



Annual Evaluation Report for the  
Regulatory and Abandoned Mine Land Program  
Administered by the State Regulatory Authority  
Of Indiana



For Evaluation Year 2020  
July 1, 2019 to June 30, 2020  
Prepared by Alton Field Division  
Interior Region 3  
September 2020

## EXECUTIVE SUMMARY

During the 2020 Evaluation Year, the Office of Surface Mining Reclamation and Enforcement (OSMRE) Alton Field Division, conducted oversight evaluations of the Indiana Department of Natural Resources, Division of Reclamation (DOR), Regulatory and Abandoned Mine Land Programs. Oversight evaluations determine the effectiveness of the Division in the implementation of the Surface Mining Control and Reclamation Act of 1977 and the approved State Programs. This annual evaluation report covers the period of July 1, 2019, through June 30, 2020. The report describes the OSMRE's oversight process and identifies the accomplishments and successes of the Division, as well as their financial, technical, and programmatic challenges and the OSMRE's concerns. The goal of oversight and this annual evaluation report is to strengthen the Division's programs and advise the DOR and the public of our findings and recommendations.

Each year, the Alton Field Division conducts outreach to solicit comments from the public and interested groups regarding the oversight process. Staff routinely interacts with citizens, environmental groups, industry, and other stakeholders, discussing topics of concern and suggestions for improvement of the OSMRE, and the DOR. This input informs the development of current and future oversight evaluations.

In support of the OSMRE's national initiatives, the Alton Field Division conducted studies evaluating the two required National Measurement Elements: off-site impacts and reclamation success (bond release). Additional topics were reviewed as described below.

### **Required National Measurement Elements**

- The Off-Site Impacts study indicated that 93 percent of Indiana's Inspectable Units were free from off-site impacts. Of the eight off-site impacts events observed, water, land, people, and structures were determined to be impacted. Each off-site event may impair more than one resource. The off-site impacts events caused eight instances, five minor, one moderate, and two major at five inspectable units. Construction and/or maintenance and operator negligence were found to be the root causes leading to the development of the off-site impacts. In each instance, the DOR took appropriate measures in making certain the operator was responsive in taking corrective actions. The OSMRE concludes that the DOR is successfully protecting the environment and the public from off-site impacts resulting from surface coal mining and reclamation operations. Detail findings are on page 16.
- The Reclamation Success (bond release) study indicated that the DOR is ensuring successful reclamation. The OSMRE gathered information in areas that measure program performance: a) landform/approximate original contour, b) land capability, and c) hydrologic balance. These items were evaluated in accordance with the methods and guidelines described in REG-8 and the DOR and Alton Field Division Performance

Agreement. It was found that 100% of the acreage field evaluated by the Alton Field Division for which DOR recommended bond release was successfully reclaimed and eligible for release. Overall, the DOR released 2,921.4 Phase III acres during this Evaluation Year for mined lands successfully reclaimed to their pre-mining land use condition. Therefore, OSMRE concludes that the DOR is effectively ensuring successful reclamation on lands affected by surface coal mining operations. Detailed findings are on page 17.

### **National Priority Review Topics**

The OSMRE did not assign any National Priority Review Topics for the Evaluation Year.

### **General Oversight Topic Reviews for the State Regulatory Program**

The Alton Field Division met the requirements established by Directive REG-8 by conducting 12 inspections involving 11 inspectable units. 18 inspections was the target this Evaluation Year but due to COVID19 Pandemic that target was not reached. The OSMRE did not issue any Ten-Day Notices to the DOR this Evaluation Year.

### **General Oversight Topic Reviews for the Abandoned Mine Land Program**

- **Field Assessment of Abandoned Mine Land Projects**  
Due to limited staff resources and the COVID19 Pandemic, the AFD did not conduct any field assessments during this Evaluation Year. The AFD anticipates field assessments to reconvene during the next Evaluation Year.
- **Abandoned Mine Land Inventory System**  
The DOR's Abandoned Mine Land Program continues to request the OSMRE approval for inventory amendments in accordance with OSMRE policy and procedures. Detailed findings are on page 24.

### **Program Amendments**

#### *Regulatory Program Amendment*

There were no Regulatory Program Amendment updates during EY 2020.

#### *Abandoned Mine Land Program Amendment*

There were no Abandoned Mine Land Program Amendment updates during EY 2020.

### **2020 Assistance Activities**

- **Funding** - The primary mode of the OSMRE assistance to Indiana is through grant funding. Indiana was awarded \$1.6 million in Evaluation Year 2020 for regulatory program operations, providing 50 percent support for its Regulatory Program. The OSMRE provides 100 percent funding for the Indiana Abandoned Mine Land Program, which totaled \$5.73 million awarded in Evaluation Year 2020.
- **Technical Assistance:**

Abandoned Mine Land Program - Interior Regions 3, 4 & 6 provided technical assistance and general guidance to Indiana with ongoing rehabilitation efforts of several aging bioreactor cells. Technical Assistance to Indiana was impacted due to the COVID19 Pandemic.

- Training - Technical and Professional training courses are offered by the OSMRE throughout the year which address technical and programmatic aspects of mining and reclamation. These courses are provided for the OSMRE and state participants. Due to the COVID19 Pandemic, a large number of training courses offered by OSMRE were canceled. Some courses were offered via Virtual Class sessions when applicable. During Evaluation Year 2020, 17 DOR staff members attended 10 Technical and Professional training courses offered by the OSMRE.



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*Cover Page Photograph: Peabody Midwest Mining , LLC - Caledonia Mine*

## **I. INTRODUCTION**

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) created the Office of Surface Mining Reclamation and Enforcement (OSMRE) in the Department of the Interior. SMCRA provides authority to OSMRE to oversee the implementation of and provide federal funding for the state regulatory programs and abandoned mine land programs that have been approved by the Secretary of the Interior as meeting the minimum standards specified by SMCRA. A brief explanation of each program follows:

### *Title V – Regulation of Coal Mining*

In 1983, The State of Indiana gained primacy and assumed the responsibility for regulation of surface coal mining and reclamation operations. The Indiana Department of Natural Resources, Division of Reclamation (DOR) administers the Indiana Regulatory Program under the provisions of the Surface Coal Mining And Reclamation Act, Indiana Code Title 14: Natural and Cultural Resources, Article 34: Surface Coal Mining and Reclamation (IC 14-34). Its governing regulations are identified as Indiana Administrative Code Title 312: Natural Resources Commission, Article 25: Coal Mining and Reclamation Operations, (312 IAC 25). Indiana’s law and regulations may be accessed at [State's website](#).

The OSMRE is responsible for oversight of the Indiana Regulatory Program to ensure the DOR is effectively administering, implementing, maintaining, and enforcing the approved programs in compliance with SMCRA and consistent with Federal regulations. Oversight also includes providing assistance to Indiana to strengthen the programs as necessary. To fulfill this role, each year, the OSMRE conducts performance evaluations in accordance with Directive REG-8, which establishes policy, procedures, and responsibilities for conducting oversight of state programs.

### *Title IV – Abandoned Mine Land*

In 1983, the DOR gained authority for implementation of its Title IV AML Program. Through the approved AML Reclamation Plan, Indiana works to protect the citizens of Indiana from the adverse effects of old mining practices and continues to restore these lands to safe and productive conditions.

The OSMRE is responsible for monitoring the progress and quality of the AML Program. Monitoring also includes providing assistance to strengthen its program as necessary. To fulfill this role, the OSMRE conducts performance evaluations in accordance with Directive AML-22, including: 1) evaluating the program’s annual progress in addressing problems identified in its Enhanced Abandoned Mine Land Inventory System (e-AMLIS) and; 2) evaluating compliance with the requirements of SMCRA, applicable 30 CFR regulations, the approved AML reclamation plan, and grant conditions.

In addition to conducting oversight of approved state programs, OSMRE provides technical assistance, staff training, financial grants and assistance, as well as management assistance to each state program. This report contains summary information regarding the Indiana programs

and the effectiveness of the Indiana programs in meeting the applicable purposes of SMCRA as specified in Section 102. This report covers the Evaluation Year (EY) 2020, July 1, 2019 to June 30, 2020.

Detailed background information and comprehensive reports for the program elements evaluated during the Evaluation Year are available for review and copying at the OSMRE, Alton Field Division, 501 Belle St., Suite 216, Alton, Illinois 62002. To arrange an appointment time, contact the AFD at (618) 463-6460.

The reports are also available at the OSMRE Oversight Documents website at [ODOCs](#). Adobe Acrobat Reader® is needed to view these documents. Acrobat Reader® is free and can be downloaded at the [Adobe website](#). Follow these steps to gain access to the document of interest:

1. Select Indiana from the drop-down box labeled “State”. Also select 2020 as the “Evaluation Year”, and then click “Submit”. The search can be narrowed by choosing selections under the “Keyword” or “Category” headings.
2. The oversight documents and reports matching the selected state and evaluation year will appear at the bottom of the page.
3. Select “View” for the document that is of interest and the report will appear for viewing, saving, and/or printing.

The following acronyms are used in this report:

<b>AFD</b>	Alton Field Division
<b>AMD</b>	Acid Mine Drainage
<b>AML</b>	Abandoned Mine Land
<b>DOR</b>	Indiana Department of Natural Resources, Division of Reclamation
<b>e-AMLIS</b>	Enhanced Abandoned Mine Land Inventory System
<b>EY</b>	Evaluation Year
<b>FTACO</b>	Failure-to-Abate Cessation Order
<b>IAC, IC</b>	Indiana Administrative Code, Indiana Code
<b>IU</b>	Inspectable Unit
<b>OSMRE</b>	Office of Surface Mining Reclamation and Enforcement
<b>SMCRA</b>	Surface Mining Control and Reclamation Act of 1977

## II. OVERVIEW OF COAL MINING INDUSTRY IN INDIANA

### *Coal Resources*

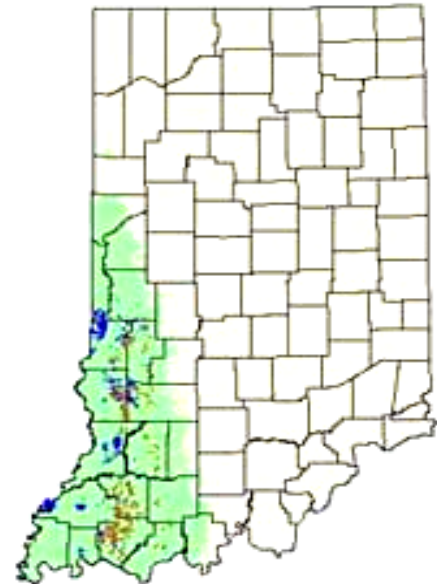
Coal is the most abundant fossil fuel in the world. The United States holds the world's largest estimated recoverable reserves of coal at approximately 27 percent of world supply. Based on current production levels, the United States has enough estimated recoverable reserves of coal to last more than 200 years. Coal is classified into four main types or ranks (anthracite, bituminous, subbituminous, and lignite), depending on the amounts and types of carbon it contains and on the amount of heat energy it can produce. Indiana has approximately 34 billion tons of recoverable coal reserves consisting of bituminous coal.

The Indiana Coalfield covers an area of about 6,500 square miles in west-central and southwestern Indiana, as shown on Figure 1 to the right. It constitutes the eastern edge of the Illinois Coal Basin, a basin that covers parts of a three-state area, including most of Illinois, and portions of Indiana and Kentucky. Indiana coal seams dip about 25 feet per mile to the west toward the center of the Illinois Coal Basin. This configuration largely accounts for the location of surface and deep mines in Indiana. Online access to maps showing locations of coal mines in Indiana can be found at the [Indiana Geological Survey's website](#).

Twenty counties within, or partly within, the Indiana coalfield have significant coal reserves. Currently, however, coal is being mined in only ten counties. Indiana's coal reserve is approximately 57 billion tons, with 17 billion tons being recoverable using current technology. Of the recoverable coal, about 15 billion tons can be extracted through underground mining and 2 billion tons through surface mining. Based on current production rates, Indiana's 17 billion tons of available coal could last more than 500 years.

### *Historical Highlights*

Coal was first discovered in Indiana along the Wabash River in 1736, and was reported in land surveys and located on maps by 1804. Small-scale surface mining along exposed coal seams was done at first by pick and shovel, and later by horse and scraper. The first underground mineshaft in Indiana was developed in 1850 at Newburgh, Indiana. By 1852, both shaft and slope mines had become common. Production was around 9,700 tons in 1840, and by 1918, at the close of World War I, production in Indiana had reached over 30 million tons per year. Surface mining began on a large scale with the advent of steam-powered equipment and has remained a strong and viable Indiana industry since that time.



