# OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

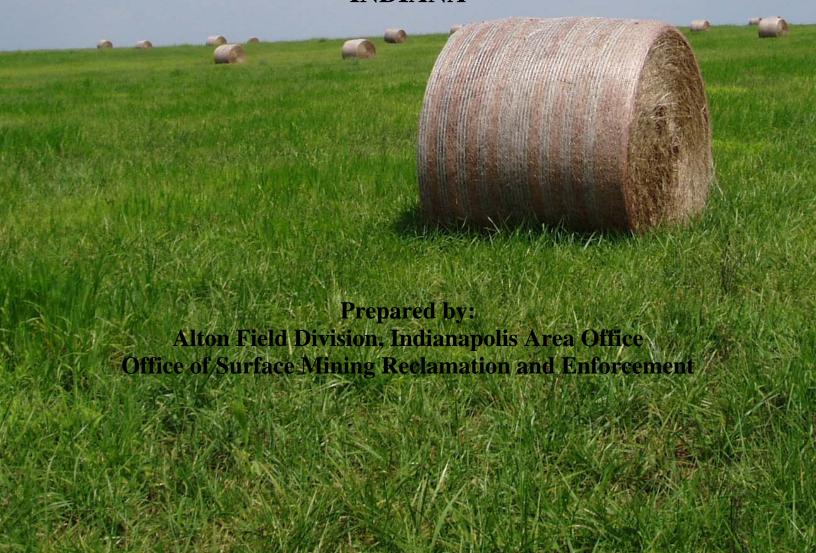
**2007 Annual Evaluation Summary Report** 

For the

**Regulatory and Abandoned Mine Lands Programs** 

Administered by the State of

**INDIANA** 



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Cover page is a photo of reclaimed farmland at the Indiana Peabody Lynnville, 1150 #1 Mine

# **I.** Executive Summary

During the 2007 Evaluation Year (EY), the Office of Surface Mining Reclamation and Enforcement (OSM), Indianapolis Area Office (IAO), conducted oversight evaluations of the Indiana Department of Natural Resources, Division of Reclamation (IDOR), Regulatory and Abandoned Mine Land (AML) Programs. Oversight activities focused on the success of the agency in meeting Surface Mining Control and Reclamation Act (SMCRA) goals for environmental protection, and prompt, effective reclamation of land mined for coal. A Performance Agreement (evaluation plan) for each program was cooperatively developed by the IAO and the State tailoring oversight activities to the unique conditions of each State program. The purpose of these oversight activities was to identify any program assistance needs of the State to strengthen its programs.

In support of OSM's national initiatives, studies were conducted in the areas of off-site impacts, reclamation success (bond release), and customer service.

- The off-site impacts study indicated that 90 percent of Indiana's inspectable units were free from off-site impacts; a 5.6 percent improvement over last year. The numbers of off-site impacts the IDOR observed during the evaluation year were few, most of which were minor to moderate hydrologic impacts on land and water resources. The IAO concludes that the insignificant number of on-the-ground impacts and violations substantiate that Indiana is successfully administering its regulatory program.
- The IAO's review of 12 bond release actions confirmed that the IDOR continues to follow all program requirements for releasing bonds. Based on this measurement, the Indiana Regulatory Program is effectively ensuring successful reclamation.
- The IAO evaluated the effectiveness of customer service rendered by the IDOR in ensuring public participation in the bond release process, as required by Indiana Surface Coal Mining Regulations. The IAO reviewed all bond release requests the IDOR received during the last quarter of the 2006 calendar year; a total of 16 applications. The IAO found that public participation requirements were met in all 16 bond releases. The IAO concluded that the IDOR is fulfilling its responsibilities, and is effectively providing customer service ensuring public participation in the bond release process.

General oversight topic reviews of the State's Regulatory and AML Programs conducted during EY 2007 were as follows:

The IAO selected 50 inspectable units for complete inspections to evaluate IDOR effectiveness in protecting the public and the environment from off-site impacts and other on-the-ground problems resulting from surface coal mining and reclamation operations. These inspections were intended to identify the cause and degree of off-site impacts, and to direct efforts toward decreasing their occurrence. The IAO performed inspections on 50 inspectable units, 100 percent of the selected number, the results of which indicated that the IDOR administers an effective program meeting SMCRA requirements.

- During EY 2007 the IAO evaluated IDOR effectiveness in ensuring that "in-lieu-of-forfeiture" surety reclamation is done according to applicable State regulations. The IAO reviewed State regulations pertaining to surety reclamation, the active surety reclamation files for the period January 1, 2001, through December 30, 2005, and evaluated the completed surety reclamation site. The IDOR requires that in-lieu-of-forfeiture surety reclamation meet State performance standards, reclamation schedule, and liability periods for bond release prescribed in the approved permit reclamation plan. The IAO verified that the IDOR effectively ensures that surety reclamation is done according to the State's approved Program.
- The IAO evaluated unplanned maintenance on federally funded AML reclamation projects as a measure of AML Program success in achieving the goal of self-sustaining, long-term reclamation. The IAO reviewed data on post-reclamation sites requiring remediation to determine the causes and frequency of unplanned reclamation, and if warranted, ways to reduce project maintenance needs. This evaluation indicated that maintenance did not relate to inadequate design or reclamation technique, that acid seeps account for the majority of maintenance, and that much of "unplanned maintenance" was actually proactive post-reclamation tree planting. The AML Program has already initiated steps to resolve chronic acid seep problems. The IAO recommend that the program develop a Maintenance Plan along the lines of that presented in OSM's published AML Reclamation Guidelines.
- In EY 2007, the IAO conducted a routine evaluation of National Environmental Policy Act (NEPA) compliance activities performed by the Indiana AML Program relating to reclamation projects. The purpose was to ensure that environmental documents prepared by the State are adequate under NEPA and related requirements, to verify the accuracy of environmental project information, that NEPA documents were available to the public, and to confirm AML Program implementation of any commitments made in environmental documents. The IAO found that: prepared environmental documents were adequate, environmental information was accurate, mitigation commitments were implemented, and that NEPA documents were available to the public. The IAO concluded that the AML Program is properly carrying out its NEPA compliance activities.
- To address a national audit report recommendation issued by the Department of the Interior's Inspector General in 2003, the IAO conducted oversight in EY 2004 certifying that the State has in place a system to ensure that data entered into the AML Inventory System (AMLIS) is accurate. In EY 2007, the IAO conducted its third annual review of data entered into the AMLIS by the State, verifying that that State's AMLIS entries are accurate.

