Initial Program Sites (Number on Federal Lands: 5)				Total Number:		118			Average Acres per Site:				228.48	
Average Number of Permanent Program Permits and Initial Program Sites per Inspectable Unit (IU):				Total Number:		1.00			Average Acres per IU:				228.48	
Permanent Program Permits in Temporary Cessation:				Total Number:		16			Number More than 3 Years:				16	
<b>EXPLORATION SITES</b>				Total Number of Sites			Sites on Federal Lands <sup>4</sup>			Exploration Inspectable Units				
Exploration Sites with Permits:				0			0			0				
Exploration Sites with Notices:				19			0			19				
<sup>1</sup> 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. <sup>2</sup> Total Inspectable Units calculation includes Exploration Sites Inspectable Units <sup>3</sup> When a Permanent Program Permit or Initial Program Site contains both Federal and State and Private lands, the acreage for each type of land is in the applicable column. <sup>4</sup> The number of Exploration Sites on Federal lands includes sites with exploration permits or notices any part of which is regulated by the state under a cooperative agreement or by OSM pursuant to the Federal Lands Program, but excludes exploration sites that are regulated by the Bureau of Land Management														

**CHART 2A HISTORICAL TRENDS  
NUMBER OF INITIAL PROGRAM SITES AND PERMANENT PROGRAM PERMITS**



**TABLE 2A**

NUMBER OF INITIAL PROGRAM SITES AND PERMANENT PROGRAM PERMITS					
Year	Initial Program Sites	Permanent Program Permits			Total
		Surface Mines	Underground Mines	Other Facilities	
2011	120	83	48	39	290
2012	119	78	46	38	281
2013	3	55	36	31	125
2014	3	50	35	30	118

TABLE 2

**PERMANENT PROGRAM PERMITS, INITIAL PROGRAM SITES, INSPECTABLE UNITS, AND EXPLORATION**

Mines and Other Facilities	Numbers of Permanent Program Permits and Initial Program Sites									Area in Acres <sup>3</sup>				
	Permanent Program Permits				Initial Program Sites				Insp. Units <sup>1, 2</sup>	Permanent Program Permits (Permit Area)		Initial Program Sites		Total Area
	Active	Inactive	Abandoned	Total	Active	Inactive	Abandoned	Total		Federal Lands	State/Tribal and Private Lands	Federal Lands	State/Tribal and Private Lands	
Surface Mines	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Underground Mines	0	0	0	0	0	0	1	1	1	0	0	0	10	10
Other Facilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>10</b>
Permanent Program Permits and Initial Program Sites (Number on Federal Lands: 0)				Total Number:		1		Average Acres per Site:				10.00		
Average Number of Permanent Program Permits and Initial Program Sites per Inspectable Unit (IU):				Total Number:		1.00		Average Acres per IU:				10.00		
Permanent Program Permits in Temporary Cessation:				Total Number:		0		Number More than 3 Years:				0		
<b>EXPLORATION SITES</b>				Total Number of Sites				Sites on Federal Lands <sup>4</sup>				Exploration Inspectable Units		
Exploration Sites with Permits:				0				0				0		
Exploration Sites with Notices:				0				0				0		

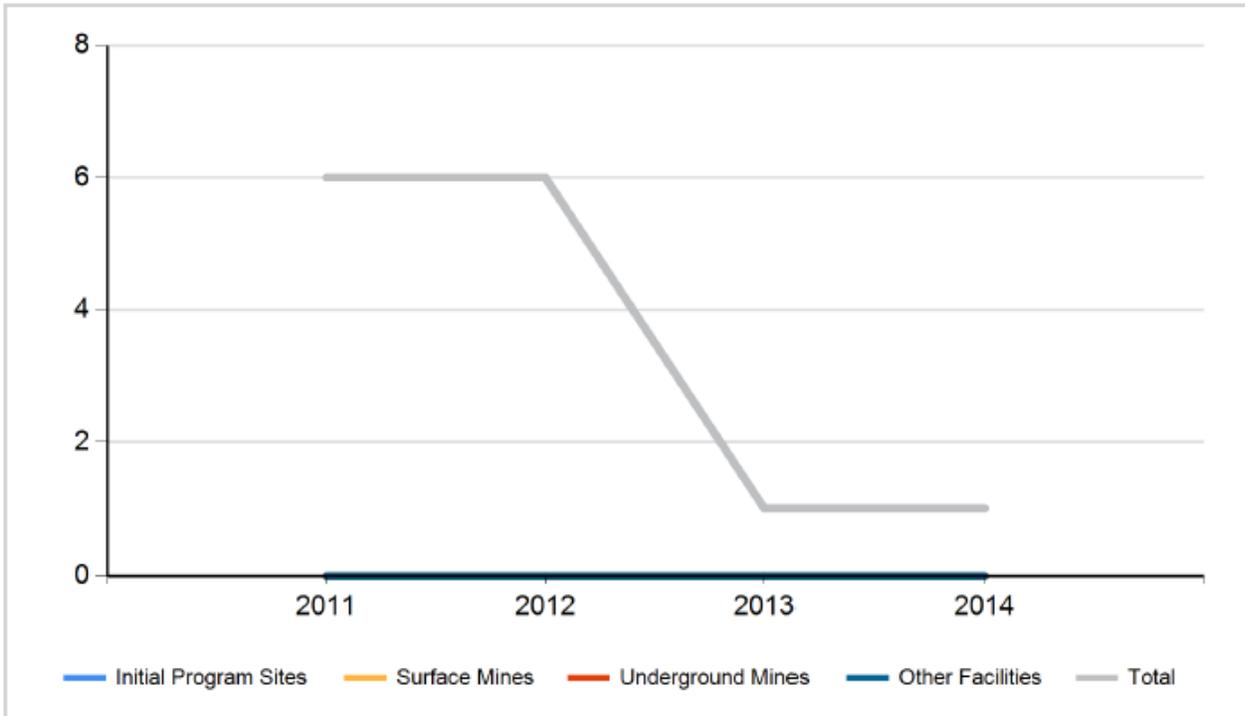
<sup>1</sup>An Inspectable Unit may include multiple small and neighboring Permanent Program Permits or Initial Program Sites that have been grouped together as one Inspectable Unit, or conversely, an Inspectable Unit may be one of multiple Inspectable Units within a Permanent Program Permit.