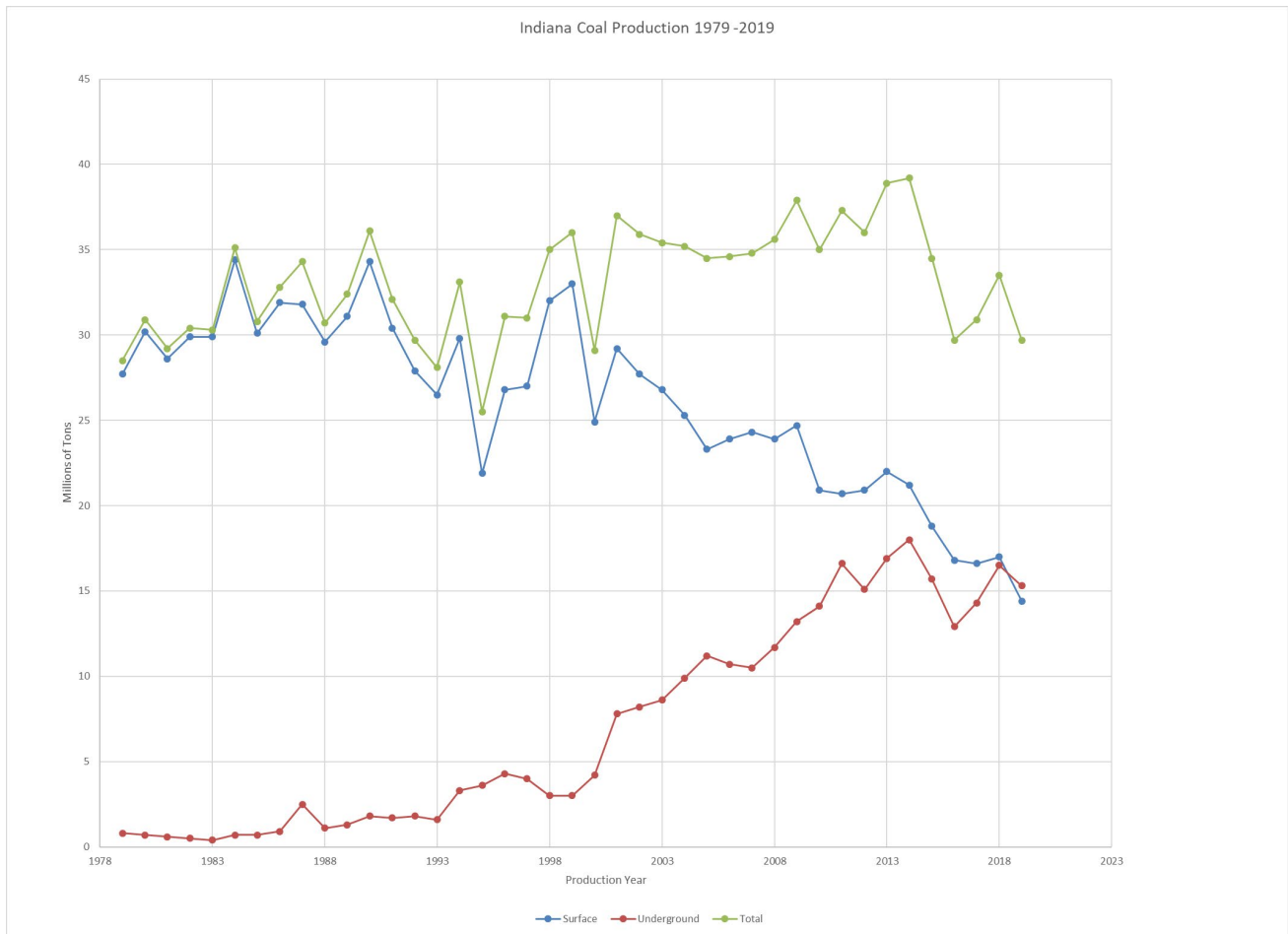
Index map of Indiana showing the coal-bearing rocks of the Pennsylvanian System in green, underground coal mines in blue, and surface coal mines in brown.

**Figure 1: Indiana Coalfield**



*Current Trends*

Historically, coal was surface mined, however, because a large portion of the surface reserves have been removed, surface mining activities are starting to decline, accompanied by a resurgence of underground mining in deeper coal beds. Figure 2 is a timeline of coal production in Indiana. As can be seen in the figure, coal production was fairly constant between 2001 and 2015 with underground mine coal production increasing in importance and accounting for 43 percent of annual coal production. Also apparent is the sharp decline in coal production in 2015-2016, with a slight increase in 2017-2019.



**Figure 2: Annual Indiana Coal Production**

Annual coal production in Indiana during calendar year 2019 was 29.7 million tons, which represents a 24% reduction from its peak production recorded in 2014 and a decrease from last year’s production (Appendix 1- Part A, Table 1). In 2018, [Energy Information Administration](#) figures on coal mine employment (most recent data) indicate that the Indiana coal industry employed an average workforce of 2,923. The percentage of workforce employment increased 11% for underground mines but incurred a decrease of 1.1% for surface mines.

### *Use of Indiana Coal*

Most of Indiana's coal is used by the electric utility industry, which burns a combination of Indiana coal and lower sulfur, out-of-state coal to meet current air pollution emission requirements. Additionally, by law, Indiana state institutions heating with coal-fired boilers are required to use Indiana coal. Other consumer uses include coke plants, residential and commercial users, other industrial customers, and foreign export.

### *Abandoned Mine Lands*

Indiana has had a history of requiring reclamation of coal-mined lands since 1941. Indiana was the second state to pass laws regulating mining. These laws had varying requirements until the Federal law (SMCRA) was passed in 1977 requiring the restoration of lands and waters to pre-mined conditions. Prior to 1941 and even under Indiana's early mining laws, land was abandoned or not reclaimed in a manner that could support productive uses. These sites can be dangerous as well as a source of water pollution.

Current laws prohibit a coal operator from abandoning a site and a performance bond is held by the DOR until all reclamation is completed. Once in a while, an operator will not reclaim a site, thereby requiring the revocation of the permit and forfeiture of the bond so that the land can be reclaimed by the DOR under private contract. The DOR has one unreclaimed bond forfeiture site affecting 59.5 acres for which OSMRE awarded a civil penalty grant in the amount of \$14 thousand to supplement reclamation efforts. The DOR has requested additional civil penalty funds if available to assist with contaminated soil clean up.

The SMCRA AML fund was established to address public health, safety and environmental problems associated with sites that were mined and abandoned prior to its enactment in 1977. The mission of all AML Programs is to permanently reclaim abandoned mine sites by abating hazards, reducing/eliminating adverse effects of past coal mining on the environment, and restoring adversely affected lands and waters to beneficial use. The overall measure of success of AML Programs is the degree to which they are achieving planned reclamation goals by addressing the most critical (highest priority) reclamation needs before addressing lower priority reclamation. Requirements for conducting approved AML Reclamation Programs are found in 30 CFR Parts 870 through 886.

The SMCRA also allows for expedited abatement of AML problems that are considered emergencies. An "emergency" is defined as a sudden danger or impairment that presents a high probability of substantial physical harm to the health, safety, or general welfare of people before the danger can be abated under normal AML Program operation procedures.

Prior to the passage of SMCRA, approximately 170,000 acres of surface coal mines and more than 2,300 underground mine entrances leading to 163,000 acres of underground coal mines affected the landscape in Indiana's southwestern counties. AML sites may include processing facilities, waste banks, subsidence prone areas and hoisting shafts from old underground mines,

dangerous highwalls, dangerous embankments, clogged streams, barren mine spoil areas, and coal refuse deposits left from past surface mining operations. Indiana AML sites are listed in the e-AMLIS, which is maintained, by the Indiana's AML Program and the OSMRE. Appendix 1 – Part B contains tables that depict the reclamation status of AML sites in Indiana.

AML sites are classified in the e-AMLIS, and designated with a priority level, based upon their impacts on public health and safety, and environmental quality. These classifications are:

- Priority 1 (P1): an AML problem meeting the conditions of SMCRA concerning the protection of public health, safety, and property from extreme danger of adverse effects of mining practices or adjacent land and water reclamation.
- Priority 2 (P2): an AML problem ...concerning the protection of public health and safety from adverse effects of mining practices or adjacent land and water reclamation.
- Priority 3 (P3): an AML problem...concerning the restoration of land and water resources and the environment previously degraded by adverse effects of mining practices.

P1's and P2's are considered "High" priorities and in accordance with SMCRA must be given increased emphasis for reclamation.

### **III. OVERVIEW OF THE PUBLIC PARTICIPATION AND OUTREACH EFFORTS**

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

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

Indiana's AML Program provides opportunities for public participation and interaction with local associations, citizens, environmental organizations and other groups regarding:

- Project selection;
- Grant applications;
- Consultations under the National Environmental Policy Act;
- Obtaining right of entry documents; and
- Amendments to the State Reclamation Plan.

The [DOR website](#) contains: contact information, mining permit applications, blank forms for permitting and bonding processes, Indiana's statutes, regulations, AML Reclamation Plan, and other information described above.

The following informational publications are also present on the website or through phone, mail, and personal contact:

- *Citizen's Guide to Indiana's Abandoned Mine Land Program;*
- *Citizen's Guide to Coal Mining and Reclamation in Indiana;*
- *Citizen's Guide to Land Reclamation;*
- *Citizen's Guide to Coal Mine Blasting;*
- *Farm Management Practices for Reclaimed Cropland;*
- *Division of Reclamation Annual Report; and*
- *Division of Reclamation Strategic Plan.*

Indiana's public participation and outreach during the EY resulted in a total of approximately 16,000 outreach hours. Outreach topics included the following:

- Indiana Soils/Prime Farmland Team – Formed in 1996, consists of representatives from the DOR, OSMRE, the Natural Resources Conservation Service, the Indiana coal industry, academia, the Indiana Department of Agriculture, two individuals involved in agricultural production on mined land, the Indiana Farm Bureau, and the West Central Indiana Watershed Alliance. The wide range of public participation on the team is a valuable resource for the DOR. This self-directed group focuses on restoration and management of reclaimed farmland. During its tenure, the team has promoted and cooperated in farmland reclamation research efforts; published the "*Citizen's Guide to Farmland Reclamation*" and the "*Farm Management Practices for Reclaimed Cropland*"; and conducts biennial field demonstrations of farmland reclamation and best practices titled Farmland Reclamation Days. Although currently inactive, initial discussions have taken place to reinstate the team.
- Indiana Society of Mining and Reclamation – The DOR is actively involved in this diverse group whose membership includes the DOR, the Indiana Department of Environmental Management, citizens, industry, academia, and power industries. The group's focus is to identify topics of interest and sponsor a Technology Transfer Seminar each year. In December 2019, the organization sponsored its 33rd Annual Surface Mined Land Reclamation Technology Transfer Seminar at the Tropicana Convention Center in Evansville, Indiana. Some of the topics included: OSMRE's updated National Environmental Policy Act (NEPA Handbook), Exploring the Potential for Pumped Hydro Energy Storage on Indiana's Abandoned Mine Lands, Political Climate and the Future of the Coal Fleet, and Advancements in Technology for Surface and Underground Mining were a few of the topic discussions.



- Education Outreach Programs – The DOR continues to conduct and participate in science fairs, blaster training, public and special interest group meetings, school room talks, and continued responding to public inquiries. The DOR outreach efforts were impacted this evaluation year due to the COVID19 Pandemic.

The public can also access OSMRE annual reports and Performance Agreements (PA) via the internet at the OSMRE Oversight Documents website at [ODOCs](#). The Introduction section of this report (page 6) details how to access information using this website.

The AFD conducted outreach related to oversight during EY 2020 by e-mails soliciting comments from the public and interested groups regarding the oversight process, suggestions on additional topics the AFD should consider for review and suggestions for improvements on future annual evaluations reports.

All comments received meeting criteria that falls within the authority of the Indiana coal Regulatory and/or AML Program’s approved regulations are considered for inclusion in the current or future EY oversight reviews. No comments were received in response to EY 2020 outreach efforts.

#### **IV. MAJOR ACCOMPLISHMENTS AND INNOVATIONS**

This year marks the 37th anniversary of the state regulatory and AML Programs in the State of Indiana. The Indiana Program continues to protect the public and minimize environmental impacts within its coalfields.

The OSMRE monitored the DOR’s performance in meeting the goals and objectives of the approved state programs over the past year. Once again, the OSMRE finds that the DOR is successfully implementing both its Regulatory and AML Programs. The oversight reviews used to reach this conclusion are summarized in Sections V and VI of this report. The OSMRE looks forward to cooperatively working with the DOR during the coming year.

Major accomplishments and innovations for this year include:

##### **Title V (Regulatory Program)**

###### *Environmental Compliance*

Indiana administers its program in a way that effectively protects citizens and the environment from adverse impacts resulting from surface coal mining activities. Environmental compliance as measured by Notice of Violations Issued covering a 14-year period is shown in Figure 3.



**Figure 3: Notice of Violations Issued**

Indiana issued four Failure-to-Abate Cessation Orders (FTACO) during this EY. An FTACO is issued when a person to whom a Notice of Violation has been issued fails to abate the violation within the abatement period and must immediately cease coal exploration, surface coal mining, or reclamation operations to abate the violations covered by the order.

*Regulatory Program Amendment*

No program amendments were processed this EY.

**Title IV (Abandoned Mine Land Program)**

The DOR continues to successfully implement its AML Program to meet the applicable purposes of SMCRA. During this EY, the Indiana Program eliminated public health and safety hazards and environmental problems related to past mining. The DOR reported 47 completed projects which included non-emergency projects, emergency projects, and enhancement/maintenance on past projects (Appendix 1 – Part B, Table 4 and Table 6)

Appendix 1 - Part B, Tables 2 and 3, provide additional data on the accomplishments in eliminating Priority 1 and 2 health and safety hazards (Priority 1 includes emergencies), and Priority 3 environmental problems.