In addition to national initiatives, and topical reviews, the IAO engaged in a number of assistance activities during the review period. The primary mode of OSM assistance to Indiana is through grant funding. Indiana was awarded \$1.87 million in EY 2007, providing 50 percent support for its Regulatory Program. OSM provides 100 percent funding for the Indiana AML Program, which totaled \$4.99 million in EY 2007.

OSM provides ongoing technical assistance to State and Tribal programs. One way is by offering a wide range of technical training courses throughout the year. In EY 2007, several individuals from Indiana's Regulatory and AML Programs attended these training courses. Another way is through the Technical Information Processing System and its workstations and software OSM provides for State use in permit processing and engineering evaluations, for example. Still another way is in responding to assistance requests concerning specific matters. In EY 2007, OSM provided requested assistance to Indiana in the following matters.

- During EY 2007, OSM completed technical assistance which began EY 2006 as a joint effort with the IDOR to review the success of reforestation on mine sites. The objective of this review was to determine the post-mined forested acreage remaining after final bond release a minimum of five years ago. A team of OSM and IDOR staff developed methodologies to assess post-mine forested acres on all mine sites that had full bond release since 1996. In May 2007, a final report was issued on the results of the review that showed forested mine ground continues to be well wooded with only minor disturbances several years after bond release, and that wildlife mitigation involving tree plantings on reclaimed land can promote habitat for the Indiana bat.
- The Chief of the Alton Field Division/IAO sits on the Executive Board of the Indiana Society for Mining and Reclamation. This Board identifies relevant topics and sponsors a technology seminar each year. In EY 2007, the seminar was held December 4-5, 2006, in Jasper, Indiana, with 156 participants from both the public and private sectors attending. In conjunction with this seminar, the OSM Chief of Communications presented a workshop on Communication and Outreach in the Coal Fields. Two presentations were given by OSM Mid-Continent Region staff in the plenary session: the Regional Director spoke on "The Office of Surface Mining's Technical Initiatives and Other Related Issues," and a staff hydrologist spoke on "The Background, Development, and Contents of the Probable Hydrologic Consequences/Cumulative Hydrologic Impact Assessment Technical Reference Document."
- The IAO continued participation in the Indiana Soils/Prime Farmland Team. This self-directed group is composed of representatives of OSM, the IDOR, the Natural Resources Conservation Service, the coal industry, the Sierra Club, academia, the Purdue University Cooperative Extension Service, two farmers involved in production agriculture on reclaimed mine land, the Indiana Farm Bureau, and the Indiana Department of Agriculture. The Team's focus is on restoration of mined agricultural land and management of reclaimed farm land. In EY 2007, the Team continued to work on developing a booklet concerning agriculture management practices for reclaimed farmland, and held its fifth Reclamation Field Day on June 28, 2007, at the Black Beauty Coal Company, Miller Creek Mine, Knox Pit, near Vincennes, Indiana.
- In EY 2007, the IAO completed an assistance effort it began in EY 2006, to review the AML Program's project administration policies, procedures, and practices to evaluate their vulnerability to fraud, waste, and abuse. This assistance request by the State was a proactive measure taken to identify any vulnerability to fraud, waste, and abuse that

might exist. Areas of particular interest were unit price contracting, reclamation partnerships, contract change orders, and the Emergency Program. Reviewers concluded that written policies and procedures serving as internal management controls within the AML Program and the controls AML reclamation contracts go through elsewhere in State Government, provide reasonable assurance against fraud, waste, and abuse. Very competent AML personnel provided further safeguard. However, it was recommended that State monitoring of Partners for Reclamation projects increase and that steps be planned to ensure future development of competent project managers in view of the pending loss of several experienced employees through retirement.

# II. Introduction

SMCRA created OSM in the Department of the Interior. SMCRA provides authority to OSM to oversee the implementation of, and provide Federal funding for, State Regulatory and Abandoned Mine Land Reclamation Programs approved by OSM as meeting the standards specified in SMCRA. This report contains summary information regarding the Indiana program and its effectiveness in meeting the applicable purposes of SMCRA as specified in section 102. This report covers the period of July 1, 2006, to June 30, 2007. Detailed background information and comprehensive reports for the program elements evaluated during the period are available for review and copying at the IAO of the OSM.

The following acronyms appear in this report:

ACSIAppalachian Clean Streams Initiative
AML Abandoned Mine Land
AMLISAbandoned Mine Land Inventory System
AOCApproximate Original Contour
AVSApplicant Violator System
EYEvaluation Year
IDORIndiana Department of Natural Resources, Division of Reclamation
IAOIndianapolis Area Office
NCAANational Collegiate Athletic Association
NEPANational Environmental Policy Act
NOV Notice-of-Violation
OSM Office of Surface Mining Reclamation & Enforcement
PAD Problem Area Description
RC&DResource Conservation and Development Area
SMCRASurface Mining Control and Reclamation Act of 1977, PL 95-87
SWCDSoil and Water Conservation District

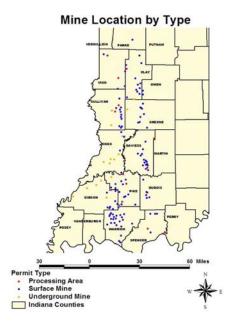
# III. Overview of the Indiana Coal Mining Industry

#### Coal Resources

The Indiana coalfield covers an area of about 6,500 square miles in west-central and southwestern Indiana. 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 western 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.

Twenty counties within, or partly within, the Indiana coalfield have significant coal reserves. Currently, however, coal is being mined in only 10 counties. Indiana has an approximate 34 billion ton coal reserve, 18 billion tons of which are recoverable using current technology. Of the recoverable coal, about 16 billion tons can be extracted through underground mining and 2 billion tons through surface mining.



Coal production in Indiana comes from beds within the Pennsylvanian System. All coals are ranked as high-volatile, bituminous coal, and are characterized as follows:

#### **Indiana Coal Values**

Value	High	Low
Moisture Content	15%	5%
Heating Value In BTU	12,000	10,500
Ash Content	20%	5%
Sulphur Content	6%	0.5%

#### Historical Highlights

Coal was first discovered in Indiana along the Wabash River in 1736, and was reported in land surveys and its location marked 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 mine shaft in Indiana was developed in 1850 at Newburgh, Indiana, and by 1852 both shaft and slope mines had become common. In 1840 production was around 9,700 tons, and by 1918 at the close of World War I, production in Indiana had reached over 30,000,000 tons per year. With the advent of steam-

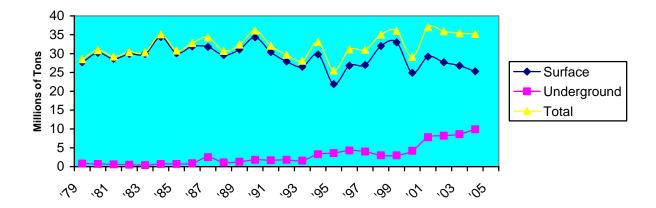
powered equipment, surface mining began on a large scale and since that time has remained a strong and viable industry.