<sup>2</sup>Total Inspectable Units calculation includes Exploration Sites Inspectable Units

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

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

**CHART 2A HISTORICAL TRENDS  
NUMBER OF INITIAL PROGRAM SITES AND PERMANENT PROGRAM PERMITS**



**TABLE 2A**

NUMBER OF INITIAL PROGRAM SITES AND PERMANENT PROGRAM PERMITS					
Year	Initial Program Sites	Permanent Program Permits			Total
		Surface Mines	Underground Mines	Other Facilities	
2011	6	0	0	0	6
2012	6	0	0	0	6
2013	1	0	0	0	1
2014	1	0	0	0	1

**TABLE 3**

<b>PERMITS ALLOWING SPECIAL CATEGORIES OF MINING</b>			
<b>Special Category of Mining</b>	<b>30 CFR Citation Defining Permits Allowing Special Mining Practices</b>	<b>Numbers of Permits</b>	
		<b>Issued During EY</b>	<b>Total Active and Inactive Permits</b>
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	0
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	0



TABLE 5

**OFF-SITE IMPACTS  
EXCLUDING BOND FORFEITURE SITES**

RESOURCES AFFECTED		People			Land			Water			Structures		
DEGREE OF IMPACT		Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major
TYPE OF IMPACT EVENT	NUMBER OF EVENTS												
Blasting	0	0	0	0	0	0	0	0	0	0	0	0	0
Land Stability	2	0	0	0	2	0	0	0	0	0	0	0	0
Hydrology	7	0	0	0	1	0	0	3	4	0	0	0	0
Encroachment	1	0	0	0	1	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Total Number of Inspectable Units<sup>1</sup>: 146  
 Inspectable Units with one or more off-site impacts: 9  
 Exploration Inspectable Units with one or more off-site impacts<sup>2</sup>: 0  
 Inspectable Units free of off-site impacts: 137 % of Inspectable Units free of off-site impacts<sup>4</sup>: 94

<sup>1</sup> 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

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

**OFF-SITE IMPACTS AT BOND FORFEITURE SITES**

RESOURCES AFFECTED		People			Land			Water			Structures		
DEGREE OF IMPACT		Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major
TYPE OF IMPACT EVENT	NUMBER OF EVENTS												
Blasting	0	0	0	0	0	0	0	0	0	0	0	0	0
Land Stability	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrology	0	0	0	0	0	0	0	0	0	0	0	0	0
Encroachment	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Total Number of Inspectable Units<sup>3</sup>: 3  
 Inspectable Units with one or more off-site impacts: 0  
 Inspectable Units free of off-site impacts: 3 % of Inspectable Units free of off-site impacts<sup>4</sup>: 100

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

TABLE 5  
(Continued)

TOTAL OFF-SITE IMPACTS INCLUDING BOND FORFEITURE SITES													
RESOURCES AFFECTED		People			Land			Water			Structures		
DEGREE OF IMPACT		Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major
TYPE OF IMPACT EVENT	NUMBER OF EVENTS												
Blasting	0	0	0	0	0	0	0	0	0	0	0	0	0
Land Stability	2	0	0	0	2	0	0	0	0	0	0	0	0
Hydrology	7	0	0	0	1	0	0	3	4	0	0	0	0
Encroachment	1	0	0	0	1	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Total Number of Inspectable Units <sup>5</sup> :				149									
Inspectable Units with one or more off-site impacts:				9									
Exploration Inspectable Units with one or more off-site impacts:				0									
Inspectable Units free of off-site impacts:				140									
										% of Inspectable Units free of off-site impacts <sup>4</sup> :		94	
<sup>4</sup> % 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.													
<sup>5</sup> Total number of Inspectable Units is (1) the number of active and inactive Inspectable Units at the end of the Evaluation Year and (2) the number of Inspectable Units that were final bond released or removed during the Evaluation Year and (3) the number bond forfeiture sites that were reclaimed during the Evaluation Year and (4) the number of bond forfeiture sites that were unreclaimed at the end of the Evaluation Year.													

TABLE 5

**OFF-SITE IMPACTS  
EXCLUDING BOND FORFEITURE SITES**

RESOURCES AFFECTED		People			Land			Water			Structures		
DEGREE OF IMPACT		Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major
TYPE OF IMPACT EVENT	NUMBER OF EVENTS												
Blasting	0	0	0	0	0	0	0	0	0	0	0	0	0
Land Stability	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
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Total Number of Inspectable Units<sup>1</sup>: 1  
 Inspectable Units with one or more off-site impacts: 0  
 Exploration Inspectable Units with one or more off-site impacts<sup>2</sup>: 0  
 Inspectable Units free of off-site impacts: 1                      % of Inspectable Units free of off-site impacts<sup>4</sup>: 100

<sup>1</sup> 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

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

**OFF-SITE IMPACTS AT BOND FORFEITURE SITES**

RESOURCES AFFECTED		People			Land			Water			Structures		
DEGREE OF IMPACT		Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major
TYPE OF IMPACT EVENT	NUMBER OF EVENTS												
Blasting	0	0	0	0	0	0	0	0	0	0	0	0	0
Land Stability	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrology	0	0	0	0	0	0	0	0	0	0	0	0	0
Encroachment	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Total Number of Inspectable Units<sup>3</sup>: 0  
 Inspectable Units with one or more off-site impacts: 0  
 Inspectable Units free of off-site impacts: 0                      % of Inspectable Units free of off-site impacts<sup>4</sup>: 0

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

TABLE 5  
(Continued)

TOTAL OFF-SITE IMPACTS INCLUDING BOND FORFEITURE SITES													
RESOURCES AFFECTED		People			Land			Water			Structures		
DEGREE OF IMPACT		Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major
TYPE OF IMPACT EVENT	NUMBER OF EVENTS												
Blasting	0	0	0	0	0	0	0	0	0	0	0	0	0
Land Stability	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
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Total Number of Inspectable Units <sup>5</sup> :				1									
Inspectable Units with one or more off-site impacts:				0									
Exploration Inspectable Units with one or more off-site impacts:				0									
Inspectable Units free of off-site impacts:				1									
										% of Inspectable Units free of off-site impacts <sup>4</sup> :		100	
<sup>4</sup> % 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.													
<sup>5</sup> Total number of Inspectable Units is (1) the number of active and inactive Inspectable Units at the end of the Evaluation Year and (2) the number of Inspectable Units that were final bond released or removed during the Evaluation Year and (3) the number bond forfeiture sites that were reclaimed during the Evaluation Year and (4) the number of bond forfeiture sites that were unreclaimed at the end of the Evaluation Year.													

TABLE 6

SURFACE COAL MINING AND RECLAMATION ACTIVITY							
Areas of Phase I, II, and III Bond Releases During the Evaluation Year (EY)							
Phase I Releases  Total Acres Released in Approved Phase I Releases	Phase II Releases		Phase III Releases			Total Acres Released During the EY	
	Total Acres Released in Approved Phase II Releases	Acres not previously released under Phase I	Total Acres Released in Approved Phase III Releases	Acres not previously released under Phase II	Acres not previously released under Phase I or II		
1,383		0			0	Phase I	1,383
	17			163		Phase II	180
			689			Phase III	689
Number of Permanent Program Permits with Jurisdiction Terminated Under Phase III Bond Release During the Evaluation Year					6	Other Releases - Acres	
Initial Program Sites with Jurisdiction Terminated During the Evaluation Year					0	Administrative Adjustments	0
Number of Inspectable Units Removed					9	Bond Forfeiture	175

Areas of Permits Bonded for Disturbance by Surface Coal Mining and Reclamation Operations

	Total Acres at Start of EY	Total Acres at End of EY	Change in Acres During EY
New Area Bonded for Disturbance			1,713
Total Area Bonded for Disturbance	19,808	20,832	1,024
Area Bonded for Disturbance without Phase I Bond Release	16,135	7,514	(8,621)
Area Bonded for Disturbance for which Phase I Bond Release Has Been Approved	2,258	6,157	3,899
Area Bonded for Disturbance for which Phase II Bond Release Has Been Approved	2,147	2,464	317
Area Bonded for Disturbance with Bonds Forfeited During Evaluation Year			0
Area Bonded for Remining	0	0	0