### *Partnerships*

Community outreach and partnerships are integral to Indiana's continuing reclamation success. One of the important Partnerships that the DOR has established is with the Sycamore Trails Resource Conservation and Development Group (Sycamore Trails). A non-profit organization that helps people care for, conserve and develop natural, human and economic resources in a way that will improve the environment, economy and standard of living in a given area. Sycamore Trails has numerous natural resource councils dealing with forestry, invasive plant species, land trusts and abandoned mine lands. The Sycamore Trails Program contributes to the goal of remediating adversely impacted mine lands, most of which are classified as stand-alone priority 3 problems in the OSMRE's e-AMLIS system. The partnership between the two programs is coordinated through a liaison. Site selections are done through a committee consisting of personnel from both programs.

### *National Abandoned Mine Land Reclamation Awards*

The OSMRE first recognized outstanding abandoned mine land reclamation and exemplary reclamation techniques in 1992, when it started the annual Abandoned Mine Land Reclamation Awards Program. The program mirrors one of the objectives of the SMCRA by ensuring that lands abandoned without reclamation prior to the law would be reclaimed. Each year, the OSMRE honors the best examples of abandoned mine land reclamation. Award winners are recognized as leaders in the field of mine reclamation that set the standards of excellence for the future and help preserve and enhance the quality of American life.

In September 2014, Indiana received the National Award for AML Site 309, Mill Creek Highwall Project, in Pike County, Indiana. This project was the result of a cooperative effort between the Indiana AML Program and a mining company, which resulted in a savings to the AML Program of over five million dollars. The project addressed an extremely dangerous highwall adjacent to a heavily traveled road, additionally rebuilt a county road improving public safety, and implemented natural stream morphology to benefit the community and the environment.

In September 2015, Indiana received the Mid-Continent Regional Award for AML Site 2052, Minnehaha, in Sullivan County, Indiana. This project addressed urgent safety and environmental dangers posed by a weakened levee that was holding back the abandoned slurry pond. A sudden failure would have caused a massive discharge of water and slurry downstream, damaging property and threatening public health and safety. The project repaired the levee, reclaimed the coal refuse, and remediated the acid mine drainage.

In September of 2017, the Indiana AML program received the very distinguished Mid-Continent Regional Award for AML Site 2083, Sugar Ridge Fish and Wildlife Area 2. This award was highly competitive and not easy to obtain. This was a very large project full of complications

that were all overcome by the Indiana staffs dedication to getting this dangerous eyesore reclaimed and returned to its citizens as a place to get back in touch with the outdoors. The problems of this site included dangerous and steep highwalls, spoil piles, gob piles and high volumes of Acid Mine Drainage and Acid Forming Materials. The project eliminated the dangers and has stopped the Acid Forming Materials from producing Acid Mine Drainage. The staff of the Indiana AML Program should be commended for achievement of the award for excellent reclamation.

In 2018, the Indiana AML Program received the Mid-Continent Region Award for Exemplary Reclamation and Innovation for the work on the Snow Hill Site 882 AML Reclamation Project.

In 2019, the Indiana AML Program has earned the 2019 Mid-Continent Region Award for outstanding reclamation using geomorphic redesign in their mitigation of the Narrow Lake AML site. Located two miles south of Dugger in Cass and Jefferson Townships, Sullivan County, Indiana, this project addressed public safety concerns regarding 3,850 linear feet of dangerous highwall. The highwall was located on public land within the Greene-Sullivan State Forest and posed a danger to visitors to the property. Reclamation consisted of backfilling the highwall, relocating the water body and improving drainage throughout the area. Congratulations are due to the Indiana AML Program once again. The very long list of Indiana AML awards received are listed in Table 1 below.

<b>Indiana AML Award Winners</b>		
<i>Year of Award</i>	<i>Type of Award</i>	<i>AML Reclamation Project</i>
1992	National	Boonville Hospital RAMP
2000	People's Choice	Midwestern Reclamation
2002	National	Sunshine Mine
2003	Mid-Continent	Victory Mine
2004	Mid-Continent	Coles Creek
2005	Mid-Continent	Sugar Ridge
2008	Mid-Continent	Log Creek Church
2014	National	Mill Creek Highwall
2015	Mid-Continent	Minnehaha
2017	Mid-Continent	Sugar Ridge Fish and Wildlife Area 2
2018	Mid-Continent	Snow Hill Site 882
2019	Mid-Continent	Narrow Lake

**Table 1: AML Award Winners**



*AML Program Amendment*

There were no AML program amendments during EY 2020.

**V. SUCCESS IN ACHIEVING THE PURPOSES OF SMCRA**

**Title V (Regulatory Program)**

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The OSMRE annually evaluates two aspects of all state regulatory programs to gain a national perspective of SMCRA, including: the number of observed off-site impacts and the number of mined and reclaimed acres that meet the performance release requirements for the various phases of reclamation. Detailed topic-specific reports for each of these national topics provide additional details on how the OSMRE conducted the following evaluations and are available online at [ODOCs](#) or at the Alton Field Division Office.

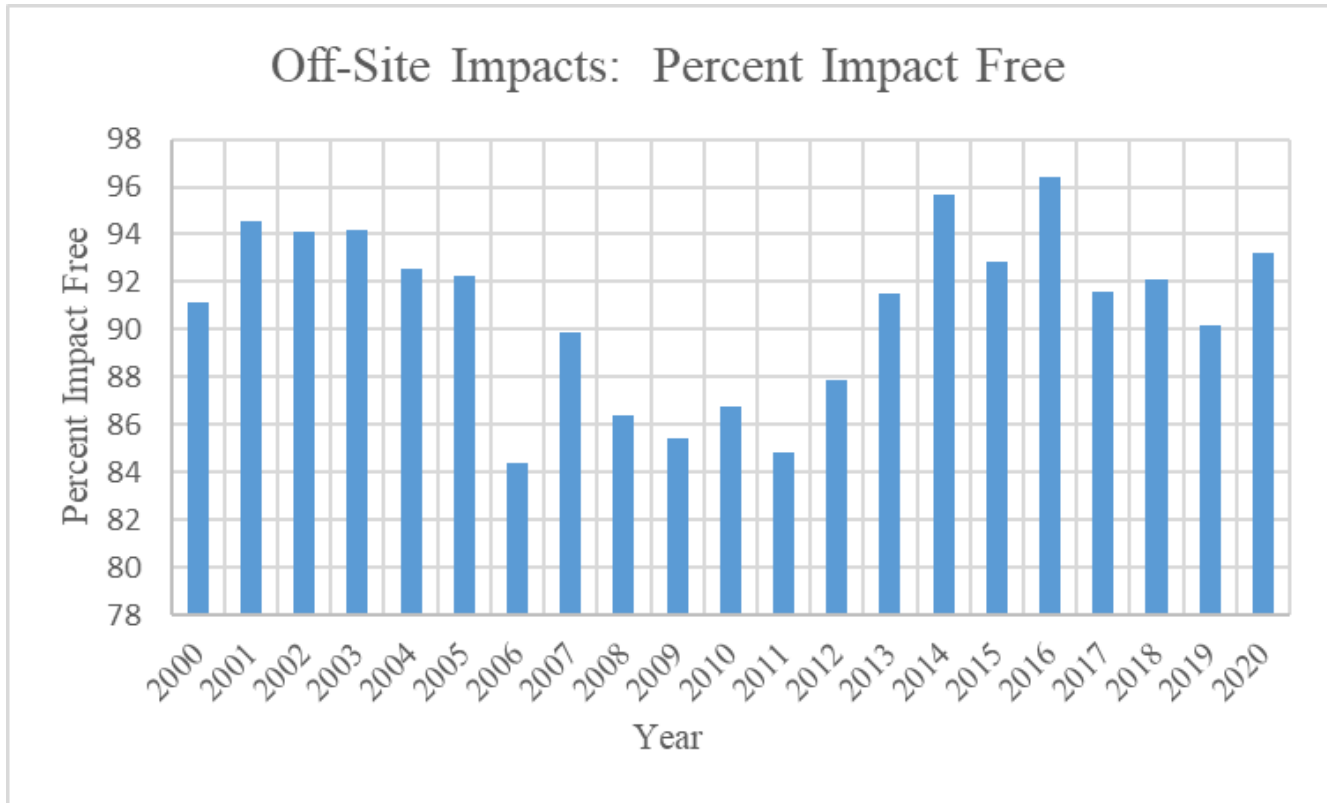
**A. Off-Site Impacts**

A primary focus of the SMCRA is the protection of the public, property, and the environment from adverse effects of active coal mining operations. The goal, therefore, is that there are no impacts outside the areas authorized for disturbance by a coal-mining permit (off-site impacts). To accomplish this goal, State programs strive to continually decrease the occurrence of off-site impacts. The AFD and DOR conducted a joint evaluation in EY 2020 to determine the effectiveness of the DOR in protecting the public and the environment from off-site impacts caused by surface mining and reclamation operations. Conclusions were based on data from the AFD's federal oversight inspections along with data reported by the DOR.

An off-site impact is defined as anything resulting from a surface coal mining and reclamation activity or operation that causes a negative effect on resources (people, land, water, or structures) where that impact is intended to be minimized or prevented by SMCRA or the applicable State program. The applicable State program must regulate or control the mining or reclamation activity or result of the activity from causing an off-site impact. In addition, the impact on the resource must be substantiated as being related to a mining and reclamation activity and must be outside the area authorized by the permit for conducting mining and reclamation activities. Off-site impacts may be identified within the permit boundary if the impact is outside the bonded area authorized by the permit for mining and reclamation activities.

An Inspectable Unit (IU) is defined by the regulatory authority and may include multiple sites that have been grouped together as one IU for inspection efficiency. Figure 4 below shows the percentage of IU's free of off-site impacts over time. During EY 2020, there were 75

Inspectable Units (IU) of which 5 IU's had off-site impacts associated with them. The percentage of IU's free from off-site impacts during this EY was 93 percent.



**Figure 4: Number of impact free inspectable units per year between 2000 and 2020**

As to the number, type and severity of off-site impacts it is important to recall that an individual IU may have multiple events causing off-site problems. The DOR identified and reported on eight events of off-site impacts having occurred on five inspectable units (Appendix D). Each off-site event may impair more than one resource. The off-site impacts events caused eight instances, five minor, one moderate, and two major at five inspectable units and determined construction and/or maintenance and/or operator negligence as the root causes. The DOR issued Notice of Violations as is appropriate. The AFD conducted 12 inspections involving 11 inspectable units. No off-site impacts were observed by the AFD. The AFD concludes that the DOR is administering a successful program by successfully discovering and citing violations involving off-site impacts as they occur and causing them to be corrected. Appendix 1 – Part A, Table 5 provides additional data on the type of resource affected and the degree of impact.

**B. Reclamation Success**

The effectiveness of the DOR Program in ensuring reclamation success is based on the number of acres that meet State bond release standards, including post-mining land use, and have had the performance bond released by the DOR. The bond release phases (i.e., Phase I, Phase II, and Phase III) are as defined in 30 CFR 800.40(c). Phase I release is when, at a minimum, “the operator completes the backfilling, regrading ... and drainage control of a bonded area in accordance with the approved reclamation plan.” Phase II release is when, at a minimum, “revegetation has been established on the regraded mined lands in accordance with the approved reclamation plan.” Phase III release is when “the operator has completed successfully all surface coal mining and reclamation activities,” and “reclamation requirements of the Act and the permit are fully met.”

Thousands of acres of land affected by surface coal mining are successfully reclaimed each year as noted in Appendix 1- Part A, Table 6 of this report and in Table 2 below.

All Phases of Bond Release (acres) 1983 to 2020							
YEAR	PHASE I	PHASE II	PHASE III	YEAR	PHASE I	PHASE II	PHASE III
1983-87	8855	3708	0	2004	5275	4710	5775
1988	4789	3365	0	2005	4389	5085	8070
1989	5151	5769	0	2006	2679	3552	3412
1990	2966	2549	0	2007	6183	6198	8734
1991	3250	2006	459	2008	4203	4856	5202
1992	4908	2898	298	2009	4268	5128	4398
1993	2481	1915	1619	2010	4669	6098	5040
1994	3148	4095	3112	2011	3587	2460	4128
1995	5172	2778	2636	2012	3055	1835	2983
1996	4548	3777	3517	2013	4023	2698	4529
1997	7734	4814	3725	2014	2376	2560	2204
1998	8549	8080	5500	2015	2668	2997	1747
1999	4403	6110	7706	2016	3812	3798	5324
2000	9914	6491	6544	2017	4879	4904	3444
2001	7316	14386	11268	2018	1688	4770	5597
2002	5004	5887	8408	2019	2440	3257	2918
2003	4965	3453	3410	<b>2020</b>	<b>1875</b>	<b>2159</b>	<b>2934</b>
				<b>TOTAL</b>	<b>155222</b>	<b>149146</b>	<b>134641</b>

**Table 2: All Phases of Bond Release in Acres**

The DOR continues to encourage operators to obtain bond release as quickly as regulations allow. A timely release results in a faster return of the land to property owners and helps to minimize the cost of the Indiana Regulatory Program.

The AFD conducted mine site evaluations at three permanent program permits on three mines where the DOR determined reclamation was complete and bonds were eligible to be released.

The AFD field evaluated 386 phase I acres; 245 phase II acres; and 517.5 phase III acres that the DOR recommended for release of bond. The AFD agreed with the DOR that 100 percent of the acres the DOR recommended for bond release within the AFD sample were successfully reclaimed and eligible for bond release. Details concerning Phase I, Phase II and Phase III bond releases are provided below.