# Coal Mining

While underground mining was once the major method of coal extraction in the state, in recent decades Indiana coal has come primarily from surface mines. As technology advanced from steam-powered equipment in the first half of the twentieth century, to diesel, and then to electric power, so the size of equipment advanced. Twenty-five years ago coal was usually surface mined at depths of no more than 65 feet. Today surface mining equipment is capable of removing overburden to mine coal seams approaching 200 feet in depth.

However, because a large portion of the surface reserves has already been removed, in the future surface mining activities are expected to decline, accompanied by a resurgence of underground mining in deeper coal beds. In fact, this resurgence is already evident. In 1990, 5 percent of Indiana's coal production was from underground mines; in 1997, 12.9 percent; and in 2005, 32.5 percent of total tonnage came from underground mining.

#### Indiana Coal Production 1979 - 2006



Annual coal production in Indiana during the last 3 years has averaged about 34.5 million tons (see Appendix A, Table 1), with a value of about \$600 million, according to the National Mining Association's survey of major producers. In 2005, Energy Information Administration figures (most recent data) indicate that the Indiana coal industry employed an average workforce of 2,683 directly, and thousands more in the various support and associated service industries.

#### Uses 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. Net electric power generation in Indiana from electric utilities was 8,728 thousand megawatt hours; among the highest such output of any state in the nation, according to the Energy Information Administration's April 2007 data. Additionally, by law, Indiana state institutions heating with coal-fired boilers are required to use Indiana coal. Other consumer uses includes coke plants, residential and commercial users, other industrial customers, and foreign export.

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

The *Indiana Soils/Prime Farmland Team* consists of representatives from the IDOR, OSM, the Natural Resources Conservation Service, the Indiana coal industry, the Sierra Club, academia, the Purdue University Cooperative Extension Service, two individuals involved in production agriculture on mined land, the Indiana Farm Bureau, and the Indiana Department of Agriculture. The Team was formed in 1996, and has met periodically since then to address prime farmland issues. Because of the wide range of public participation on this Team, it is a valuable resource for the State program.

This self-directed group focuses on restoration of mined agricultural land, and management of reclaimed farmland. During its tenure the Team has promoted and cooperated in farmland reclamation research efforts, has published a "Citizen's Guide to Farmland Reclamation," and has conducted Farmland Reclamation Field Days over the years. During EY 2007, the Team continued to work on developing a booklet concerning successful agriculture management practices for reclaimed farmland, and held its fifth Farmland Reclamation Field Day on June 28, 2007 at the Black Beauty Coal Company Miller Creek Mine, Knox Pit near Vincennes, Indiana.

Forty-eight educators attended the *Minerals Education Workshop* on November 2-3, 2006, at Rose-Hulman Institute of Technology in Terre Haute, Indiana. This was the seventh annual workshop sponsored by the IDOR. Geared for teachers from kindergarten through middle school, this workshop provides the opportunity to learn about many aspects of mining, electricity, and information on minerals and their impacts on our daily lives. The first day was devoted to hands-on activities that the teacher can use immediately in the classroom. Division staff, and a guest from the Illinois Department of Mines and Minerals, taught the sessions. All activities presented during the day, along with others, were compiled into a teacher's manual of lesson plans for all age groups, and placed on a compact disc for convenience. Teachers took home a tote bag full of materials to facilitate their teaching of the subjects they learned. A tour of the Black Beauty Coal Company Farmersburg Mine was given on the second day of the workshop, with lunch provided by the IDOR.

This tour allowed the teachers to see the activities discussed on day one in real world situations.

- The IDOR conducts other *educational outreach programs*, such as school room talks, career days, Earth Day programs, science fairs, blaster training, public and special interest group meetings, a Farmland Reclamation Field Day, as well as continuing response to public inquiries. The IDOR has an exhibit at the State Fair which is annually viewed by a large number of people. In EY 2007, the IDOR calculated that it logged 12, 831 education outreach hours (number of people x length of time), which was more than double the hours in EY 2006.
- Through its *Partners for Reclamation Program*, the IDOR-AML Program works cooperatively with area Resource Conservation and Development (RC&D) Councils to give landowners an opportunity to restore certain lands adversely affected by past coal mining. Once the county Soil and Water Conservation District (SWCD) accepts a project, the IDOR reviews the proposed project for compliance with all applicable regulations, and may fund up to 85% of project cost through the RC&D. The RC&D can assist the property owner with the project.
- The *Indiana Coal Council* is the primary representative of the coal industry in the State, while the environmental community is primarily represented by the *Hoosier Environmental Council*. The IAO maintains as needed contacts with these organizations, their members, and citizens throughout the evaluation year.

The IDOR successfully implements the required public participation provisions of all aspects of its Regulatory and AML Programs. In addition to addressing the required provisions of public participation, Indiana has taken a pro-active position regarding outreach and the distribution of information to all stakeholders. Under its "Operation Excellence" Program, Indiana established a goal "To create a greater public awareness of, and appreciation for Division programs through the use of various written, audio, and visual media."

The following informational publications are present on the IDOR web site as well as through phone or 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, Division of Reclamation Annual Report, and Division of Reclamation Strategic Plan.

The IDOR site also provides abundant information about the mission of the agency, the programs administered by the agency, and tools and publications available to the public.

Indiana continues to be pro-active in meeting controversial situations head on. It routinely conducts meetings and gathers public input when significant questions arise about a program area under its jurisdiction.

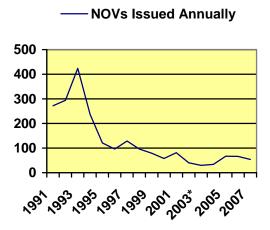
All of this is part of an overall strategy by the State directed toward better citizen understanding and involvement in the Regulatory and Abandoned Mine Land Programs.

# V. Major Accomplishments/Issues/Innovations in the Indiana Program

Indiana maintained its Regulatory Program in EY 2007 to assure that the approved program remains effective in providing protection from the adverse effects of surface coal mining operations. Indiana also maintains a cooperative agreement with OSM to administer the State program requirements on federally owned land. Indiana has proposed several amendments to assure that its program remains timely and as effective as the Federal requirements.

### **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. Since 1993, environmental compliance by coal mining operators has significantly improved as can be seen in the decrease of Notice-of-Violations (NOV) issued from 1993 to 2007. (\*EY 2003 was for 9 months.)