Areas of Permits Disturbed by Surface Coal Mining and Reclamation Operations

Disturbed Area	16,023	15,186	N/A
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TABLE 7

<b>BOND FORFEITURE ACTIVITY (Permanent Program Permits)</b>			
<b>Bond Forfeiture and Reclamation Activity</b>	<b>Number of Sites</b>	<b>Dollars</b>	<b>Acres</b>
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) <sup>1</sup>	3		175
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	3		175
Sites with bonds forfeited and collected that were un-reclaimed at the end of the current Evaluation Year <sup>1</sup>	0		0
Sites with bonds forfeited but un-collected at the end of the current Evaluation Year	0		0
<b>Forfeiture Sites with Long-Term Water Pollution</b>			
Bonds forfeited, lands reclaimed, but water pollution is still occurring	5		
Bonds forfeited, lands reclaimed, and water treatment is ongoing	1		
<b>Surety/Other Reclamation Activity In Lieu of Forfeiture</b>			
Sites being reclaimed by surety/other party at the start of the current Evaluation Year (i.e., the end of previous Evaluation Year) <sup>2</sup>	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 <sup>3</sup>	0		0
Sites being reclaimed by surety/other party at the end of the current Evaluation Year <sup>2</sup>	0		0
<sup>1</sup> Includes data only for those forfeiture sites not fully reclaimed.			
<sup>2</sup> Includes all sites where surety or other party has agreed to complete reclamation and the site is not fully reclaimed.			
<sup>3</sup> These sites are also reported in Table 6, Surface Coal Mining and Reclamation Activity, because Phase III bond release would be granted on these sites.			

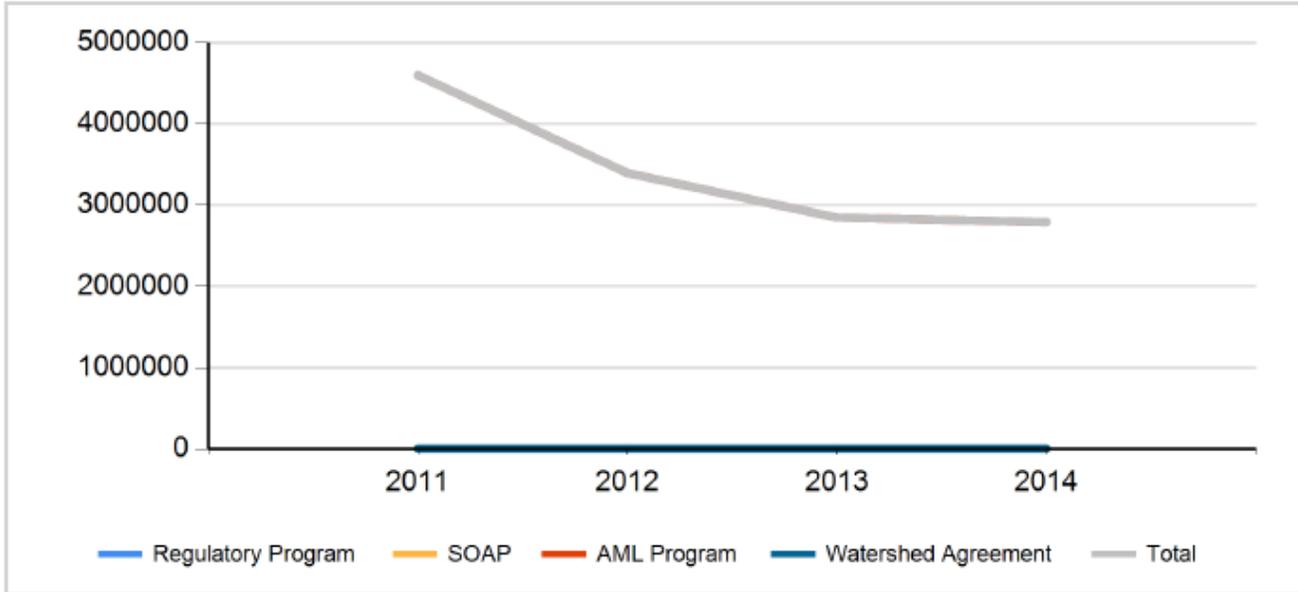
TABLE 8

<b>REGULATORY AND AML PROGRAMS STAFFING</b>	
<b>Function</b>	<b>Number of FTEs</b>
<b>Regulatory Program</b>	
Permit Review and Maintenance	12.00
Inspection	8.00
Other (supervisory, clerical, administrative, fiscal, personnel, etc.)	7.00
<b>Regulatory Program Total</b>	<b>27.00</b>
<b>AML Program Total</b>	<b>1.00</b>
<b>TOTAL</b>	<b>28.00</b>

TABLE 9

<b>FUNDS GRANTED TO STATE OR TRIBE BY OSM (Actual Dollars Rounded to the Nearest Dollar)</b>			
<b>Type of Funding</b>	<b>Federal Funds Awarded</b>	<b>Total Program Cost</b>	<b>Federal Funds Awarded as a Percentage of Total Program Costs</b>
<b>Regulatory Funding</b>			
Administration and Enforcement Grant	0		
Other Regulatory Funding, if applicable	0		
<b>Subtotal (Regulatory Funding)</b>	0	0	
<b>Small Operator Assistance Program Grant Funding</b>	0	0	
<b>Abandoned Mine Land Reclamation Funding</b>	2,792,597	2,792,597	100
<b>Watershed Cooperative Agreement Program</b>	0	0	
<b>TOTAL</b>	2,792,597		

**CHART 9A HISTORICAL TRENDS  
FUNDS GRANTED TO STATE OR TRIBE BY OSM**



**TABLE 9A**

<b>FUNDS GRANTED TO STATE OR TRIBE BY OSM</b>				
<b>Year</b>	<b>Regulatory Program</b>	<b>SOAP</b>	<b>AML Program</b>	<b>Total</b>
2011	0	0	4,600,437	4,600,437
2012	0	0	3,395,925	3,395,925
2013	0	0	2,847,000	2,847,000
2014	0	0	2,792,597	2,792,597

TABLE 10

**STATE INSPECTION ACTIVITY**  
**INSPECTABLE UNITS FOR WHICH STATE MET REQUIRED INSPECTION FREQUENCY ON AN**  
**INSPECTABLE UNIT-BY-INSPECTABLE UNIT BASIS <sup>1</sup>**

Inspectable Units (IUs)	Total number of inspectable units <sup>2</sup>	Number of inspections required annually		Number of inspections conducted		IUs Met Complete Inspection Frequency Requirement		IUs Met Partial Inspection Frequency Requirement		IUs Met Complete and Partial Inspection Frequency Requirements		
		Complete inspections	Partial inspections	Complete inspections	Partial inspections	Number	Percent	Number	Percent	Total number of IUs	Number that met inspection frequency	Percent
<b>COAL MINES AND FACILITIES</b>												
Active	78	312	624	302	731	78	100	78	100	78	78	100
Inactive	29	116	0	115	69	29	100	29	100	29	29	100
Abandoned	11	11	0	37	25	11	100	11	100	11	11	100
<b>TOTALS <sup>3</sup></b>	<b>118</b>	<b>439</b>	<b>624</b>	<b>454</b>	<b>825</b>	<b>118</b>	<b>100</b>	<b>118</b>	<b>100</b>	<b>118</b>	<b>118</b>	<b>100</b>
<b>Coal Exploration Activities <sup>4</sup></b>		<b>Complete Inspections</b>					<b>Partial Inspections</b>					
Exploration sites with permits		0					0					
Exploration sites with notices		25					18					

<sup>1</sup> Calculated on a site-specific basis.