**Phase I. Land Form/Approximate Original Contour and Soil Replacement**

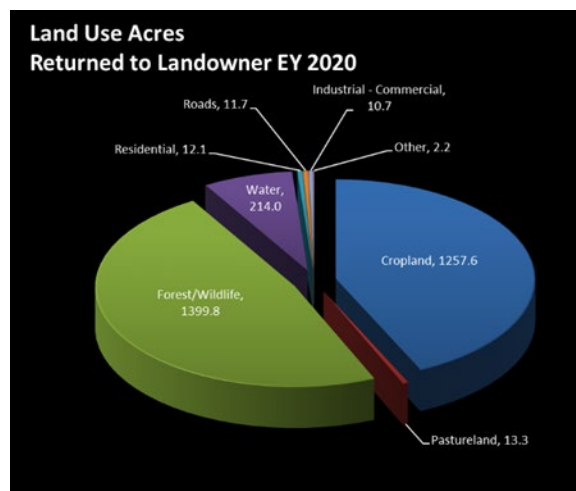
The criteria for determining whether reclaimed lands are reconstructed appropriately are whether approximate original contour has been achieved, including soil replacement. For the purposes of this evaluation, phase I bond releases were used as the indicator that the approximate original contour had been achieved and soils had been properly replaced. During EY 2020, Indiana mining companies achieved approximate original contour on 1,874.9 acres. To date, approximately 155,222 acres have met the criteria for, and have been granted, phase I bond release since 1983.

**Phase II. Surface Stability and Establishment of Vegetation**

For the purposes of this evaluation, surface stability and the establishment of vegetation were measured by the acres of phase II bond released. During EY 2020, Indiana mining companies were successful in achieving surface stability and establishing vegetation on 2,158.75 acres. Based on the AFD analysis of data supplied by the DOR, between 1983 and June 2020, approximately 149,146 acres of mined land have met the criteria for phase II bond release.

**Phase III. Establishment of Post-Mining Land Use and Productivity Restoration**

Post-mining land use was achieved by establishing successful and appropriate vegetative cover. This includes restoring productivity, where appropriate. The AFD measured this element of reclamation success by the number of acres receiving phase III bond release. During EY 2020, 2934.2 acres received phase III bond release. Figure 5 depicts bond acreage released according to land use.





### **Figure 5: Post-Mining Land Use.**

Based upon the AFD analysis of data supplied by the DOR, between 1983 and June 2020, approximately 134,641 acres have been fully reclaimed, with the post-mining land use and appropriate vegetative cover achieved, including restoration of productivity where appropriate.

#### **Hydrologic Reclamation**

The successful restoration of surface and ground water quality and quantity was measured by the accounting of acres of phase III bond release achieved. Indiana released 2934.2 acres for phase III during the evaluation period and a total of approximately 134,641 acres since 1983.

#### **Contemporaneous Reclamation**

The OSMRE Directive REG-8 defines contemporaneous reclamation to be the difference between the time when lands are disturbed and when they achieve phased bond release. There has been considerable discussion about whether this is a valid measure of contemporaneous reclamation. This discussion has taken place both within the OSMRE and with the various State regulatory authorities.

Contemporaneous reclamation was not evaluated during EY 2020. However, it is important to note that contemporaneous reclamation was accomplished as is evident that the DOR released 2,934 acres of Phase III bond during the EY. There was 1,398.60 acres affected/disturbed by mining during the EY. Pertaining to contemporaneous reclamation, there were no violations issued and no citizen complaints received. Taking all this into account, surface mining reclamation appears to be proportional indicating that mining and reclamation are contemporaneous as practicable.

## **Title IV (Abandoned Mine Land Program)**

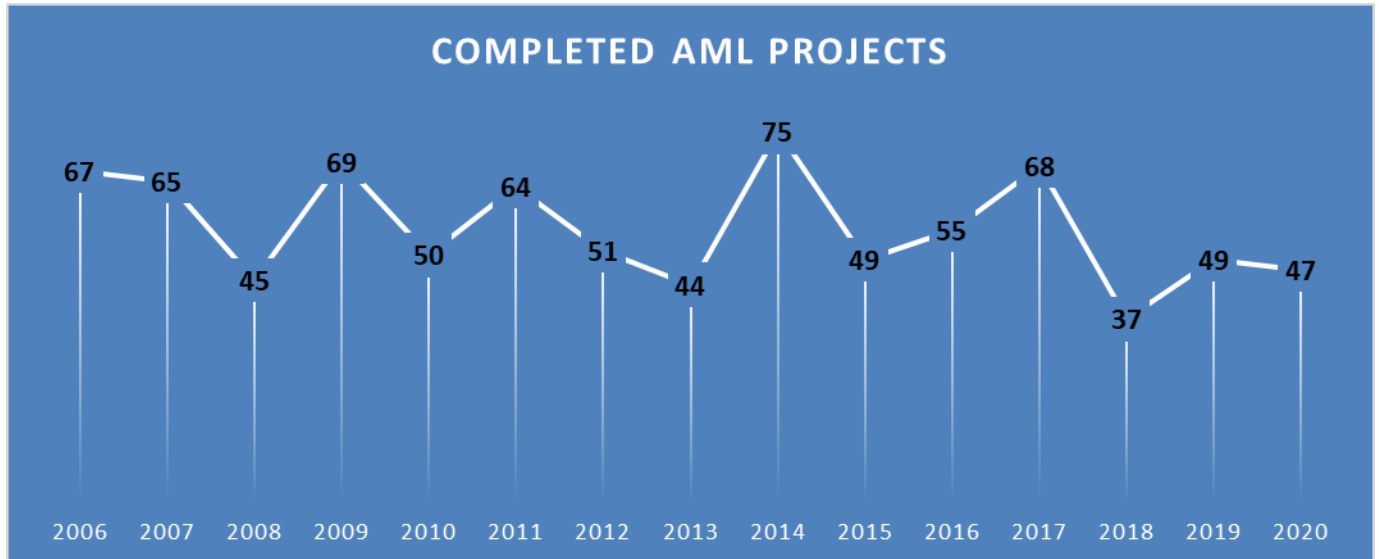
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### *Non-Emergency Construction Activities*

Indiana has expended over \$171.89 million on the ground to reclaim high priority abandoned mine land features (i.e. vertical openings, dangerous highwalls, etc.). This does not include money for administration or project design. The tables in Appendix 1 – Part B provide more details on the elimination of public health and safety hazards (Priority 1 and 2), and environmental problems (Priority 3) related to past mining.

The OSMRE issues the State an Authorization to Proceed (ATP), allowing construction activities at non-emergency project sites to begin. Indiana's AML Program requests this authorization after conceptual design and environmental reviews are completed for a site.

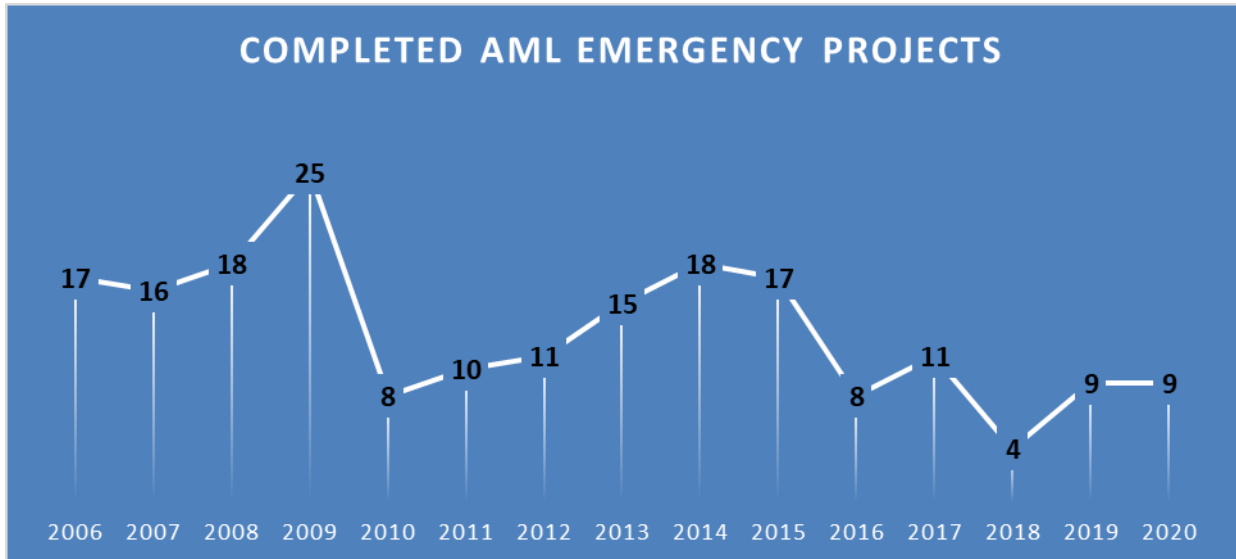
During EY 2020, Indiana’s AML Program reported 47 completed projects, Table 4 and Table 6 in Appendix 1 – Part B (Figure 6), which included non-emergency, emergency (denoted in blue), and enhancement/maintenance of previously reclaimed projects.



**Figure 6: Number of Completed AML Projects**

*Emergency Program*

Emergency projects are authorized by a blanket ATP issued for small pit subsidence projects, or by an individual ATP similar to non-emergency projects. During EY 2020, the State identified nine emergencies (Figure 7). A vertical opening and shaft were abated via an individual ATP and seven pit subsidence projects abated and covered under a “Blanket Emergency Approval Agreement.” The benefits realized by the Blanket Emergency Approval Agreement are a reduction in the time it takes to address each project and is a more efficient and cost saving elimination of safety hazards. The positive results have been a reduction in the time that the public is exposed to the hazardous conditions caused by AML emergencies.



**Figure 7: Number of AML Emergency Projects**

**VI. NATIONAL PRIORITY AND GENERAL OVERSIGHT TOPIC REVIEWS**

National priority reviews and general oversight topic reports can be reviewed at the OSMRE’s website as listed at the Introduction (page 6) of this report. Individual reports prepared by the OSMRE are part of the oversight process for each state and contain findings and details regarding the evaluation of State specific elements.

**A. National Priority Reviews**

National priority reviews are oversight topic reviews selected by the OSMRE to review nationwide. There were no national priority reviews during this EY.

**B. General Oversight Topic Reviews**

General Oversight Topic Reviews are conducted as per Indiana’s Performance Agreement/Evaluation Plan.

**Title V (Regulatory)**

**Oversight Inspection Activity**

During EY 2020, the AFD conducted oversight inspections in Indiana to evaluate the effectiveness of Indiana’s Program in implementing its rules and regulations that specifically target mining operation performance standards. Information gathered from these inspections indicates how well Indiana’s Program is ensuring environmental protection, reclamation success, and preventing off-site impacts. The number of inspections conducted in Indiana was based on

the requirements of the OSMRE Directive REG-8. The numbers of IU’s vary greatly in each state with Indiana falling within the five to 1000 IU category. AFD’s required inspection target for Indiana was 18 this EY and the AFD conducted 12. The AFD did not meet this target due to the COVID19 Pandemic. The AFD conducts a variety of inspection types each year. All inspections are focused and will be either complete or partial and joint or non-joint. The total number for each of the two groupings will equal the total 12 inspections performed. The OSMRE also conducts independent inspections, which are unannounced oversight inspections. The state is given a short notice (generally less than 24 hours) and may choose to accompany the OSMRE on these inspections. Independent inspections validate and enhance the credibility of both state regulatory programs and the OSMRE’s oversight. Table 3 shows the number of each inspection type conducted in Indiana this EY. It should be noted that the number of inspections recorded in this section will vary from Appendix 1 – Part A, Table 13 because that table is calculated on permits and not IUs. In Indiana, there are four IU’s containing multiple permits.

EY 2020 Inspections Conducted	EY 2020 Inspection Target	Percent Target Inspections Completed
12	18	67%

**Inspection Types**

Complete	Partial	Joint	Non-Joint	Independent
4	8	11	1	0

**Table 3: Federal Oversight Inspections**

**State Inspection Activity**

Indiana’s regulations Section 312 IAC 25-7-1, define the inspection frequencies required for active, inactive and abandoned operations.

The DOR maintains a database that records the DOR mine site inspections. The database is updated as needed, but no less than once per quarter, which the AFD uses to ensure mandatory inspection frequencies are being met.

During EY 2020, the DOR was successful in meeting its mandatory inspection frequency on 100 percent of the 73 Inspectable Units (Appendix 1 – Part A, Table 10 “State Inspection Activity”).

## **Title IV (AML)**

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### **Field Assessment of Abandoned Mine Land Projects**

Due to limited staff resources and the COVID19 Pandemic, the AFD did not conduct any field assessments during this Evaluation Year. The AFD anticipates field assessments to reconvene during the next Evaluation Year.

### **Abandoned Mine Land Inventory System (e-AMLIS)**

The AFD and the Indiana AML Program utilize an “Enhanced Abandoned Mine Land Inventory System e-AMLIS Procedures Plan” which establishes a general plan for implementing e-AMLIS unique to the Indiana AML Program. The plan includes various requirements for implementing the OSMRE Directive AML-1, signed December 12, 2012, and its accompanying AML Inventory Manual. Indiana is required to update the e-AMLIS once problems are identified on a site that will be reclaimed with program funding. Required information, including but not limited to problem type, priority, costs, location, etc., must be entered into the e-AMLIS before the ATP is issued. The AFD reviews the problem types, priority and costs entered into e-AMLIS and either approves each problem and priority or requests further information. The AFD must approve amendments to the e-AMLIS inventory before an ATP can be issued and reclamation begins.