#### **Blanket Emergency Approvals**

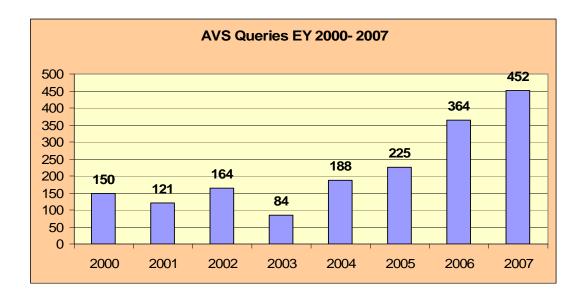
In EY 2003, the IAO and the IDOR developed a Blanket Emergency Approval Agreement. This Agreement identified instances where the IDOR would not have to contact the OSM in advance for approval for expenditures for emergency projects which meet specified criteria. The initial Agreement specified that "pit" subsidence projects would be the only emergency project that met the criteria. This agreement has been renewed every two years since it began.

During EY 2007, the IDOR completed 14 emergency pit subsidence projects. The benefits realized by this new Agreement was that the amount of time taken to address each project was reduced by one working day, and safety hazards that affected an estimated 545 people were eliminated more quickly than under the previous emergency process, thus reducing the exposure of the public to hazardous situations and the possibility of injury or even death.

# **Applicant Violator System (AVS)**

During this reporting period, the Division of Reclamation complied with the provisions of the April 1, 1991, Memorandum of Understanding between the OSM and the State of Indiana. Indiana also continues to comply with provisions requiring OSM checks of Abandoned Mine Land contractors. Indiana continues to update ownership/control information within the AVS upon acceptable responses from applicants/operators. Indiana has been in the process of reviewing submittals of changes for Peabody Coal Company LLC and Black Beauty Coal Company central ownership and control file.

The Indiana AVS Coordinator participated in a phone conference of the Office of Surface Mining and various State regulatory authorities concerning the redesign of the Applicant Violator System. Plans are being made for a meeting for what OSM calls "super users" of which Indiana is one. New companies have been making inquiries and in some cases submitted transfers for permits already used. Research on these new companies has taken some time because they are not in the AVS system. Many are investor or hedge companies. One was an AML contractor. AVS query activity continues to rise since 2003 as indicated in the chart below. Increased activity is directly proportional to changes in the coal market and within the organizational investment families of the companies.



#### **Clean Stream Activities**

Indiana continues to be an active participant in the Appalachian Clean Streams Initiative (ACSI). Historically, the IDOR has dealt primarily with two organizations that address clean streams projects. The southern portion of the Indiana coal field was represented by the Four Rivers RC&D and the northern portion of the coal field represented by the Sycamore Trails RC&D. During EY 2006 and EY 2007 the Four Rivers group was not active in the Clean Streams Program. The Sycamore Trails RC&D remains active in the

Partners for Reclamation Program described above, which includes receiving AML funding for ACSI projects.

In EY 2007, three ASCI projects were being reclaimed. Reclamation on two of these projects was conducted by the Sycamore Trails RC&D and the other one by the AML Program itself.

# Horizon Natural Resources Company Bankruptcy Issue

In EY 2007, the Horizon Natural Resources bankruptcy issue reached resolution. The restructuring and reclamation plan, in which the IDOR had been cooperating, included the sale of assets which became the property of other entities, included 17 permanent program permits in Indiana on approximately 15,000 acres guaranteed by \$61 million in reclamation bond. At the end of EY 2006, 14 permits on 4 mines had been sold and transferred to other companies. During EY 2007, the 3 remaining permits on one mine were sold to successor parties. The IDOR holds bond on the 5 mines, and anticipates that mining will eventually resume on 3 of them.

#### **National Abandoned Mine Land Reclamation Awards**

Each year the OSM honors the best examples of abandoned mine land reclamation. The award winners are recognized as a leader 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. Previous Indiana AML award recipients are:

Indiana AML Award Winners

Year of	AML Reclamation Project
Award	
1992	Boonville Hospital RAMP Project
2000	Midwestern Reclamation Project
2002	Sunshine Mine
2003	Victory Mine
2004	Coles Creek
2005	Sugar Ridge

National Award, Peoples Choice Award, Mid-Continent Regional Award

The AML award recipients were recognized for:

• Reclaiming a site with a 35-foot highwall and a water-filled pit, both hazardous attractive nuisances to children who live nearby and attend the elementary school that borders the abandoned mine site. One side of the pit area, near a residential area, was caving in, and the other side was sloughing, posing a threat to an adjacent hospital. In reclaiming the site, the abandoned mine hazards were eliminated turning the site into a useful and attractive resource for the community.

- The reclamation of a 270-acre site by eliminating 4,400 feet of dangerous highwalls, coal refuse and spoil, plus 30 million gallons of acid water from slurry ponds. Coal combustion by-products were used to enhance the quality of water discharged from the site.
- Transforming barren and eroded abandoned mine refuse, that created sedimentation and acid mine drainage problems of adjacent streams, into an outstanding wildlife habitat much of which has become an area of intense human activity. Today, this reclaimed abandoned mine site is home to a championship cross country running course that is used by local high schools and colleges and became the site of the 2002 National Collegiate Athletic Association (NCAA) national championships. Over 10,000 people attended this event. This site has also been selected as the 2004, 2005, and 2006 NCAA Division 1, men's and women's Cross Country Championships. In addition, the site has a sports center with basketball courts, weight room, and other public activity rooms.
- Elimination of a 25-acre area of gob, slurry, mine drainage, and derelict buildings. The project included regrading refuse, spreading 100 tons per acre of agricultural lime, covering the material with four feet of soil, and planting vegetation. In addition, almost 5,000 linear feet of erosion control features were installed. Most drainage from the reclaimed site has been directed into a small wetland that improves site aesthetics, eliminates off-site sedimentation, and enhances water quality downstream.
- Prior to reclamation, this abandoned mine site consisted of gob covered roads, acidic impoundments, acid drainage problems, and 95-acres of barren gob.
   During reclamation all coal refuse was consolidated and encapsulated into one large area to eliminate its acid producing characteristics. Surface water was redirected through a series of shallow passive wetland treatment cells before leaving the site. The impoundments were planted with native vegetation and now provide water treatment and a diverse wildlife habitat.
- Sugar Ridge Fish and Wildlife area includes over 8,000 acres mostly of reclaimed surface mine land. Here coal refuse has been consolidated and buried, drainage was redirected through newly constructed channels and pit bottoms were covered. Passive treatment and wildlife wetlands were built and disturbed areas revegetated. As a result the land is productive, the water quality improved, and a useful public area created.