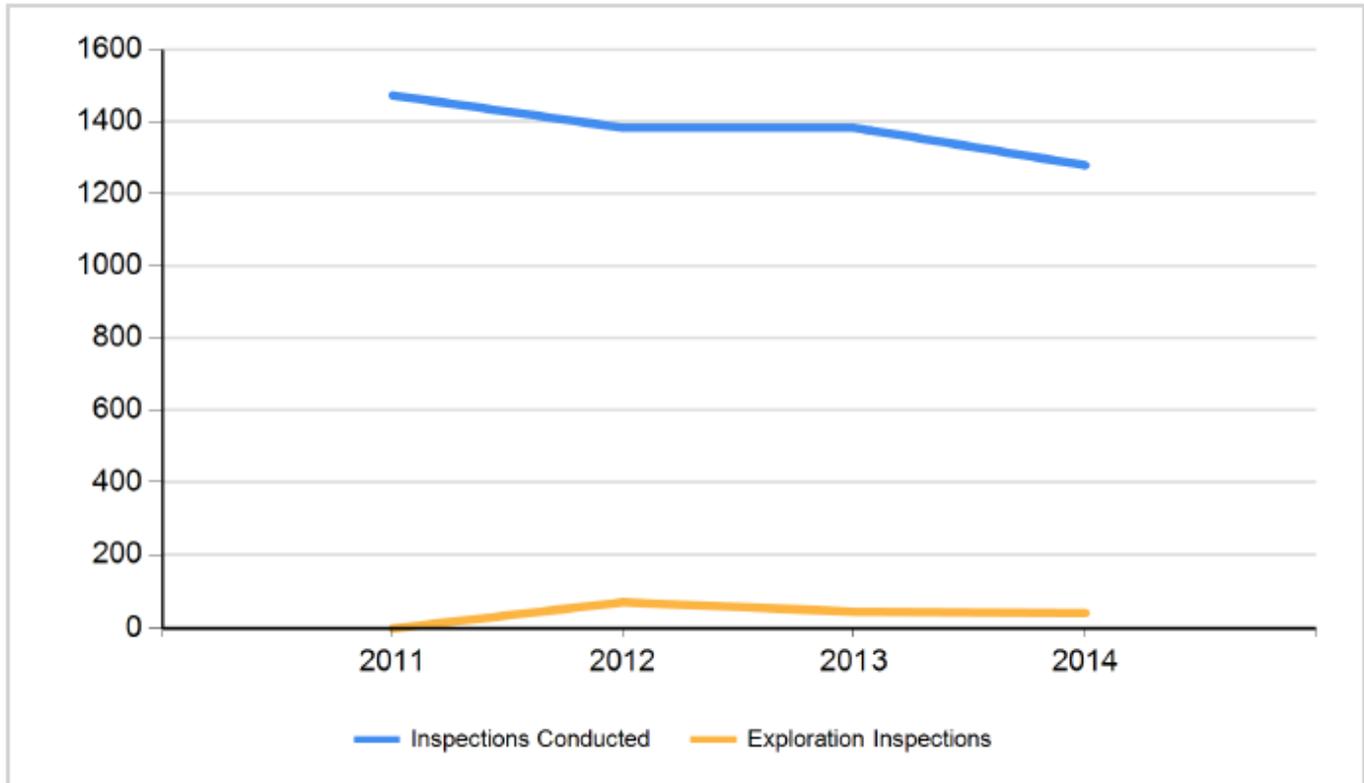
<sup>2</sup> Total number includes both permanent program permits and initial program sites.

<sup>3</sup> 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

<sup>4</sup> 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.

<sup>5</sup> NA - Not Available

**CHART 10A HISTORICAL TRENDS  
STATE OR TRIBAL INSPECTION ACTIVITY**



**TABLE 10A**

<b>STATE OR TRIBAL INSPECTION ACTIVITY</b>		
<b>Year</b>	<b>Inspections Conducted</b>	<b>Exploration Inspections</b>
2011	1473	0
2012	1383	73
2013	1383	47
2014	1279	43

TABLE 10

**STATE INSPECTION ACTIVITY**  
**INSPECTABLE UNITS FOR WHICH STATE MET REQUIRED INSPECTION FREQUENCY ON AN**  
**INSPECTABLE UNIT-BY-INSPECTABLE UNIT BASIS <sup>1</sup>**

Inspectable Units (IUs)	Total number of inspectable units <sup>2</sup>	Number of inspections required annually		Number of inspections conducted		IUs Met Complete Inspection Frequency Requirement		IUs Met Partial Inspection Frequency Requirement		IUs Met Complete and Partial Inspection Frequency Requirements		
		Complete inspections	Partial inspections	Complete inspections	Partial inspections	Number	Percent	Number	Percent	Total number of IUs	Number that met inspection frequency	Percent
<b>COAL MINES AND FACILITIES</b>												
Active	0	0	0	0	0	0	0	0	0	0	0	0
Inactive	0	0	0	0	0	0	0	0	0	0	0	0
Abandoned	1	1	0	1	1	1	100	1	100	1	1	100
<b>TOTALS <sup>3</sup></b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>100</b>	<b>1</b>	<b>100</b>	<b>1</b>	<b>1</b>	<b>100</b>
<b>Coal Exploration Activities <sup>4</sup></b>		<b>Complete Inspections</b>						<b>Partial Inspections</b>				
Exploration sites with permits		0						0				
Exploration sites with notices		0						0				

<sup>1</sup> Calculated on a site-specific basis.