During EY 2020, the AFD processed approximately 18 e-AMLIS approvals/amendments and verified that all supporting documentation was uploaded to reflect priorities, funding status, etc., in accordance with Directive AML-1. Indiana’s AML Program is effectively implementing procedures consistent with established policy for e-AMLIS.

Information can be viewed at the OSMRE’s website at [e-AMLIS](#). Additionally, Tables in Appendix 1 – Part B provide a current status of the Indiana AML inventory.

## **VII. PROGRAM PROBLEMS AND ISSUES**

The OSMRE initiated a corrective action process that is implemented if problems are identified with a state’s approved Regulatory or AML Program, or with the state’s actions under those programs. No program-wide problems or issues were identified during this EY. Site-specific or program-specific issues recognized by the AFD during inspections or during daily routine operations were addressed by DOR when they were identified.

## **VIII. OSMRE ASSISTANCE**

OSMRE provides technical assistance and technology support to state Regulatory and AML Programs at the individual state level on project specific efforts, and at the national level in the form of national meetings, forums, and national initiatives. The OSMRE provides direct

technical assistance in project and problem investigation, design and analysis, permitting assistance, developing technical guidelines, training and support.

During EY 2020, the OSMRE provided Indiana with the following assistance:

**Funding**

The primary mode of the OSMRE assistance to Indiana is through grant funding. Indiana was awarded \$1.60 million for the operation of the Regulatory Program in EY 2020. The OSMRE provided 50 percent of the total funding necessary for the Regulatory Program operation and 100 percent funding for the Abandoned Mine Land Program, which totaled \$5.73 million in EY 2020. Table 4 below contains the grant amounts for the previous five years.

<i>Grants Awarded in Indiana (Dollars are in Millions)</i>		
<i>Year</i>	<i>Regulatory Grant Amount*</i>	<i>AML Grant Amount**</i>
<b>2020</b>	<b>\$1.60</b>	<b>\$5.73</b>
2019	\$1.65	\$8.07
2018	\$1.64	\$8.11
2017	\$1.71	\$5.86
2016	\$1.93	\$7.37
*Regulatory Grant Year is October 1 – September 30		
**AML Grant Year is April 1 – March 31		

**Table 4 - Grants**

**Technical Assistance**

*AML Acid Mine Drainage (AMD) Project Assistance:*

The SMCRA includes provisions to clean up past mining-related pollution discharges and to prevent the creation of future discharges. The term AMD, in this context, refers to any pollution discharge emanating from past mining operations; many of which are alkaline with high levels of metals.

The Interior Region 3, 4 & 6 provides assistance to Indiana’s AML Program for continuing cleanup of AMD discharges. This EY general technical assistance was provided to Indiana with ongoing rehabilitation efforts of several aging bioreactor cells. Technical assistance to Indiana was impacted due to the COVID19 Pandemic.

**Training**

Technical training courses are offered by the OSMRE throughout the year, which address technical and programmatic aspects of mining and reclamation. These courses are provided for the OSMRE and state participants.

The OSMRE also provides states with Technical Innovation and Professional Services including high-end technical software and associated training and support. Indiana uses the software and



services for a variety of tasks related to permit application processing and other technical or engineering evaluations for both its Regulatory and AML Programs. Indiana's staff regularly attends applicable training courses each evaluation year.

Due to the COVID19 Pandemic, a large number of training courses offered by OSMRE were canceled. Some courses were offered via Virtual Class sessions when applicable. This EY, 4 Indiana staff participated in three Technical Innovation and Professional Services training classes. With respect to the National Technical Training Program, 13 Indiana staff participated in seven different courses.

**IX. TABLE FOOTNOTES**

The following footnotes are in reference to table data located in Title V: *Summary of Core Data to Characterize the Regulatory Program, Appendix 1 – Part A.*

Table 1 – None.

Table 2 – None.

Table 3 – Permits Allowing Special Categories of Mining: The total number of active and inactive permits is the total number of active and inactive permits that allow the practice at the end of the EY. A single permit may encompass several of the special categories of mining so no attempt should be made to use this data as a cumulative total of permits with special categories of mining. If the State does not have a total number to report, not applicable (NA) is entered.

Table 4 – None.

Table 5 – The number of inspectable units can increase or decrease during the course of an evaluation year. For this reason, the number of IU’s cited in the narrative of this report may be different than those provided in this table.

Table 6 – Surface Coal Mining and Reclamation Activity: The rows: “Area Bonded for Disturbance without Phase I Bond Release, ...for which Phase I Bond Release Has Been Approved, and ...for which Phase II Bond Release Has Been Approved” are reported by the State Program, if it can accurately reflect the various stages of the bonding process. The DOR does not track Bond Releases according to the OSMRE’s guidance at this time; therefore, a zero is entered into the fields. In turn, this results in ‘the disturbed area’ including Phase III bond released acres. Given this value is consistent with previous EY reports and that it provides valued data the entry will be retained as reported.

Under Areas Bonded for Disturbance, the “Area Bonded for Remining” was adjusted to represent the actual number of acres which is 15.6. EY 2019 reported 49 acres which was incorrect.

Table 7 – None

Table 8 – None

Table 9 – None

Table 10 – State Inspection Activity: Allows for two options for capturing data. IU’s may change their inspection frequency during the year based on its status (i.e., not started, active, inactive, bond release, abandoned or revoked.) The column “Number of Inspections Required Annually” is based on an IU remaining in the same status the

entire EY, which is usually not the case. Indiana utilizes Option 2 to report its inspection activity; therefore, the number of inspections required annually (complete inspections) and (partial inspections), a calculated field, does not accurately reflect what was required throughout the EY.

Option 2 - Total number of Inspectable Units is entered and is based on mine status: Active, Inactive, Abandoned throughout the EY. The DOR tracks all IU's during the EY and based on the mine status, which could change during the EY, calculates inspection frequency. The total number of Inspectable Units will reflect these changes that occur throughout the EY. The AFD ensures the accuracy of the reported data throughout the evaluation year.

Table 11 – Table 15 - None

### **AML Program**

The following footnotes are in reference to table data located in Title IV: Summary of Core Data to Characterize the AML Program, Appendix 1 – Part B.

Note: Tables 1-5 are e-AMLIS data driven. Table 6 data are reported by the Indiana Program.

Table 7 data are reported by the MCR- Grants Team. The tables capture **Coal** related reclamation activities only.

Table 1–3 – Comparisons between the Tables should be limited. Each table is stand-alone and does not necessarily represent comparable totals based on how the Priority 3 environmental problem features are being reported. Additionally, the data is provided as a snap-shot in time, updates to data may reflect discrepancies in previous EY reporting.

Table 1 – There is a total cost discrepancy of \$1,850 for Priority 1 and Priority 2. The costs associated with the key feature Vertical Openings differ from Table 2. This anomaly will remain since Completion Data Costs cannot be changed in the inventory.

There is a total cost discrepancy of \$516,989 for Priority 3. The costs associated with the key feature Spoil Area differ from Table 3. This anomaly will remain since Completion Data Costs cannot be changed in the inventory.

Table 2-3 – None

Table 4 – Blue denotes emergency projects.

Table 5-7 - None

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**APPENDIX 1, Part A****Title V: Summary of Core Data to Characterize the Regulatory Program**

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

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

**List of Tables**

Table 1	Coal Produced for Sale, Transfer, or Use
Table 2	Permanent Program Permits, Initial Program Sites, Inspectable Units, and Exploration
Table 3	Permits Allowing Special Categories of Mining
Table 4	Permitting Activity
Table 5	Off-site Impacts
Table 6	Surface Coal Mining and Reclamation Activity
Table 7	Bond Forfeiture Activity
Table 8	Regulatory and AML Programs Staffing
Table 9	Funds Granted to State by OSMRE
Table 10	State Inspection Activity
Table 11	State Enforcement Activity
Table 12	Lands Unsuitable Activity
Table 13	OSMRE Oversight Activity
Table 14	Status of Action Plans
Table 15	Land Use Acreage (Optional)

Indiana

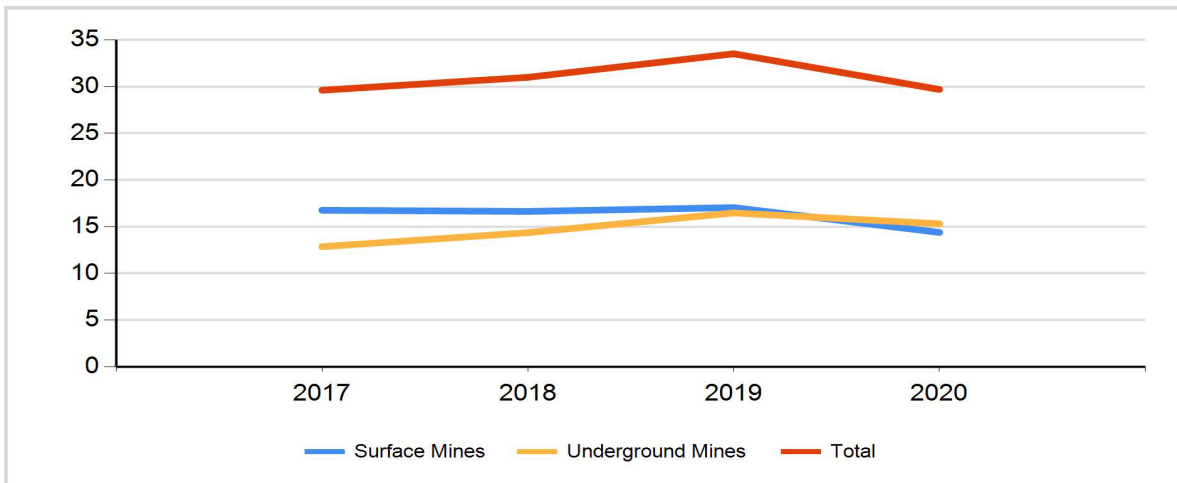
EY 2020, ending June 30, 2020

**TABLE 1**

<b>COAL PRODUCED FOR SALE, TRANSFER, OR USE<sup>A</sup></b> (Millions of short tons)			
<b>Calendar Year</b>	<b>Surface Mines</b>	<b>Underground Mines</b>	<b>Total</b>
2016	16.8	12.9	29.6
2017	16.6	14.4	31.0
2018	17.0	16.5	33.5
2019	14.4	15.3	29.7

<sup>A</sup> 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 1**  
**COAL PRODUCED FOR SALE, TRANSFER, OR USE**  
**DURING THE CALENDAR YEAR**  
(Millions of short tons)



Indiana

EY 2020, ending June 30, 2020

TABLE 2

PERMANENT PROGRAM PERMITS, INITIAL PROGRAM SITES, INSPECTABLE UNITS, AND EXPLORATION														
Mines and Other Facilities	Numbers of Permanent Program Permits and Initial Program Sites								Insp. Units <sup>1, 2</sup>	Area in Acres				Total Area
	Permanent Program Permits				Initial Program Sites					Permanent Program Permits (Permit Area)		Initial Program Sites		
	Active	Inactive	Abandoned	Total	Active	Inactive	Abandoned	Total		Federal Lands	State/Tribal and Private Lands	Federal Lands	State/Tribal and Private Lands	
Surface Mines	44	9	0	53	0	0	0	0	53	0	141,459	0	0	141,459
Underground Mines	12	2	0	14	0	0	0	0	14	0	10,145	0	0	10,145
Other Facilities	4	2	0	6	0	0	0	0	6	0	8,687	0	0	8,687
<b>Total</b>	<b>60</b>	<b>13</b>	<b>0</b>	<b>73</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>73</b>	<b>0</b>	<b>160,291</b>	<b>0</b>	<b>0</b>	<b>160,291</b>
Permanent Program Permits and Initial Program Sites (Number on Federal Lands: 0)				Total Number:		73		Average Acres per Site:				2,195.77		
Average Number of Permanent Program Permits and Initial Program Sites per Inspectable Unit (IU):				Total Number:		1.00		Average Acres per IU:				2,195.77		
Permanent Program Permits in Temporary Cessation:				Total Number:		11		Number More than 3 Years:				6		
EXPLORATION SITES			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:			10			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

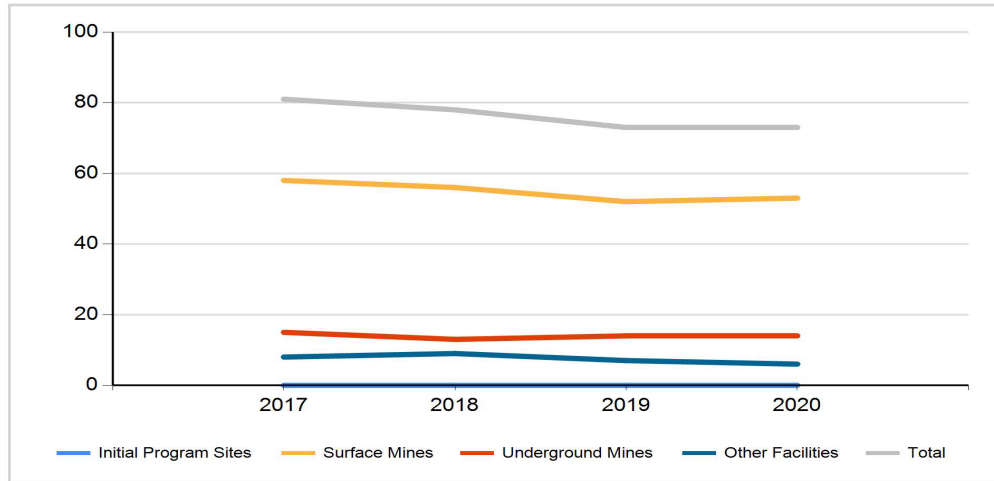
<sup>3</sup>When a Permanent Program Permit or Initial Program Site contains both Federal and State and Private lands, the acreage for each type of land is in the applicable column.