# **Active Mining Reclamation Awards**

The Indiana program has consistently been one that has encouraged operators to mine and reclaim responsibly. The positive interaction between the regulators and the industry is evident by the number of OSM Reclamation Awards that Indiana has received over the

years. Since the inception of the OSM awards, the accomplishments of the following Indiana operators have been recognized:

Year of	Company	Mine
Award		
1988	Black Beauty Coal Company	Arlen
1989	Vigo Coal Company	Discovery
1990	Solar Sources	Skypoint
1990	Fowler Excavating	Bullock
1991	Foertsch Construction	Little Sandy
1992	Solar Sources	Pit 12
1997	Solar Sources	Pit 12 <sup>1</sup>
1999	Amax Coal Company	Ayrshire
2000	Black Beauty Coal Company	Columbia
2001	Triad Mining	Switz City
2001	Kindill Mining	Mine 2
2001	Black Beauty Coal Company	Mines in Indiana and Illinois <sup>2</sup>
2002	Solar Sources	Skypoint <sup>3</sup>
2003	Black Beauty Coal Company and	Deer Ridge <sup>2</sup>
	United Minerals Company	
2003	Squaw Creek Coal Company	Squaw Creek
2003	Vigo Coal Company	Cypress Creek <sup>4</sup>
2004	Black Beauty Coal Company	Farmersburg
2005	Peabody Coal Company	Universal Slurry Wetland Area
2005	Black Beauty Coal Company	Farmersburg <sup>4</sup>
2006	United Minerals & Black Beauty Coal Co	West Fork
2006	Peabody Energy	Lynnville

1- HALL OF FAME AWARD 2- DIRECTOR'S AWARD 3-25th ANNIVERSARY GOLD AWARD 4-GOOD NEIGHBOR AWARD

Examples of outstanding reclamation and responsible mining practices that past Reclamation Award winners were recognized for are:

- Exemplary soil replacement, and for restoring the site to farmland, which is now producing a variety of crops, including hay, soybeans, and wheat;
- Eliminating abandoned mine problems, and restoring productivity to agricultural land. Wetlands were created and trees and shrubs were planted to provide a diverse wildlife habitat.
- The development of a Wildlife Management Area, managed to promote fish, wildlife, and related environmental values.
- Special soil handling methods were employed to meet productivity standards resulting in exemplary post-mining agricultural land.
- Reclamation that created some of the best reforestation and wildlife habitat to be found on reclaimed coal mine lands.

- Creating a unique fish and wildlife habitat which will be used for public recreation activities such as hunting, fishing, hiking, biking, and bird watching.
- Exceptional mining and reclamation by a small coal operator (under 100,000 tons per year) while returning the mine site to its pre-mining usage for row crops, pasture, and forestry, after losing just one growing season during actual mining.
- Creating exemplary wetlands that resulted in 44 shallow wetlands covering approximately 160 acres. In addition, there are 72 permanent impoundments covering approximately 246 acres. Many of the impoundments were constructed with remnant standing timber that provides protected bird nesting sites.
- Using native species of grasses to establish wildlife areas to add diversity and provide cover and food for grassland birds. These grasses produce hay crops, yield additional seed for planting natural grass areas, and provide wildlife with a unique habitat.
- Constructing a wetlands/flood control drainage system that eliminated continuous downstream flooding causing crop losses as well as flooding of Boonville, Indiana's waste water treatment plant, homes, and roads.
- Reclaimed land that is now producing above-average crop yields. More than double the amount of soil required by regulations was spread on the reclaimed land, much of which has been leased to local farmers. Reclamation has been so successful that it is difficult to identify where mining occurred.
- Constructing an 80 acres Slurry Wetland area that was once a coal wash slurry deposit. Today it includes 20 acres of permanently impounded water and surrounding wildlife habitat. The reclamation was a cooperative effort by the mining company and the International Union of Operating Engineers. Buildings used during the mining now house an Apprenticeship and Training Program. Both the wetlands and adjacent training center are valuable assets to the community--excellent examples of a reclaimed site offering more than before it was mined.
- Being a good neighbor by being involved with surrounding communities and governmental agencies, including schools. The company runs educational mine site activities, and has provided needed improvements at a local high school. It has installed lights at local baseball fields, and constructed an entrance road for a new town park. It has also built a cemetery monument, and donated land to construct a treatment plant for the town of Farmersburg. The Coal Mining Company proves that coal mining, combined with a "good neighbor" spirit, results in valuable benefits for everyone involved.

Creating post-mining land uses that compliment neighboring rural community and provide good wildlife habitat and aesthetic benefits to the area through highly successful reforestation. The picture at right of the National Award winning Peabody Lynnville Mine is a good example of highly successful reforestation and restoration of wildlife habitat.



# VI. Success in Achieving the Purposes of SMCRA as Determined by Measuring and Reporting End Results:

Performance standard based reviews, along with public participation evaluations provide the IAO with a broad picture of:

- The number and extent of observed off-site impacts;
- The number of acres that have been mined and reclaimed and which meet bond release requirements for the various phases of reclamation; and,
- The effectiveness of customer service provided by the State.

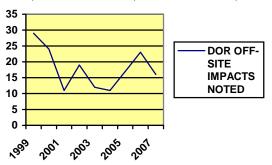
Individual topic reports, available in the IAO, provide a detailed analysis and information concerning how the evaluations were conducted and how the conclusions were reached.

#### A. <u>Off-Site Impacts</u>:

A primary focus of 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 be no impacts, or no greater than minimal impacts, outside the permit area. To accomplish this goal, State programs strive to continually decrease the occurrence of off-site impacts. The IAO and IDOR conducted a joint evaluation in EY 2007 to determine the effectiveness of the State program in protecting the public and the environment from off-site impacts caused by surface mining and reclamation operations. Conclusions were based on data from IAO complete oversight inspections along with data reported by the State.

The IDOR inspected a total of 109 inspectable units (a total of 1,813 complete and partial inspections) in EY 2007, and found 16 off-site impacts on 10 inspectable units. Most impacts were minor hydrologic impacts on land and water resources. Of the 109 inspectable units, 90% were absent any off-site impacts. In EY 2006, 85.3% of units were free of off-site impacts; in EY 2005, 92.2% of

units were free of off-site impacts; 92.6% in EY 2004; 94.1% in EY 2003; 94.1% in EY 2002; 94.6% in EY 2001; and, 91.1% in EY 2000. The 16 off-site impacts observed by the IDOR during this evaluation year were less than the previous year, and the percentage of sites with no off-site impacts was higher than last year. The IDOR observed 23 off-site impacts in EY 2006, 17 in EY 2005, 11 in EY 2004, 12 in EY 2003, 19 in EY 2002, 11 in EY 2001, and 24 in EY 2000.