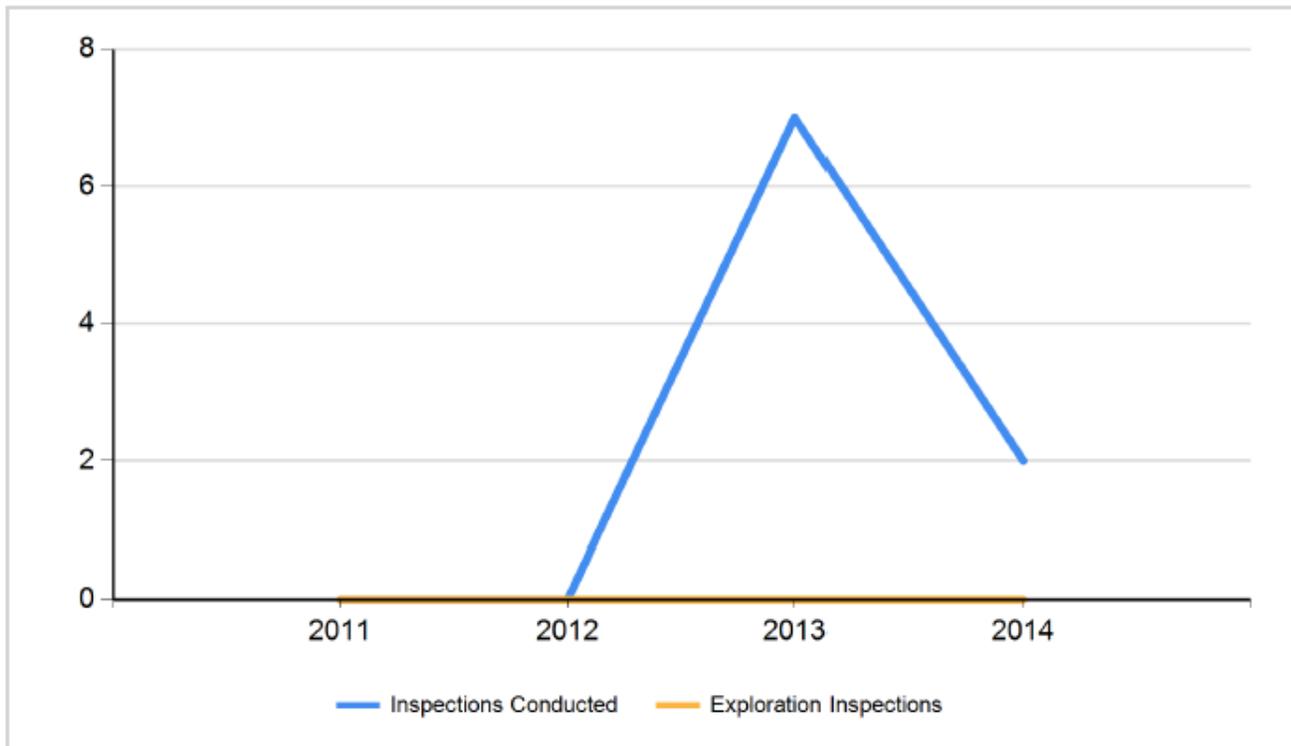
<sup>2</sup> Total number includes both permanent program permits and initial program sites.

<sup>3</sup> 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

<sup>4</sup> 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.

<sup>5</sup> NA - Not Available

**CHART 10A HISTORICAL TRENDS  
STATE OR TRIBAL INSPECTION ACTIVITY**



**TABLE 10A**

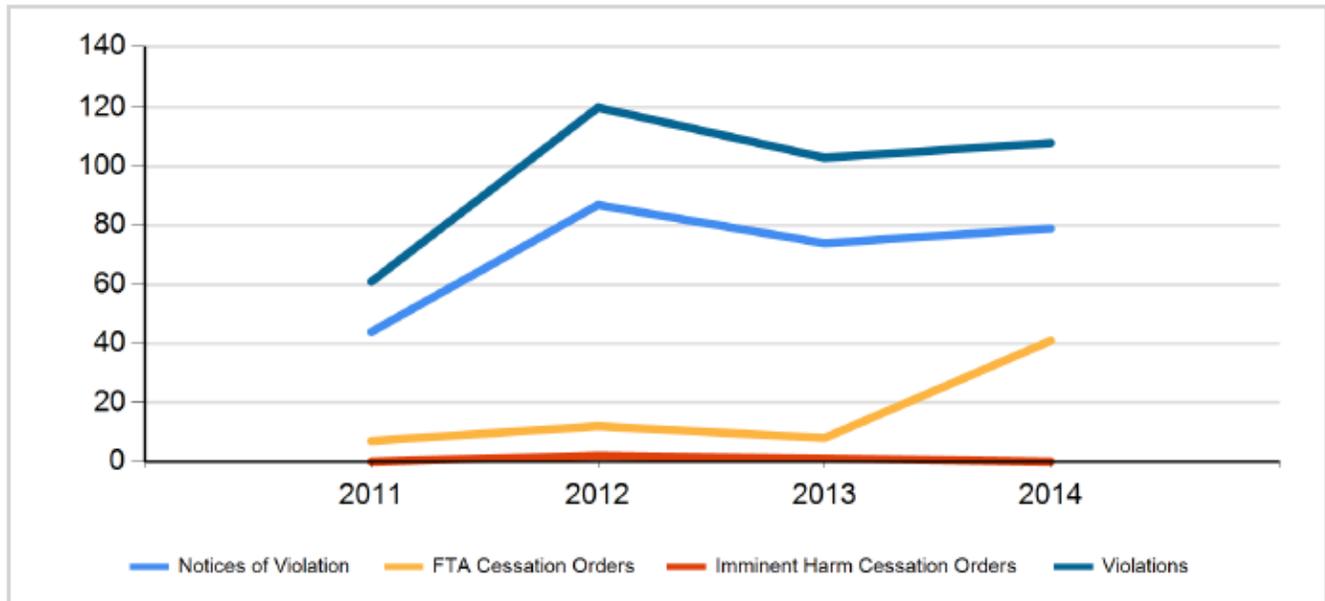
<b>STATE OR TRIBAL INSPECTION ACTIVITY</b>		
<b>Year</b>	<b>Inspections Conducted</b>	<b>Exploration Inspections</b>
2011	0	0
2012	0	0
2013	7	0
2014	2	0

TABLE 11

<b>STATE OR TRIBAL ENFORCEMENT ACTIVITY</b>		
<b>Type of Enforcement Action</b>	<b>Number of Actions <sup>1</sup></b>	<b>Number of Violations <sup>1</sup></b>
Notice of Violation	79	108
Failure-to-Abate Cessation Order	41	56
Imminent Harm Cessation Order	0	0

<sup>1</sup> Does not include actions and violations that were vacated.

**CHART 11A HISTORICAL TRENDS  
STATE OR TRIBAL ENFORCEMENT ACTIVITY**



**TABLE 11A**

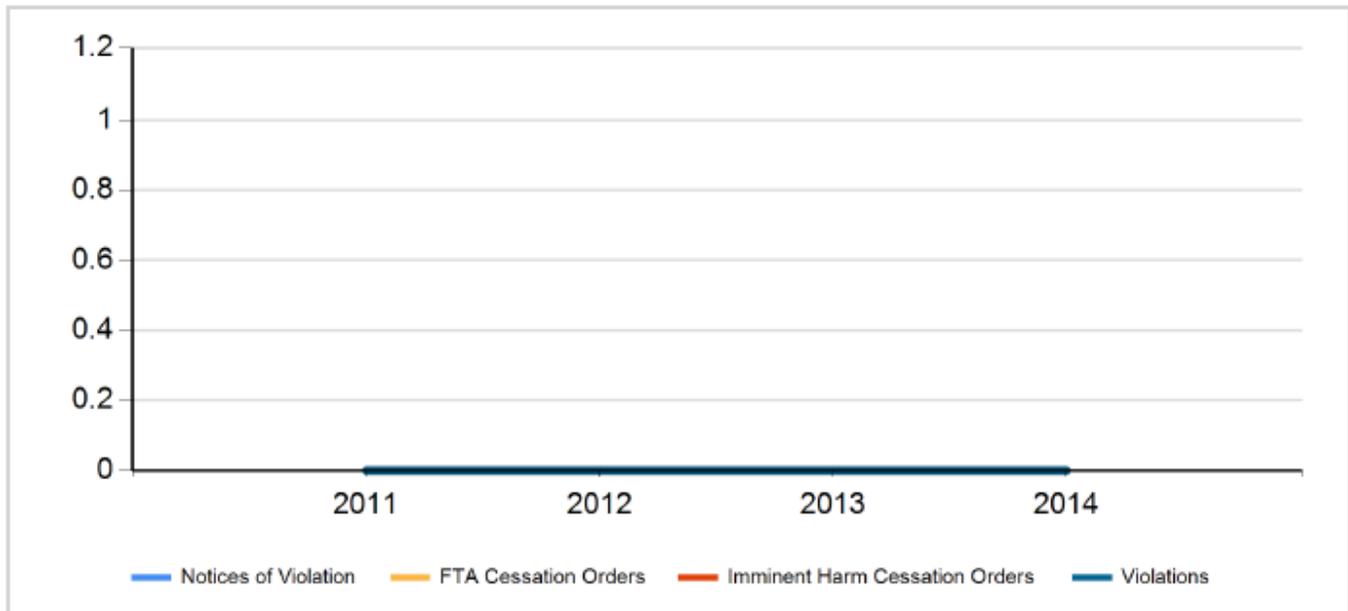
<b>STATE OR TRIBAL ENFORCEMENT ACTIVITY</b>				
<b>Year</b>	<b>Notices of Violation</b>	<b>Violations</b>	<b>FTA Cessation Orders</b>	<b>Imminent Harm Cessation Orders</b>
2011	44	61	7	0
2012	87	120	12	2
2013	74	103	8	1
2014	79	108	41	0