<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

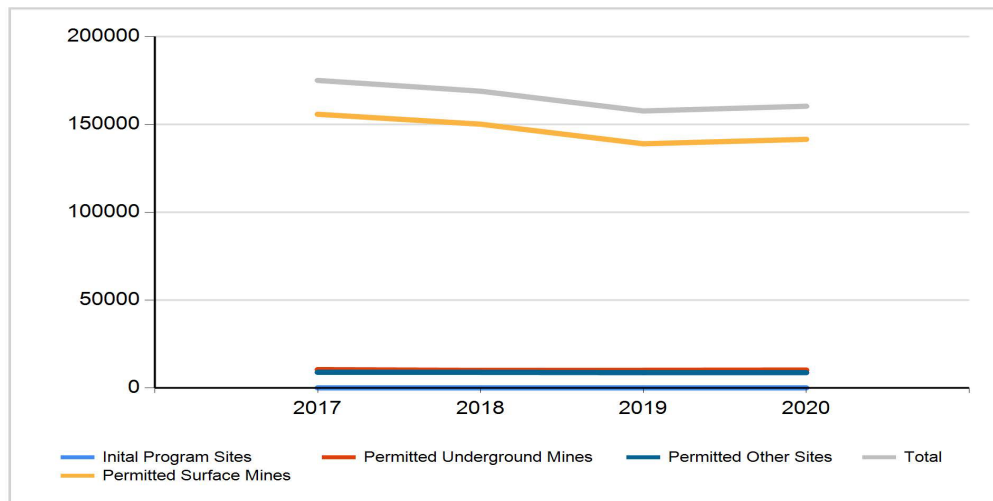
Indiana

EY 2020, ending June 30, 2020

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



**CHART 2B HISTORICAL TRENDS  
AREA OF INITIAL PROGRAM SITES AND PERMANENT PROGRAM PERMITS**



**TABLE 2B**

AREA OF INITIAL PROGRAM SITES AND PERMANENT PROGRAM PERMITS					
Year	Initial Program Sites	Permanent Program Permits			Total
		Surface Mines	Underground Mines	Other Facilities	
2017	0.0	155719.0	10396.0	8852.0	174967.0
2018	0.0	150078.0	9916.0	8852.0	168846.0
2019	0.0	138926.0	9982.0	8687.0	157595.0
2020	0.0	141459.0	10145.0	8687.0	160291.0



Indiana

EY 2020, ending June 30, 2020

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 3A

NUMBER OF PERMITS ISSUED AND REVISIONS APPROVED					
Year	Experimental Practices	Mountaintop Removal Mining	Steep Slope Mining	Steep Slope Variances	Prime Farmlands
2017	0	0	0	0	0
2018	N/A	N/A	N/A	N/A	N/A
2019	0	0	0	0	0
2020	0	0	0	0	0

TABLE 3B

NUMBER OF PERMITS ISSUED AND REVISIONS APPROVED							
Year	Contemporaneous Reclamation Variances	AVF Mining	Auger Mining	Preparation Plants Not at Mine Site	In-Situ Operations	Remining	Perennial/ Intermittent Streams
2017	0	0	0	0	0	0	0
2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2019	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	0

OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

U.S. Department of the Interior

Indiana

EY 2020, ending June 30, 2020

TABLE 4

PERMITTING ACTIVITY												
Type of Application	Surface Mines			Underground Mines			Other Facilities			Totals		
	App. Rec.	Issued/ Appvd	Acres	App. Rec.	Issued/ Appvd	Acres <sup>1</sup>	App. Rec.	Issued/ Appvd	Acres	App. Rec.	Issued/ Appvd	Acres
New Permits	0	2	251	0	0	0	0	0	0	0	2	251
Renewals	9	9		3	3		1	1		13	13	
Transfers, sales, and assignments of permit rights	0	0		0	0		0	0		0	0	
Small operator assistance	0	0		0	0		0	0		0	0	
Exploration permits										0	0	
Exploration notices <sup>2</sup>											10	
Revisions that do not add acreage to the permit area	0	248		0	94		0	12		0	354	
Revisions that add acreage to the permit area but are not incidental boundary revisions	1	1	5,286	1	1	100	0	0	0	2	2	5,386
Incidental boundary revisions	4	4	38	14	14	26	0	0	0	18	18	64
<b>Totals</b>	<b>14</b>	<b>264</b>	<b>5,575</b>	<b>18</b>	<b>112</b>	<b>126</b>	<b>1</b>	<b>13</b>	<b>0</b>	<b>33</b>	<b>399</b>	<b>5,701</b>
Permits terminated for failure to initiate operations:							Number:	0		Acres:	0.0	
Acres of Phase III bond releases (Areas no longer considered to be disturbed):										Acres:	2,934.0	
Permits in temporary cessation							Notices received:	0		Terminations:	1	
Midterm permit reviews completed							Number:	5				
<sup>1</sup> Includes only the number of acres of proposed surface disturbance												
<sup>2</sup> State approval not required. Involves removal of less than 250 tons of coal and does not affect lands designated unsuitable for mining.												

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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	1	0	0	0	1	0	0	0	0	0	0	0	0
Land Stability	2	0	0	0	2	0	0	0	0	0	0	0	0
Hydrology	5	0	0	0	0	0	0	2	1	2	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>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>

Total Number of Inspectable Units<sup>1</sup>: 73  
 Inspectable Units with one or more off-site impacts: 5  
 Exploration Inspectable Units with one or more off-site impacts<sup>2</sup>: 0  
 Inspectable Units free of off-site impacts: 68 % of Inspectable Units free of off-site impacts<sup>4</sup>: 93

<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>: 1  
 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>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

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	1	0	0	0	1	0	0	0	0	0	0	0	0
Land Stability	2	0	0	0	2	0	0	0	0	0	0	0	0
Hydrology	5	0	0	0	0	0	0	2	1	2	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>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>

Total Number of Inspectable Units<sup>5</sup>: 74  
 Inspectable Units with one or more off-site impacts: 5  
 Exploration Inspectable Units with one or more off-site impacts: 0  
 Inspectable Units free of off-site impacts: 69 % of Inspectable Units free of off-site impacts<sup>4</sup>: 93

<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 5A**

<b>PERCENT OF INSPECTABLE UNITS FREE OF OFF-SITE IMPACTS</b>		
<b>Year</b>	<b>Initial Program and Permanent Program Permits</b>	<b>Bond Forfeiture Sites</b>
2017	91.6	0.0
2018	92.0	100.0
2019	90.1	100.0
2020	93.2	100.0

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TABLE 6

SURFACE COAL MINING AND RECLAMATION ACTIVITY							
Areas of Phase I, II, and III Bond Releases During the Evaluation Year (EY)							
Phase I Releases	Phase II Releases		Phase III Releases			Total Acres Released During the EY	
	Total Acres Released in Approved Phase II Releases	Acres not previously released under Phase I	Total Acres Released in Approved Phase III Releases	Acres not previously released under Phase II	Acres not previously released under Phase I or II		
1,885		0			0	Phase I	1,885
	2,168			0		Phase II	2,168
			2,934			Phase III	2,934
Number of Permanent Program Permits with Jurisdiction Terminated Under Phase III Bond Release During the Evaluation Year					1	<b>Other Releases - Acres</b>	
Initial Program Sites with Jurisdiction Terminated During the Evaluation Year					0	Administrative Adjustments	234
Number of Inspectable Units Removed					1	Bond Forfeiture	0
Areas of Permits Bonded for Disturbance by Surface Coal Mining and Reclamation Operations							

	Total Acres at Start of EY	Total Acres at End of EY	Change in Acres During EY
New Area Bonded for Disturbance			2,932
Total Area Bonded for Disturbance	48,811	48,575	(236)
Area Bonded for Disturbance without Phase I Bond Release	0	0	0
Area Bonded for Disturbance for which Phase I Bond Release Has Been Approved	0	0	0
Area Bonded for Disturbance for which Phase II Bond Release Has Been Approved	0	0	0
Area Bonded for Disturbance with Bonds Forfeited During Evaluation Year			0
Area Bonded for Remining	15	15	0
Areas of Permits Disturbed by Surface Coal Mining and Reclamation Operations			
Disturbed Area	58,593	0	(58,593)

**TABLE 6A**

<b>ACRES OF PHASE I, II, AND III BOND RELEASES</b>			
<b>Year</b>	<b>Phase III</b>	<b>Phase II</b>	<b>Phase I</b>
2017	3444	4904	4879
2018	5596	4770	1688
2019	2918	3257	2440
2020	2934	2168	1885

**TABLE 6B**

<b>AREAS BONDED FOR DISTURBANCE AND DISTURBED AREA</b>					
<b>Year</b>	<b>ACRES BONDED FOR DISTURBANCE</b>				<b>Disturbed Area</b>
	<b>Unreleased</b>	<b>Phase I Released</b>	<b>Phase II Released</b>	<b>Total Bonded Area</b>	
2017	27518.0	0.0	0	53679.0	55000.0
2018	24816.0	0.0	0	50097.0	56753.0
2019	28142.0	0.0	0	48811.0	58593.0
2020	32973.0	0.0	0	48575.0	0.0



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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>	1		59
Sites with bonds forfeited and collected during the current Evaluation Year	0	0	0
Sites with bonds forfeited and collected that were re-permitted during the current Evaluation Year	0		0
Sites with bonds forfeited and collected that were reclaimed during the current Evaluation Year	0		0
Sites with bonds forfeited and collected that were un-reclaimed at the end of the current Evaluation Year <sup>1</sup>	1		59
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	0		
Bonds forfeited, lands reclaimed, and water treatment is ongoing	0		
<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>	1		781
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>	1		781
<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 7A**

<b>NUMBER OF BOND FORFEITURE SITES</b>	
<b>Year</b>	<b>Bond Forfeiture Sites</b>
2017	0
2018	1
2019	0
2020	0

**TABLE 7B**

<b>ACREAGE OF BOND FORFEITURE SITES</b>	
<b>Year</b>	<b>Acres</b>
2017	0
2018	59
2019	0
2020	0

**TABLE 7C**

<b>NUMBER OF SITES WITH WATER POLLUTION STILL OCCURRING</b>	
<b>Year</b>	<b>Sites</b>
2017	0
2018	0
2019	0
2020	0

**TABLE 7D**

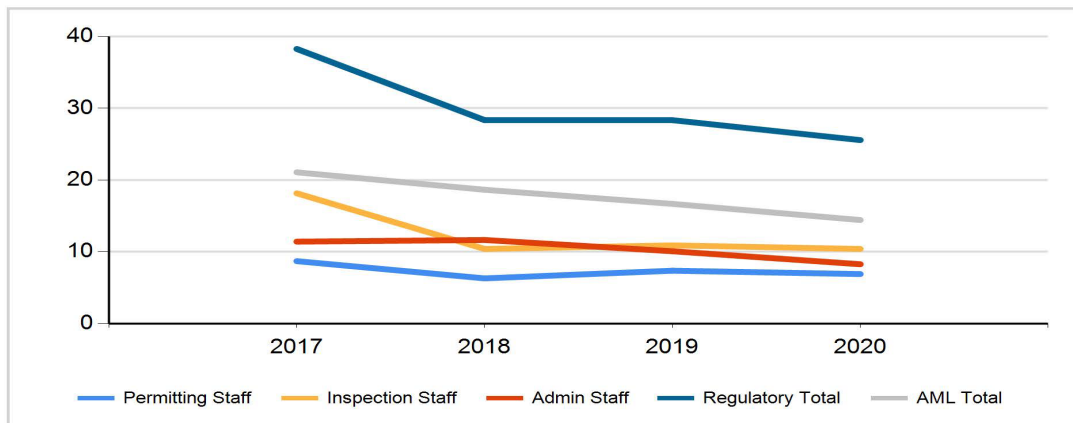
<b>NUMBER OF SITES WITH WATER TREATMENT ONGOING</b>	
<b>Year</b>	<b>Sites</b>
2017	0
2018	0
2019	0
2020	0

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**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	6.90
Inspection	10.40
Other (supervisory, clerical, administrative, fiscal, personnel, etc.)	8.27
<b>Regulatory Program Total</b>	<b>25.57</b>
<b>AML Program Total</b>	<b>14.43</b>
<b>TOTAL</b>	<b>40.00</b>

**CHART 8A HISTORICAL TRENDS  
REGULATORY AND AML PROGRAMS STAFFING**



**TABLE 8A**

<b>REGULATORY AND AML PROGRAMS STAFFING</b>					
<b>Year</b>	<b>Regulatory Program</b>				<b>AML Program</b>
	<b>Permitting</b>	<b>Inspection</b>	<b>Admin</b>	<b>Total</b>	
2017	9	18	11	38	21
2018	6	10	12	28	19
2019	7	11	10	28	17
2020	7	10	8	26	14