In the course of making complete inspections on 50 units in EY 2007, the IAO observed 36 violations, 10 of which were off-site impacts on 7 inspectable units, the majority of which were hydrologic impacts. One of the 7 inspectable units was not noted by the State, making a total of 11 inspectable units with off-site impacts. Of the 36 violations, 16 were on-the-ground violations, and 20 were paper work violations. The IAO found 90% of the inspectable units it inspected were absent any off-site impacts. The IAO issued seven Ten-Day Notices in EY 2007.

An analysis did not identify any trend or point to an underlying cause that the State might address. The IAO concludes that the minimal numbers of on-the-ground impacts and violations substantiate that the State is administering a successful Regulatory Program, and recommends that the State continue to encourage mine operators to diligently strive to minimize off-site impacts.

#### B. Reclamation Success:

Thousands of acres of land affected by surface coal mining are successfully reclaimed each year as noted in Appendix A; Table 5 of this report. The IAO conducted site visits at 12 permanent program surface mines and evaluated 1732.6 phase I acres, 1858.3 phase II acres and 1572.6 phase III acres that the IDOR subsequently released. The IAO agreed with the IDOR that these acres met the reclamation requirements to be eligible for release of bond except for 10.1 phase II acres, and 2.0 phase III acres at two mines. Bond release was withheld on the acreage concerning which OSM disagreed. Therefore, the IAO concludes that the IDOR is ensuring successful reclamation on lands affected by surface coal mining operations.

Specifically, the following elements were evaluated for successful reclamation:

# Land Form/Approximate Original Contour and Soil Replacement

The criterion for determining whether reclaimed lands are reconstructed appropriately is whether it has been returned to its approximate original contour (AOC), including soil replacement. For the purposes of this evaluation Phase I bond releases were used as the indicator that the AOC had been achieved and soils had been replaced. For the evaluation period, approximate premining contour, including soil replacement, was achieved on 6,182.8 acres. To date approximately 111,678 acres have met the criteria for, and have been granted, Phase I bond release.

#### 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. For EY 2007, Indiana was successful in achieving surface stability and in establishing vegetation on 6,197.7 acres.

Based on the IAO analysis of data supplied by the IDOR, between 1983 and June 2007, approximately 101,626 acres of mined land have met the criteria for Phase II bond release.

# **Establishment of Post Mining Land Use and Productivity Restoration**

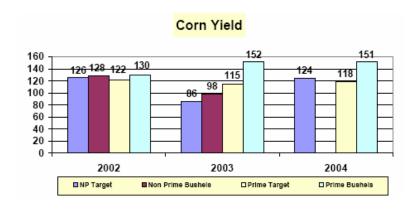
Post mining land use was achieved by establishing successful and appropriate vegetative cover. This includes restoring productivity, where appropriate. The IAO measured this element of reclamation success by the number of acres receiving Phase III bond release. For the evaluation period, 8,734 acres had Phase III bond released.

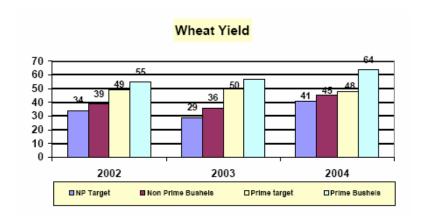
Based upon the IAO analysis of data supplied by the IDOR, between 1983 and June 2007, approximately 84,190 acres have been fully reclaimed and the post mining land use and appropriate vegetative cover achieved, including restoration of productivity where appropriate.

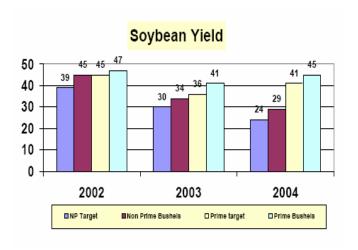
# **Crop Yield on Reclaimed Lands**

Accumulated data from crop years 2002 - 2004 (latest available) may be used to demonstrate land productivity for bond release purposes. Each permit has a target yield for reclaimed prime and non-prime cropland established according to the county average yield for each typical crop weighed by soil type. Crop production must meet or exceed the target yield to qualify for release. Production for the following three charts is shown in bushels per acre. These charts give the target yields for both prime and non-prime cropland and the actual yields of corn, wheat,

and soybeans on reclaimed lands. The data is from whole field harvests and test plots. All bushels per acre calculations are weighed averages.







# **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 8,733.7 acres for Phase III during the evaluation period and a total of approximately 84,190 acres since 1983.

# **Contemporaneous Reclamation**

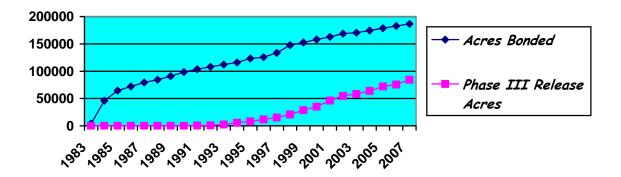
The OSM Directive, REG-8 defines contemporaneous reclamation to be the difference in time between when lands are disturbed and when they achieve phased bond release. There has been considerable discussion about whether this is a valid measure of contemporaneous reclamation. This discussion has taken place both within OSM and with the various State regulatory authorities. The results shown in the chart and table below represent the best effort under REG-8 at assessing contemporaneous reclamation.

Acres of Bond Released 1983 - 2007

YEAR	BONDED	PHASE I	PHASE II	PHASE III	YEAR	BONDED	PHASE I	PHASE II	PHASE III
1983	<i>3831</i>	0	0	0	1995	7150	5172	2778	2636
1984	42022	178	0	0	1996	2451	4548	3777	3517
1985	18698	461	0	0	1997	7981	7734	4814	3725
1986	7481	3069	0	0	1998	14107	8549	8080	5500
1987	7463	5147	<i>3708</i>	0	1999	4780	4403	6110	7706
1988	4815	4789	3365	0	2000	5616	9914	6491	6544
1989	6544	5151	5769	0	2001	4566	7316	14386	11268
1990	7501	2966	2549	0	2002	6102	5004	5887	8408
1991	5219	3250	2006	459	2003**	1783	4965	3453	3410
1992	4335	4908	2898	298	2004	3953	5275	4710	5775
1993	4292	2481	1915	1619	2005	4211	4389	5085	8070
1994	3833	3148	4095	3112	2006	4102	2679	3552	3412
					2007	3593	6183	6198	8734
					TOTAL	186431*	111678	101626	84190

<sup>\*</sup>THIS NUMBER DOES NOT REFLECT THE REMOVAL OF ACREAGE RELEASED AS NOT AFFECTED, NOR THE ACRES REPERMITTED AND BONDED. THE ACTUAL FINAL BONDED ACREAGE CAN BE SIGNIFICANTLY SMALLER THAN THIS.