TABLE 11

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

<sup>1</sup> Does not include actions and violations that were vacated.

**CHART 11A HISTORICAL TRENDS  
STATE OR TRIBAL ENFORCEMENT ACTIVITY**



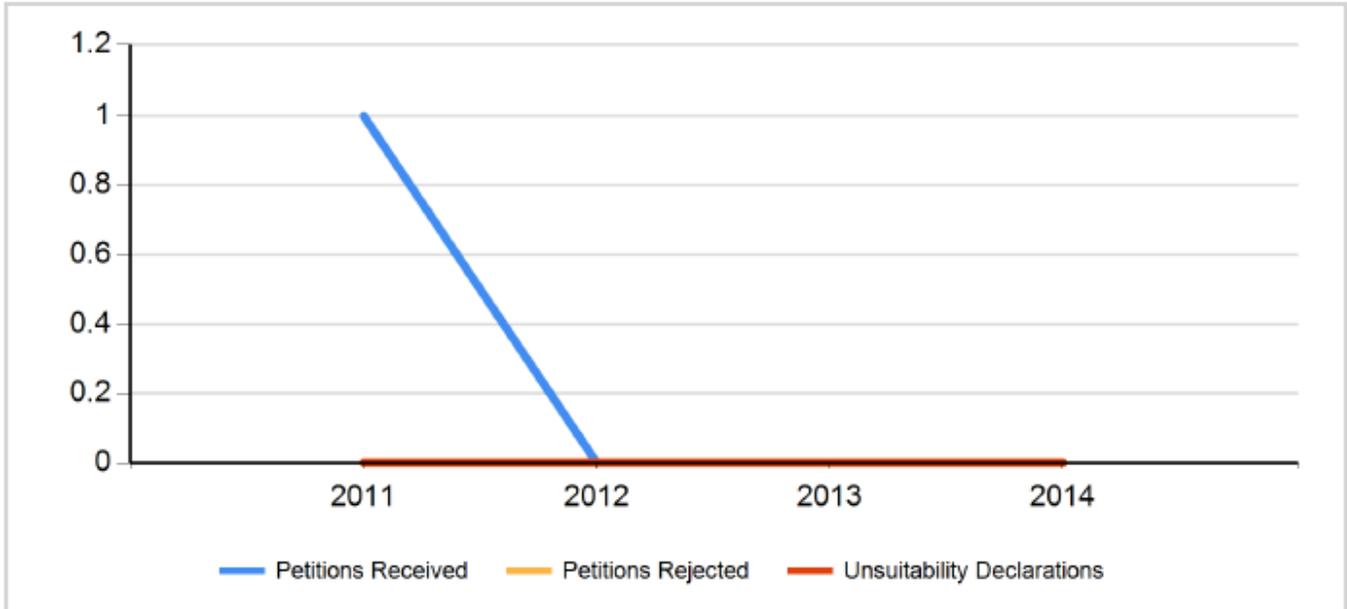
**TABLE 11A**

STATE OR TRIBAL ENFORCEMENT ACTIVITY				
Year	Notices of Violation	Violations	FTA Cessation Orders	Imminent Harm Cessation Orders
2011	0	0	0	0
2012	0	0	0	0
2013	0	0	0	0
2014	0	0	0	0

TABLE 12

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

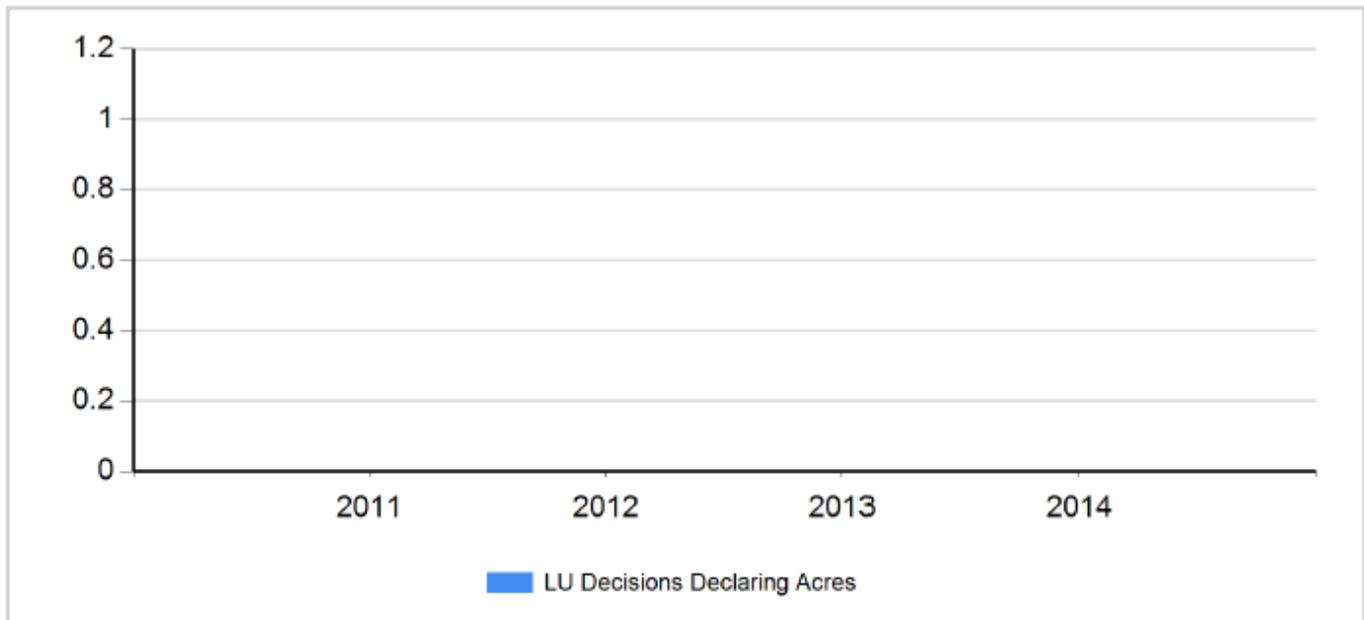
**CHART 12A HISTORICAL TRENDS  
LANDS UNSUITABLE ACTIVITY**



**TABLE 12A**

<b>LANDS UNSUITABLE ACTIVITY</b>			
<b>Year</b>	<b>Petitions Received</b>	<b>Petitions Rejected</b>	<b>Unsuitability Declarations</b>
2011	1	0	0
2012	0	0	0
2013	0	0	0
2014	0	0	0