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TABLE 9

FUNDS GRANTED TO STATE OR TRIBE BY OSM (Actual Dollars Rounded to the Nearest Dollar)			
Type of Funding	Federal Funds Awarded	Total Program Cost	Federal Funds Awarded as a Percentage of Total Program Costs
<b>Regulatory Funding</b>			
Administration and Enforcement Grant	1,602,801		
Other Regulatory Funding, if applicable	0		
<b>Subtotal (Regulatory Funding)</b>	1,602,801	3,205,603	50
<b>Small Operator Assistance Program Grant Funding</b>	0	0	
<b>Abandoned Mine Land Reclamation Funding</b>	5,731,158	0	
<b>Watershed Cooperative Agreement Program</b>	0	0	
<b>TOTAL</b>	7,333,959		

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

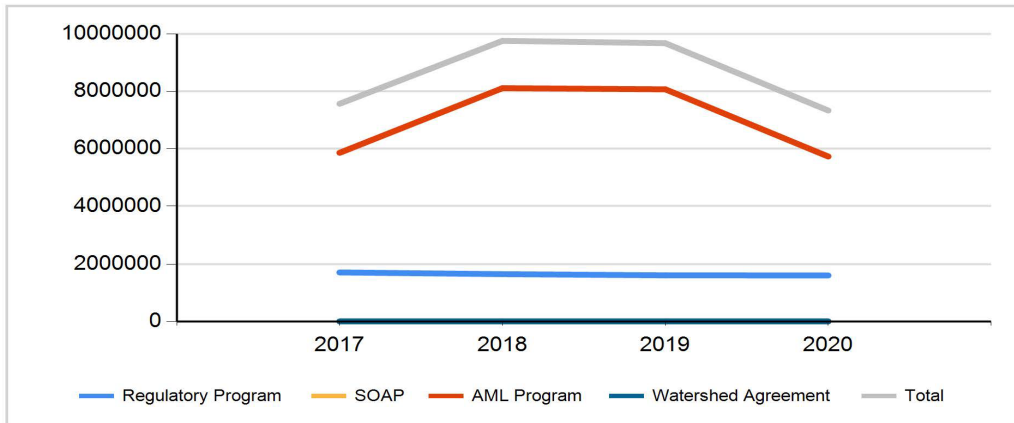


TABLE 9A

FUNDS GRANTED TO STATE OR TRIBE BY OSM				
Year	Regulatory Program	SOAP	AML Program	Total
2017	1,708,000	0	5,860,428	7,568,428
2018	1,648,573	0	8,113,445	9,762,018
2019	1,607,189	0	8,072,975	9,680,164
2020	1,602,801	0	5,731,158	7,333,959

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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
COAL MINES AND FACILITIES												
Active	60	240	480	267	453	60	100	60	100	60	0	0
Inactive	13	52	0	64	116	13	100	13	100	13	0	0
Abandoned	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTALS<sup>3</sup></b>	<b>73</b>	<b>292</b>	<b>480</b>	<b>331</b>	<b>569</b>	<b>73</b>	<b>100</b>	<b>73</b>	<b>100</b>	<b>73</b>	<b>0</b>	<b>0</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

TABLE 10A

STATE OR TRIBAL INSPECTION ACTIVITY		
Year	Inspections Conducted	Exploration Inspections
2017	896	0
2018	872	0
2019	855	0
2020	900	0

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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	27	32
Failure-to-Abate Cessation Order	4	4
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

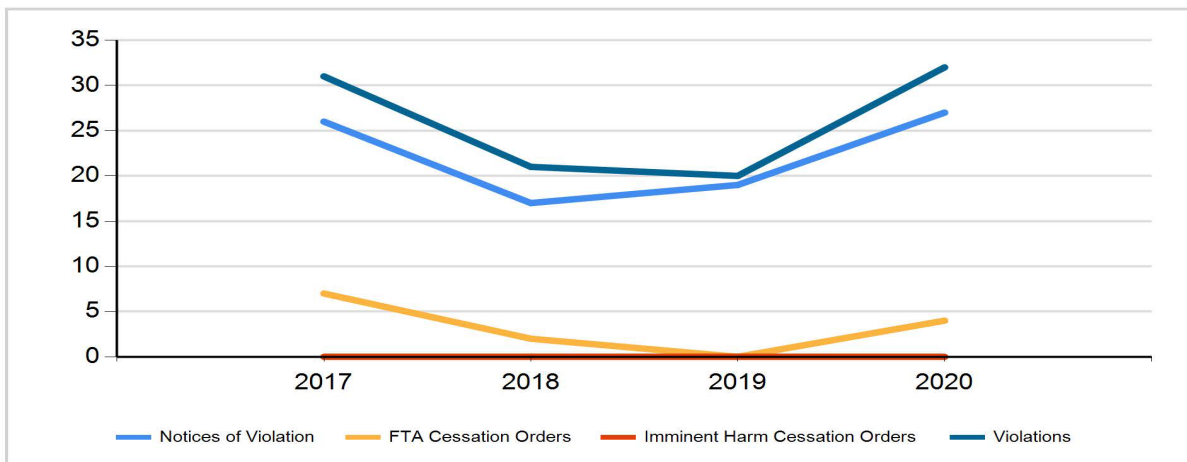


TABLE 11A

STATE OR TRIBAL ENFORCEMENT ACTIVITY				
Year	Notices of Violation	Violations	FTA Cessation Orders	Imminent Harm Cessation Orders
2017	26	31	7	0
2018	17	21	2	0
2019	19	20	0	0
2020	27	32	4	0

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**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

**TABLE 12A**

<b>LANDS UNSUITABLE ACTIVITY</b>			
<b>Year</b>	<b>Petitions Received</b>	<b>Petitions Rejected</b>	<b>Unsuitability Declarations</b>
2017	0	0	0
2018	0	0	0
2019	0	0	0
2020	0	0	0

**TABLE 12B**

<b>ACRES DECLARED UNSUITABLE</b>	
<b>Year</b>	<b>Acres Declared Unsuitable</b>
2017	0.0
2018	0.0
2019	0.0
2020	0.0



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**TABLE 13**

<b>OSM OVERSIGHT ACTIVITY</b>					
<b>Oversight Inspections and Site Visits</b>					
	<b>Complete</b>		<b>Partial</b>		Total
	Joint	Non-Joint	Joint	Non-Joint	
Oversight Inspections	3	1	8	0	12
	Technical Assistance		Other		Total
Site Visits	0		0		0
<b>Violations Observed by OSM and Citizen Requests for Inspection<sup>1</sup></b>					
Type of Action					Total number of each action
How many violations were observed by OSM on oversight inspections?					0
Of the violations observed, how many did OSM defer to State action during inspections?					0
Of the violations observed, how many did OSM refer to the State through Ten-Day Notices? <sup>2</sup>					0
How many Ten-Day Notices did OSM Issue for observed violations? <sup>3</sup>					0
How many Ten-Day Notices did OSM issue to refer citizen requests for inspection?					0
How many Notices of Violation did OSM issue?					0
How many Failure-to-Abate Cessation Orders did OSM issue?					0
How many Imminent Harm Cessation Orders did OSM issue?					0
<b>OSM Action for Delinquent Reporting or Non-Payment of Federal AML Reclamation Fees</b>					
How many Ten-Day Notices for delinquent reporting or non-payment of Federal AML reclamation fees did OSM issue?					0
How many Notices of Violation for delinquent reporting or non-payment of Federal AML reclamation fees did OSM issue?					0
How many Federal Failure-to-Abate Cessation Orders for delinquent reporting or non-payment of Federal AML reclamation fees did OSM issue?					0
<sup>1</sup> This section does not include actions for delinquent reporting or non-payment of Federal AML fees that are reported in the last section of the table. <sup>2</sup> Number of violations contained in Ten-Day Notices not including those issued to refer citizen requests for inspection. <sup>3</sup> Number of Ten-Day Notices issued not including those to refer citizen requests for inspection.					

**TABLE 13A**

<b>OSM OVERSIGHT ACTIVITY</b>							
Year	Number of violations observed on OSM oversight inspections	Number of violations deferred to state action	Number of violations referred to state by TDN	Number of TDN's issued	Number of TDN's issued to refer requests for inspection	Number of Federal NOV's, FTACOs, & IHCos issued	Number of oversight inspections
2017	12	12	0	0	2	0	23
2018	2	2	0	0	0	0	21
2019	6	6	0	0	0	0	18
2020	0	0	0	0	0	0	12

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TABLE 14

STATUS OF ACTION PLANS						
Action Plan ID	Problem Type <sup>1</sup>	Problem Title	Problem Description	Date Action Plan Initiated	Scheduled Completion Date	Actual Completion Date
None						
<sup>1</sup> Problem Type: "PA" indicates a required Program change under subchapter T or 732 "RP" indicates a Regulatory Program implementation or administrative problem						

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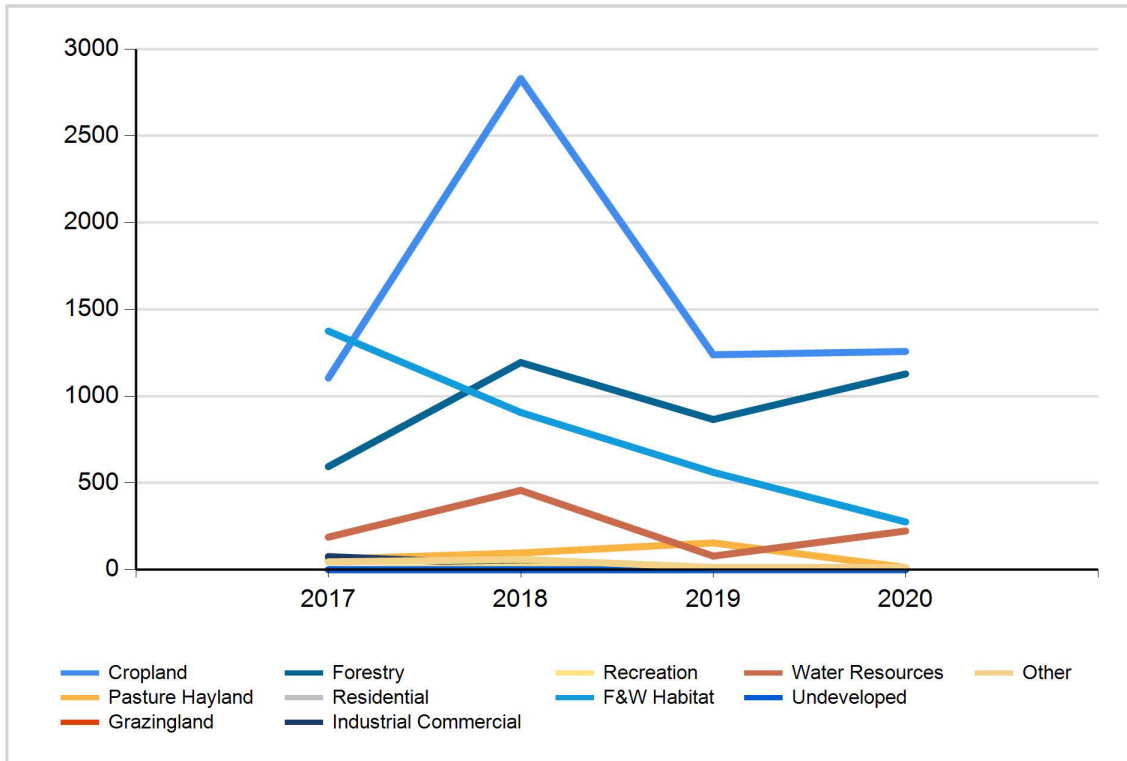
**TABLE 15**  
**(Optional)**

<b>POST-MINING LAND USE ACREAGE OF SITES FULLY RECLAIMED (Phase III bond release or termination of jurisdiction under the Initial Program)</b>	
Land Use <sup>1</sup>	Acres Released
Cropland	1,257.60
Pasture/Hayland	13.30
Grazingland	0.00
Forestry	1,128.00
Residential	12.10
Industrial/Commercial	10.70
Recreation	0.00
Fish & Wildlife Habitat	275.40
Developed Water Resources	223.20
Undeveloped land or no current use or land management	0.00
Other - Public Utilities	0.00
Other - public roads	5.70
Other - access roads	6.00
Other - public utilities	2.20
Other -	0.00
Other -	0.00
Other -	0.00
Other -	0.00
<b>Sub-Total Other</b>	13.90
<b>Total</b>	2,934.20
<sup>1</sup> Land uses as defined in 30 CFR 701.5 or "Other" as defined under the state or tribal program	

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**CHART 15A HISTORICAL TRENDS  
POST MINING LAND USE ACREAGES**



**TABLE 15A**

POST MINING LAND USE ACREAGES											
Year	Cropland	Pasture Hay	Grazing Land	Forest	Residential	Industrial Comm.	Recreation	F&W Hab.	Water Resources	Undeveloped	Other
2017	1105	61	0	594	1	76	0	1375	188	0	45
2018	2830	97	0	1194	9	30	15	906	457	0	59
2019	1239	155	0	866	4	2	0	561	79	0	14
2020	1258	13	0	1128	12	11	0	275	223	0	14

## **APPENDIX 1, Part B**

### **Title IV: Summary of Core Data to Characterize the AML Program**

The following tables present summary data pertinent to abandoned mine land activities under the Indiana AML program. Unless otherwise specified, the reporting period for the data contained in the tables is the Evaluation Year. Other data and information used by OSMRE in its evaluation of Indiana performance are available for review in the evaluation file maintained by the AFD.