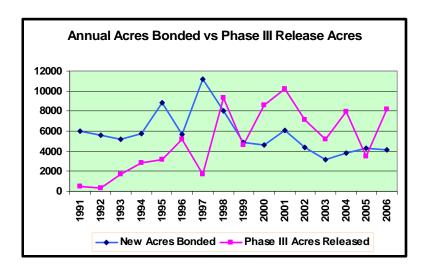
<sup>\*\*</sup> EY2003 IS FOR A 9 MONTH PERIOD (OCTOBER 1, 2002 – JUNE 30, 2003)



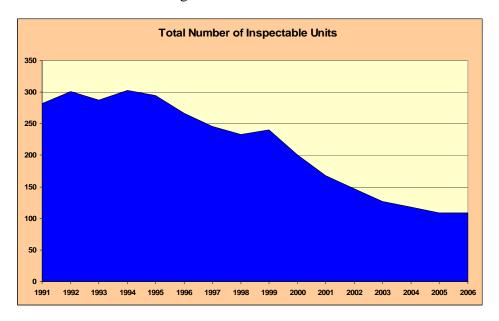
A general picture of how successfully reclamation is staying current with mining was made by the IAO by comparing the number of acres affected to the number of acres on which phase III bond was released by the IDOR from November 1, 2001, to October 31, 2006. For measurement of contemporaneous reclamation, the IDOR provided IAO data showing that 12,447 acres were affected, and 34,241 acres were phase III released.

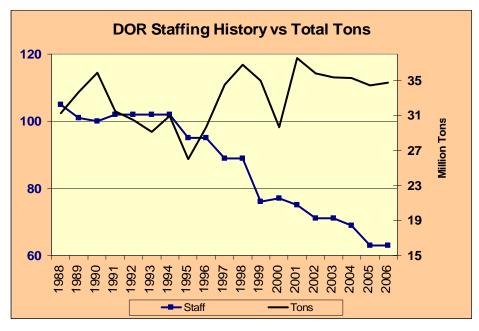
This number, along with findings that only one violation of the requirement for contemporaneous reclamation was identified during IAO complete mine site evaluations in Indiana during EY 2007, is a good indication that reclamation is staying current with mining.

The Division's emphasis on encouraging operators to obtain release as quickly as regulations will allow continues. A timely release results in a faster return of the land to the property owners and helps to minimize cost of the Indiana Regulatory Program. The number of acres bonded as of June 30, 2007, was 66,259.22. That number changes constantly based on bond releases, undermining releases, and new bond added. The chart compares the number of new acres bonded each calendar year to the number of Phase III release acres. It can be seen from this chart that Phase III release acres continue to well out number the new acres bonded resulting in a general decline of total acres under bond.



The number of IDOR inspectors remained constant in EY 2007, but the number of acres for which they have responsibility decreased slightly during that time period. Total staff levels in the IDOR have changed considerably over the years; going from 105 in 1988 to the current level of just over 60. This change is due to a number of factors: decreasing number of inspectable units and acres, larger companies and larger permits, increased percentage of underground mines, better trained and more experienced staff, and advances in technology. The following charts illustrate these changes.





# C. Customer Service

Effective customer service is an essential component of the Regulatory Program, and a responsibility that State regulatory authorities assume in carrying out the purposes of SMCRA. An evaluation of customer service performance is one of three required national measurement elements OSM policy calls for in each annual evaluation plan. The EY 2007 evaluation determined the effectiveness of customer service provided by the State in ensuring public participation in the bond release process as required by Indiana Surface Coal Mining Regulations.

The IAO reviewed all bond release applications the IDOR received during the last quarter of calendar year 2006; a total of 16 applications. The IAO found that the public participation requirements established in the State's regulations at 312 IAC 25-5-16, which are consistent with Section 519 of SMCRA and its implementing regulations at 30 CFR 800.40, were met in each of the 16 bond releases. Based on the results of this evaluation, the IAO concluded that the IDOR is effectively providing customer service by ensuring proper public participation in the bond release process.

#### VII. OSM Assistance

The primary mode of OSM assistance to Indiana is through grant funding. The amount of grant funding awarded to Indiana for the operation of the Regulatory Program in EY 2007 was \$1.87 million. OSM provided 50% of the total funding necessary for Regulatory Program operation and OSM also provided 100% funding for the Abandoned Mine Land Program in Indiana, which totaled \$4.99 million in EY 2007. Over the previous five years, OSM has awarded grants to Indiana totaling \$10.05 million for Regulatory Grants and \$27.06 million for the AML Grants. The following table contains the grant amounts for each of these five years.

Grants Awarded in Indiana (Dollars are in Millions)

Year	Regulatory Grant	AML Grant
	Amount*	Amount**
2007	\$1.87	\$4.99
2006	\$1.87	\$4.97
2005	\$1.99	\$5.83
2004	\$1.94	\$5.70
2003	\$2.38	\$5.33

<sup>\*</sup> Regulatory Grant Year is October 1 – September 30

<sup>\*\*</sup> AML Grant Year is April 1 – March 31

Additionally, assistance is provided as outlined below:

- ➤ Technical training courses are offered by OSM throughout the year, which address technical and programmatic aspects of mining and reclamation. These courses are provided for OSM and State participants as well as industry and others on a space available basis.
- ➤ OSM provides Technical Innovation Professional Services including local workstations and software for State use. The OSM also provides training and support. Indiana uses the system for a variety of tasks related to permit application processing and other technical or engineering evaluations. The technical staff continues to work with the State to develop and implement an electronic permitting program.
- Informal discussions occur between OSM and State management and staff that result in a good working relationship. Informal assistance is provided regarding field or implementation issues on a continual basis.
- During EY 2007, OSM completed technical assistance which began EY 2006 as a joint effort with the IDOR to review the success of reforestation on mine sites. The objective of this review was to determine the post-mined forested acreage remaining after final bond release a minimum of five years ago. Forests in the coal fields in Indiana provide important habitat for the endangered Indiana bat, and coal mining can often conflict with efforts to protect Indiana bat habitat. Reclamation efforts have focused on creating future habitat for the Indiana bat, and few studies have provided insight into the status of these reclaimed forests after bond release. No study has examined the frequency of tree survival related to land management activities on reclaimed lands after bond release.

A team of OSM and IDOR staff developed methodologies to assess post-mine forested acres on all mine sites that had full bond release since 1996. In May 2007, a final report was issued on the results of the review that showed forested mine ground continues to be well wooded with only minor disturbances several years after bond release, and that wildlife mitigation involving tree plantings on reclaimed land can promote habitat for the Indiana bat.