**CHART 12B HISTORICAL TRENDS  
ACRES DECLARED UNSUITABLE**



**TABLE 12B**

<b>ACRES DECLARED UNSUITABLE</b>	
<b>Year</b>	<b>Acres Declared Unsuitable</b>
2011	0.0
2012	0.0
2013	0.0
2014	0.0

**Knoxville Field Office  
Annual Evaluation Report  
Fiscal Year 2014**

**APPENDIX 2**

**Summary of Core Data to Characterize the AML Program**

The following tables present summary data pertinent to mining operations and regulatory activities under the Tennessee regulatory program. Unless otherwise specified, the reporting period for the data contained in the tables is the Fiscal Year. Other data and information used by OSMRE in its evaluation of Tennessee's performance is available for review in the evaluation file maintained by KFO.

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

List of Tables

Table 1	Tennessee Status of AML Inventory
Table 2	Tennessee Accomplishments in Eliminating Health and Safety Hazards Related to Past Mining
Table 3	Tennessee Accomplishments in Eliminating Environmental Problems Related to Past Mining
Table 4	Tennessee Accomplishments in Public Well-Being Enhancement
Table 5	Tennessee Partnership Financial Resources Dedicated to Protecting the Public from Adverse Effects of Past Mining
Table 6	Tennessee Reclamation Projects
Table 7	Tennessee AML Program Grant Awards and Staffing

**Table 1 – (State/Tribe) Status of AML Inventory**  
 (All Priority 1, 2, and 3 Hazards as of September 30, 2014)

<b>Table 1 – TENNESSEE Status of AML Inventory all Priority 1, 2, and 3 Hazards on September 30, 2014</b>					
	High Priority		Elevated Priority 3	Stand Alone Priority 3 (not adjacent or in conjunction w/ P1&P3)	Total
	Priority 1	Priority 2			
<b>UNFUNDED</b>					
<b>GPR</b>	1.00	669.62	6.00	8,137.60	8,814.22
<b>Acres</b>					
<b>Dollars</b>	300,000.00	8,873,473.00	100,000.00	27,006,255.00	36,279,728.00
<b>FUNDED</b>					
<b>GPR</b>	0	271.10	25.00	0	296.10
<b>Acres</b>					
<b>Dollars</b>	0.00	1,251,000.00	125,000.00	0.00	1,376,000.00
<b>COMPLETED</b>					
<b>GPR</b>	265.23	3,126.36	300.46	1,599.57	5,291.62
<b>Acres</b>					
<b>Dollars</b>	4,448,574.30	18,961,938.35	1,372,235.00	8,443,789.00	33,225,536.65

**Table 2 – (State/Tribe)**  
**Accomplishments in Eliminating Health and Safety Hazards Related to Past Mining**  
**Priority 1 and 2 Hazards**  
(As of September 30, 2014)

	Clogged Stream Lands (Acres)	Clogged Streams (Miles)	Dangerous Highwalls (Feet)	Dangerous Impoundments (Count)	Dangerous Piles & Embankments (Acres)	Dangerous Slides (Acres)	Hazardous Equip & Facilities (Count)	Hazardous Water Bodies (Count)	Industrial/Residential Waste (Acres)	Polluted Water: Agricultural & Industrial (Co	Polluted Water: Human Consumption (Count)	Portals (Count)	Subsidence (Acres)	Surface Burning (Acres)	Vertical Openings (Count)	Total
<b>UNFUNDED</b>																
Units	0.00	7.00	7,060.00	1.00	82.50	72.00	30.00	21.00	3.00	9.00	37.00	321.00	0.00	1.00	12.00	7,656.50
GPRA	0.00	35.00	100.82	5.00	82.50	72.00	3.00	105.00	3.00	45.00	185.00	32.10	0.00	1.00	1.20	670.62
Costs	0.00	370,000.00	804,750.00	1,000.00	570,000.00	3,450,000.00	529,000.00	779,000.00	15,000.00	585,000.00	784,000.00	924,680.00	0.00	300,000.00	61,000.00	9,173,430.00
<b>FUNDED</b>																
Units	0.00	0.00	7,777.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	26.00	0.00	0.00	0.00	0.00	7,809.00
GPRA	0.00	0.00	111.10	0.00	0.00	0.00	0.00	30.00	0.00	0.00	130.00	0.00	0.00	0.00	0.00	271.10
Costs	0.00	0.00	767,700.00	0.00	0.00	0.00	0.00	83,300.00	0.00	0.00	400,000.00	0.00	0.00	0.00	0.00	1,251,000.00
<b>COMPLETED</b>																
Units	137.00	1.80	77,587.90	2.00	332.60	25.10	31.00	143.40	17.00	7.00	137.00	184.00	1.00	26.50	11.00	78,644.30
GPRA	137.00	9.00	1,108.56	10.00	332.60	25.10	3.10	717.00	17.00	35.00	685.00	18.40	1.00	26.50	1.10	3,126.36
Costs	37,297.00	404,082.00	5,352,624.00	35,000.00	1,540,165.00	635,801.00	318,767.00	3,700,192.70	161,972.00	783,347.00	3,893,730.65	591,479.00	63,338.00	1,292,421.00	151,722.00	18,961,938.35
<b>TOTAL</b>																
Units	147.00	8.80	92,424.90	3.00	415.10	97.10	61.00	170.40	20.00	16.00	200.00	505.00	1.00	26.50	23.00	94,118.80
GPRA	147.00	44.00	1,320.48	15.00	415.10	97.10	6.10	852.00	20.00	80.00	1,000.00	50.50	1.00	26.50	2.30	4,077.08
Costs	37,297.00	774,082.00	6,925,074.00	36,000.00	2,110,165.00	4,085,801.00	847,767.00	4,562,492.70	176,972.00	1,368,347.00	5,077,730.65	1,516,159.00	6,333,800.00	1,292,421.00	212,722.00	35,356,830.35

**Table 3 – (State/Tribe)**  
**Accomplishments in Eliminating Environmental Problems Related to Past Mining**  
**Priority 3 and SMCRA section 403(b) Hazards**  
(As of September 30, 2014)