Because of the enormous variations from state to state and the differences between state programs, the summary data should not be used to compare one state to another.

#### **List of Tables**

- Table 1 Status of AML Inventory All Priority 1, 2, and 3 Hazards
- Table 2 Accomplishments in Eliminating Health and Safety Hazards Related to Past Mining Priority 1 and 2 Hazards
- Table 3 Accomplishments in Eliminating Health and Safety Hazards Related to Past Mining Priority 3 and SMCRA Section 403(b) Hazards
- Table 4 Public Well-Being Enhancement
- Table 5 Partnership Financial Resources Dedicated to Protecting the Public from Adverse Effects of Past Mining
- Table 6 Reclamation Projects Started and/or Completed
- Table 7 AML Program Grant Awards and Staffing

**Indiana**

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**TABLE 1**

<b>STATUS OF AML INVENTORY ALL PRIORITY 1, 2, AND 3 HAZARDS</b>					
	<b>High Priority</b>		<b>Elevated Priority 3</b>	<b>Stand-Alone Priority 3 (Not adjacent or in conjunction w/ P1&amp;2)</b>	<b>Total</b>
	<b>Priority 1</b>	<b>Priority 2</b>			
<b>Unfunded</b>					
<b>GPRAs Acres</b>	16.2	1760.55		1338.33	3115.08
<b>Dollars</b>	\$18,364,222.00	\$144,907,998.76		\$6,476,925.00	\$169,749,145.76
<b>Funded</b>					
<b>GPRAs Acres</b>	0	41.4	19.1	0	60.5
<b>Dollars</b>	\$0.00	\$3,400,081.99	\$488,700.00	\$0.00	\$3,888,781.99
<b>Completed</b>					
<b>GPRAs Acres</b>	673.51	4945.69	1619.9	7210.56	14449.66
<b>Dollars</b>	\$30,585,462.58	\$58,051,854.56	\$21,167,175.69	\$62,089,520.43	\$171,894,013.26

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TABLE 2

ACCOMPLISHMENTS IN ELIMINATING HEALTH AND SAFETY HAZARDS RELATED TO PAST MINING PRIORITY 1 AND 2 HAZARDS

Problem Type (keyword)																		
	Clogged Stream (CS) (miles)	Clogged Stream Lands (CSL) (acres)	Dangerous Pile or Embankment (DPE)(acres)	Dangerous Highwall (DH) (feet)	Dangerous Impoundment (DI) (count)	Dangerous Slide (DS) (acres)	Gases: Hazardous /Explosive (GHE) (count)	Hazardous Equip./Facilities (HEF) (count)	Hazardous Water Body (HWB) (count)	Industrial/Residential Waste (IRW) (acres)	Portal (P) (count)	Polluted Water:Agri/Industrial (PWAI)(count)	Polluted Water: Human Consumption (PWHC)(count)	Subsidence (S) (acres)	Surface Burning (SB) (acres)	Underground Mine Fire (UMF) (acres)	Vertical Opening (VO) (count)	TOTAL
<b>Unreclaimed/Remaining Hazards (Unfunded)</b>																		
Units	0	0	3.3	121072	0	1	1	17	1	0	4	1	0	24.7	0	0	49	
GPR Acres	0	0	3.3	1729.95	0	1	1	1.7	5	0	0.4	5	0	23.9	0	0	5.9	1777.15
Dollars	\$0.00	\$0.00	\$1,119,847.00	\$139,974,062.00	\$0.00	\$3,600.00	\$3,791.00	\$355,000.00	\$31,000.00	\$0.00	\$12,000.00	\$20,000.00	\$0.00	\$21,495,263.53	\$0.00	\$0.00	\$263,657.23	\$163,278,220.76
<b>Annual Reclamation - EY2020 only (Completed)</b>																		
Units	0	0	0	2508	0	0	0	0	0	0	0	0	0	20	0	0	49	
GPR Acres	0	0	0	35.8	0	0	0	0	0	0	0	0	0	20	0	0	4.9	60.7
Dollars	\$0.00	\$2,180.00	\$0.00	\$1,014,315.82	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,453,315.60	\$0.00	\$0.00	\$245,283.57	\$2,715,094.99
<b>Historical Reclamation - EY1978 - 2020 (Completed)</b>																		
Units	11.28	38.7	377.25	217493.8	8	5	5	111	2	42	66	14	45	151.45	15.2	0	1463	
GPR Acres	56.45	181.5	377.25	4246.34	42	5	5	11.1	10	42	6.6	70	226	150.65	15.2	0	174.2	5619.29
Dollars	\$1,528,620.00	\$1,077,658.00	\$8,872,498.00	\$29,031,639.10	\$2,171,372.00	\$393,239.00	\$94,079.00	\$952,270.48	\$16,000.00	\$99,200.00	\$284,399.00	\$2,773,171.00	\$5,353,858.00	\$28,282,995.58	\$185,561.00	\$0.00	\$7,522,606.98	\$88,639,167.14

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TABLE 3

ACCOMPLISHMENTS IN ELIMINATING ENVIRONMENTAL PROBLEMS RELATED TO PAST MINING PRIORITY 3 AND SMCRA SECTION 403(b) HAZARDS															
Problem Type (keyword)															
	Bench , Solid Bench, Fill Bench (BE) (acres)	Industrial/Residential Waste Dump (DF) (acres)	Equipment and Facilities (EF) (count)	Gob (GO) (acres)	Highwall (HD) (feet)	Haul Road (HR) (acres)	Mine Opening (MO) (count)	Pit, Open Pit, Strip Pit (PD) (acres)	Spoil, Spoil Bank (SA) (acres)	Slurry (SL) (acres)	Slump (SP) (acres)	Water (WA) (gallons)	Other (specify)	Water Supplies (WS) – Section 403(b) (count)	TOTAL
<b>Unreclaimed/Remaining Hazards (Unfunded)</b>															
Units	0	3.5	32	102.3	1600	2	17	180.4	917	127	22.5	123	0	0	
GPRAs	0	3.5	3.2	103.8	22.83	2	1.7	180.4	917	127	22.5	98	0	0	1481.93
Dollars	\$0.00	\$3,000.00	\$43,375.00	\$1,913,558.00	\$25,000.00	\$2,500.00	\$2,500.00	\$129,450.00	\$3,594,734.00	\$1,609,500.00	\$16,100.00	\$3,360,078.00	\$0.00	\$0.00	\$10,699,795.00
<b>Annual Reclamation - EY2020 only (Completed)</b>															
Units	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
GPRAs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dollars	\$0.00	\$0.00	\$0.00	\$33,396.86	\$0.00	\$0.00	\$0.00	\$0.00	\$21,717.94	\$0.00	\$0.00	\$14,669.70	\$0.00	\$0.00	\$69,784.50
<b>Historical Reclamation - EY1978 - 2020 (Completed)</b>															
Units	0	72	260.2	2186.1	8646	328	10	606.4	2770.1	1445.9	237.9	1062.95	280.9	0	
GPRAs	0	71.7	27.1	2181.3	124.51	328	1.9	618	2770.7	1450.2	236.2	922.25	172.6	0	8904.46
Dollars	\$0.00	\$433,226.00	\$1,257,808.00	\$26,264,668.94	\$468,286.00	\$2,345,201.00	\$120,161.00	\$6,930,157.91	\$12,809,670.27	\$18,388,320.38	\$196,684.50	\$12,539,948.12	\$2,019,553.00	\$0.00	\$83,773,685.12



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TABLE 4

PUBLIC WELL-BEING ENHANCEMENT (All Priority 1, 2 and 3 AML projects completed during EY 2020)						
#	PAD Number	Project Name	Problem Type(s) Reclaimed	GPRA Acres	Cost	Number of People with Reduced Exposure Potential (State Estimated /or/ Census Data)
1	IN000070	Baker Road	DH	0	\$4,140.00	318
2	IN000361	Enoco	WA	0	\$10,600.00	245
3	IN000533	Chinook	SA	0	\$18,297.94	417
4	IN000652	Bucktown Highwall	DH	35.8	\$993,025.82	185
5	IN000704	Hobbs	VO	0.2	\$3,913.95	148
6	IN000741	Old Degonia Springs Rd	VO	0.1	\$8,551.76	318
7	IN000759	Midwestern	GO	0	\$3,297.17	107
8	IN000800	Blackfoot Tipple	GO	0	\$10,523.00	107
9	IN000931	Froderman Subsidence	VO	0.2	\$12,266.13	961
10	IN000941	Snow Hill Maintenance	GO	0	\$19,576.69	351
11	IN000991	John Penick Subsidence	VO	0.1	\$7,363.15	108
12	IN001022	Ted Tedeschi	VO	0.3	\$7,363.15	108
13	IN001803	Ganbil Lake	DH	0	\$2,300.00	148
14	IN001804	Steep Lake	DH	0	\$4,365.00	148
15	IN001805	Narrow Lake	DH	0	\$10,485.00	148
16	IN002007	Mark Luff	SA	0	\$3,420.00	173
17	IN002049	Justin McNeely Openings	VO	0	\$4,552.65	3404
18	IN002074	Ruth Melhiser Opening	VO	0.1	\$2,429.74	173
19	IN002083	Sugar Ridge Area 2 (Maintenance)	WA	0	\$4,069.70	173
20	IN002115	Weigand (Maintenance)	CSL	0	\$2,180.00	173
21	IN002200	Wilson Subsidence	VO	0.1	\$1,182.04	3024
22	IN002223	Green Subsidence	VO	0.5	\$17,025.08	108
23	IN002254	Phillips Subsidence Maintenance	VO	0.1	\$5,075.91	108
24	IN002286	Schwenk Maintenance	VO	0.1	\$2,200.99	3160
25	IN002295	Crosstown Grouting	S	15	\$1,421,141.78	318
26	IN002310	Hendrickson Subsidence	S	1	\$2,176.50	318
27	IN002312	Zion Hill Subsidence	VO	0.5	\$20,799.15	198
28	IN002315	Melva Lou Subsidence	VO	0.5	\$16,331.52	116
29	IN002317	Broshears Subsidence	VO	0.6	\$11,271.95	173
30	IN002318	Montgomery Shaft	VO	0.1	\$8,703.80	131
31	IN002319	Galbrauth Subsidence	VO	0.1	\$2,546.24	417
32	IN002322	Kluesner Subsidence	VO	0.2	\$10,108.20	185
33	IN002323	Benell Subsidence	S	1	\$4,496.66	131
34	IN002324	Wise Subsidence	S	2	\$7,680.65	145
35	IN002325	Miller Subsidence	S	1	\$7,175.73	145
36	IN002328	Gough Subsidence	VO	0.1	\$1,769.82	318
37	IN002332	Elzer Subsidence	VO	0.1	\$2,145	318
38	IN002335	Mentillo Subsidence	VO	0.1	\$6,596.21	148
39	IN003011	Woolley Subsidence	VO	0.1	\$3,260.40	318
40	IN003099	Gould Subsidence	S	0	\$10,644.28	318
41	IN003107	Gentry Subsidence #1	VO	0.1	\$7,509.31	318
42	IN003108	Secrest Subsidence	VO	0.1	\$3,348.22	3024
43	IN003109	Black Diamond Shaft	VO	0.1	\$21,716.96	107
44	IN003110	West Subsidence #2	VO	0.1	\$4,268.44	318
45	IN003111	Shipleys Subsidence	VO	0.1	\$2,575.52	108
46	IN003112	Cox Shaft	VO	0.1	\$45,305.11	185
47	IN003113	Reed Subsidence	VO	0.1	\$5,103.17	417
<b>TOTAL</b>				60.7	\$2,784,879.49	478.45

**TABLE 5**

<b>PARTNERSHIP FINANCIAL RESOURCES DEDICATED TO PROTECTING THE PUBLIC FROM ADVERSE EFFECTS OF PAST MINING</b>									
<i>(AML projects completed during EY 2020)</i>									
<b>#</b>	<b>PAD Number</b>	<b>Project Name</b>	<b>SMCRA Program Funding Source</b>	<b>Total SMCRA funding</b>	<b>Alternate Non-SMCRA Funding Source</b>	<b>Total non-SMCRA Funding</b>	<b>In-Kind Services</b>	<b>Total Project Funding</b>	<b>Comments</b>
1									
2									
<b>TOTAL</b>				\$0.00		0	\$0.00	\$0.00	

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**TABLE 6**

<b>RECLAMATION PROJECTS STARTED AND/OR COMPLETED</b>		
<b>Project Type</b>	<b>Projects Started</b>	<b>Projects Completed</b>
State/Tribe (EY 2020):	47	47
Federal (EY 2020):	0	0
<b>Total (EY 2020):</b>	<b>47</b>	<b>47</b>

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**TABLE 7**

<b>AML PROGRAM GRANT AWARDS AND STAFFING</b>	
<b>AML Program Costs</b>	
Administration	\$855,095.77
Construction	\$2,040,387.23
Water Supply Construction	\$0.00
AMD Set-Aside	\$1,719,347.40
Other(s) (Specify) State Nonwater Project SS	\$1,116,327.60
<b>Total AML Funding</b>	<b>\$5,731,158.00</b>
<b>AML Program Staffing</b> (full-time equivalents on June 30, 2020):	<b>14.43</b>

**APPENDIX 2: COMMENTS OF STATE OF INDIANA ON THE REPORT**

**Title V: Indiana Regulatory Program Comments**

No Comments

**Title IV: Indiana AML Program Comments**

No Comments