	Bench (Acres)	Equipment Facility (Count)	Gobs (Acres)	Haul Road (Acres)	High Wall (Feet)	Industrial/Residential Waste (Acres)	Mine Opening (Count)	Other ()	Pits (Acres)	Slump (Acres)	Slurry (Acres)	Spoil Area (Acres)	Water Problems (Gallons)	Total
<b>Unreclaimed Remaining Hazards (Unfunded)</b>														
Units	1,839.00	20.00	118.50	461.00	12,551.00	2.00	43.00	6.00	1,153.50	0.00	1.00	4,378.50	1,739.00	22,312.50
GPRAs	1,839.00	2.00	118.00	461.00	179.30	2.00	4.30	0.00	1,153.50	0.00	1.00	4,378.50	5.00	8,143.60
Costs	4,411,719.00	158,500.00	344,603.00	749,057.00	2,324,000.00	5,000.00	124,001.00	73,501.00	4,879,353.00	0.00	1,500.00	12,310,156.00	1,724,865.00	27,106,255.00
<b>ANNUAL RECLAMATION - FY2014 only (Completed)</b>														
Units	0.00	0.00	0.00	0.00	11,265.00	0.00	0.00	1.00	19.30	0.00	0.00	67.00	0.00	11,352.30
GPRAs	0.00	0.00	0.00	0.00	151.30	0.00	0.00	1.00	19.30	0.00	0.00	67.00	0.00	238.60
Costs	0.00	0.00	0.00	0.00	476,580.00	0.00	0.00	220.00	253,397.00	0.00	0.00	313,435.00	0.00	1,043,632.00
<b>HISTORICAL RECLAMATION - FY1978-2014 (Completed)</b>														
Units	76.00	15.00	68.50	8.00	34,453.30	5.20	3.00	1.00	185.00	4.00	0.00	1,057.80	361.00	36,237.80
GPRAs	76.00	1.50	69.00	8.00	492.12	5.20	0.30	0.00	185.00	4.00	0.00	1,057.90	1.00	1,900.02
Costs	359,275.00	56,055.00	471,931.00	48,403.00	1,448,693.00	5,015.00	9,500.00	48,025.00	1,356,714.00	136,870.00	0.00	5,467,526.00	408,017.00	9,816,024.00

**Table 4 – (State/Tribe) Public Well-Being Enhancement**  
 (All Priority 1, 2, 3 AML projects completed during FY 2014)

PAD Number	Problem Type(s) Reclaimed	Project Name	Cost	GPRA Acres	Number of People with Reduced Exposure Potential
TN000035	H	Cherry Branch 3	\$ 22,985.00	5.7	82
TN000035	HWB	Cherry Branch 3	\$ 36,776.00	5	82
TN000035	DH	Cherry Branch 3	\$ 36,776.00	11.4	82
TN000035	PI	Cherry Branch 3	\$ 35,028.00	1.8	164
TN000035	H	Cherry Branch 3	\$ 9,194.00	3.6	82
TN000036	PI	Cherry Branch 3	\$ 34,335.00	1.1	75
TN000036	H	Cherry Branch 3	\$ 179,210.00	40.7	75
TN000036	DH	Cherry Branch 3	\$ 68,070.00	10	75
TN000036	HWB	Cherry Branch 3	\$ 19,578.00	5	75
TN000036	SA	Cherry Branch 3	\$ 83,200.00	16	75
TN000037	HWB	Cherry Branch 3	\$ 56,781.00	5	75
TN000037	PI	Cherry Branch 3	\$ 25,043.00	1.1	75
TN000037	H	Cherry Branch 3	\$ 42,722.00	21.4	75
TN000037	SA	Cherry Branch 3	\$ 171,600.00	33	75
TN000037	DH	Cherry Branch 3	\$ 55,980.00	9.3	75
TN000046	DP	Bellview Phase 2	\$ 220.00	1	54
TN000046	SA	Bellview Phase 2	\$ 53,635.00	17	54
TN000046	PI	Bellview Phase 2	\$ 53,764.00	1.8	54
TN000046	H	Bellview Phase 2	\$ 57,382.00	12.9	54
TN000046	DH	Bellview Phase 2	\$ 48,903.00	5.7	54
TN000046	HWB	Bellview Phase 2	\$ 91,148.00	20	54
TN000049	DH	Bellview Phase 2	\$ 350,060.00	57.9	54
TN000049	HWB	Bellview Phase 2	\$ 53,730.00	20	54
TN000049	H	Bellview Phase 2	\$ 55,087.00	12.1	54
TN000049	PI	Bellview Phase 2	\$ 25,508.00	1	54
TN000087	PWHC	Seiber Flats Waterline Extension	\$ 280,540.45	25	80
TN000166	PWHC	Stinking Creek Waterline Phase 2	\$ 418,828.20	100	82
TN000193	H	Roseanne Ellis	\$ 100,000.00	53.1	104
TN000193	DH	Roseanne Ellis	\$ 120,000.00	27.4	104
TN000193	HWB	Roseanne Ellis	\$ 52,208.00	5	104
TN000193	PI	Roseanne Ellis	\$ 65,120.00	11.5	104
TN000234	DS	Grave Hill Landslide	\$ 47,398.30	1.4	80
TN000239	DPE	Wolf Ridge Gob Pile	\$ 218,000.00	1.7	80
TN000239	P	Wolf Ridge Gob Pile	\$ 15,000.00	0.1	80
TN000239	H	Wolf Ridge Gob Pile	\$ 10,000.00	11.4	80
TN000239	PI	Wolf Ridge Gob Pile	\$ 14,599.00	1	80
TN000239	SA	Wolf Ridge Gob Pile	\$ 5,000.00	1	80

**Table 5 – (State/Tribe) – Partnership Financial Resources Dedicated to Protecting the Public from Adverse Effects of Past Mining**  
(AML projects completed during FY 2014)

PAD Number	Project Name	SMCRA Program Funding Source	Total SMCRA Funding	Alternate Non-SMCRA Funding Source	Alternate Non-SMCRA Funding Source
TN000035	Cherry Branch 3	SGA	\$140,759.00	Program	\$0.00
TN000036	Cherry Branch 3	SGA	\$736,519.00	Program	\$0.00
TN000046	Bellview Phase 2	SGA	\$305,052.00	Program	\$0.00
TN000049	Bellview Phase 2	SGA	\$484,385.00	Program	\$0.00
TN000087	Seiber Flats Waterline Extension	SGA	\$280,540.45	Program	\$0.00
TN000166	Stinking Creek Waterline Phase 2	SGA	\$418,828.20	Program	\$0.00
TN000193	Roseanne Ellis	SGA	\$337,328.00	Program	\$0.00
TN000234	Grave Hill Landslide	SGA	\$47,398.20	Program	\$0.00
TN000239	Wolf Ridge Gob Pile	SGA	\$262,599.00	Program	\$0.00

**Table 6 – (State/Tribe) – Reclamation Projects Started and/or Completed**  
(During FY 2014)

Project Type	Projects Started	Projects Completed
State/Tribe (FY 2013)	3	4
Federal (FY 2013)	0	0
Total (FY 2013)	3	4

**Table 7 – (State/Tribe) – AML Program Grant Awards and Staffing**  
(During FY 2014)

<b>AML Program Costs</b>	
Administration	\$436,121.00
Non –Water Supply Construction	\$1,107,890.32
Water Supply Construction	\$795,000.00
AMD Set-Aside	\$453,585.98
Other(s)	\$0.00
<b>Total AML Funding</b>	\$2,792,597.30
<b>AML Program Staffing</b> (full-time equivalents on September 30, 2014)	4