The Chief of the Alton Field Division/IAO sits on the Board of the Indiana Society for Mining and Reclamation. This is a diverse group that includes membership from OSM, the IDOR, Department of Commerce, citizens, industry, academia and power industries. The group's focus is to identify topics of interest and to sponsor a Technology Transfer Seminar each year. On December 4 and 5, 2005, the Seminar was held in Jasper, Indiana. 156 participants, from all factions of the public and private sectors, attended. Topics presented ranged from, "Economic and Public Health Benefits of Coal Utilization"; and "Dealing with Permits, Regulations & Public Emotions"; to "The Future of Illinois Basin Coal as Feedstock for Transportation Fuel." OSM also assisted in conducting a

workshop held in conjunction with the seminar: Communication and Outreach in the Coal Fields.

- ➤ The OSM continues to participate on the Indiana Soils/Prime Farmland Team and assist in addressing the technical aspects of prime farmland restoration. The team is composed of representatives of the coal mining industry, a private soils consultant, the Natural Resources Conservation Service, Purdue University Agronomy Department, Purdue University Cooperative Extension Service, University of Illinois, the Indiana Department of Agriculture, two individuals directly engaged in production agriculture, the Indiana Farm Bureau, besides OSM and the IDOR. As described above, the team is currently developing a guidance brochure concerning the management of post-mined agricultural lands. In addition, the team held its fifth Prime Farmland Reclamation Field Day on June 28, 2007.
- In EY 2006, OSM began a review of the AML Program's policies, procedures, and practices relating to reclamation project administration, as requested by the State. This request was made as a proactive step to evaluate vulnerability to fraud, waste, and abuse in the Program's project administration process, especially in view of staff retirements anticipated in the near future. Areas of special interest were unit price contracting, the Reclamation Partnership Program, contract change orders, and Emergency Program operations. The Program manager felt this evaluation should done by people outside the State Program who were well acquainted with the operation of AML reclamation programs.

In EY 2007, a team consisting of two IAO Program Specialists, and a Grants Specialist completed the evaluation. To assess vulnerability to fraud, waste, and abuse, the team reviewed AML Program internal management controls. These controls included policy/procedures manuals prescribing the various aspects of proper reclamation project management. The team interviewed IDOR staff concerning project management practices carried out by supervisors and project managers in the field and in the office implementing written requirements.

The team found that AML Program management controls combined with the administrative processes elsewhere in the Department of Natural Resources and in the Indiana Department of Administration, where AML reclamation contracts are handled, provided reasonable assurance against fraud, waste, and abuse. The team found AML personnel to be very competent with many years of experience in managing regular AML projects and emergency projects. Contract change orders, unit price contracts, and Emergency Program contractor selection in any AML Program pose increased susceptibility to fraud, waste, and abuse. The single most important safeguard against it is competent project management personnel. In light of pending loss of personnel through attrition, the team recommended that succession planning take place to ensure continuation of competent project management. The team also recommended that the AML

Program increase it's monitoring of Partners for Reclamation Program projects because of the outside management and differing operations in that program.

# VIII. General Oversight Topic Reviews

In addition to the off-site impact and land restoration reviews, OSM conducted oversight activities in the program areas listed below. Copies of oversight documents relating to these topics may be obtained at the IAO office or by requesting specific reports by mail at the following address:

Office of Surface Mining Reclamation and Enforcement Indianapolis Area Office 575 North Pennsylvania, Room 301 Indianapolis, Indiana 46204

The IAO can also be contacted by E-mail at IFOMAIL@osmre.gov.

**Complete Inspections:** The workplan in this area was designed to allow the IAO to gather information, which would then be used to generate an overview of the "on-the-ground" impacts of surface coal mining and reclamation. A sample of 50 complete inspections was selected with all 50 being completed during the review year. As indicated in the off-site impact section above, the inspections indicated that Indiana maintains and administers an effective program that meets all SMCRA requirements.

**Surety Reclamation Evaluation:** Guided by OSM Directive REG-8, Oversight of State Regulatory Programs, the IAO conducted an evaluation during the EY 2007, of the effectiveness of the IDOR in ensuring "in-lieu-of-forfeiture" surety reclamation is conducted in accordance with applicable State regulations. The effectiveness of the IDOR in ensuring "in-lieu-of-forfeiture" surety reclamation was determined by the IAO first identifying the State regulations that relate to surety reclamation and then reviewing the IDOR's files relating to active surety reclamation projects during the period January 1, 2001, through December 30, 2005. One project was ongoing during that time. A field evaluation was conducted at the site where reclamation was completed by the surety.

The IAO verified the IDOR requires that in-lieu-of-forfeiture surety reclamation be conducted according to the State's performance standards. In the case reviewed for this evaluation, the surety was required to follow an approved reclamation schedule to reclaim the site according to an approved reclamation plan, monitor ground and surface water according to the schedule in the permit, meet liability time periods for Phase bond release, and remove groundwater wells following complete reclamation.

**Evaluation of AML Reclamation Project Unplanned Maintenance:** The Evaluation Year 2007 Indiana Abandoned Mine Land Performance Agreement included a review of unplanned project maintenance as a measure of AML Program success in achieving the goal of self-sustaining reclamation. The IAO conducted a review of post-reclamation remediation data to evaluate AML Program operations with respect to maintenance of

reclamation work and, if possible, recommend ways to enhance program performance by reducing the need for project maintenance.

The findings and conclusions resulting from this evaluation review were:

- (1) Frequency of unscheduled project maintenance in the Indiana AML Program does not indicate project design problems; the State uses state-of-the-art technology. No trends were noted indicating a deficiency in current program operations.
- (2) Acid seeps and erosion accounted for the majority of maintenance problems.
- (3) Many projects identified as maintenance are not unanticipated remedial work. A large number of such projects were tree plantings on post-reclamation projects to enhance reforestation to improve reclamation stability and long-term success.
- (4) Maintenance is still performed on some very old sites as well as newer ones.

Recommendations are to continue the effort already initiated to resolve the problem of chronic acid seeps, and to develop a plan for project maintenance as presented in Item 9, in Part B of the published OSM-AML Reclamation Guidelines.

**Evaluation of AML Program NEPA Compliance Activities:** In EY 2007 the IAO conducted an evaluation of NEPA compliance activities performed by the AML Program. The purpose of this evaluation was to ensure that reclamation project environmental documents prepared by the State are adequate under NEPA and related requirements, and to verify the accuracy of project environmental information, and that any commitments made in the environmental document were implemented.

Review findings were that: (1) AML Program prepared environmental documents were adequate under NEPA, (2) information in the document was accurate, (3) the AML Program is implementing commitments or stipulations required as a result of documented NEPA consultations, and (4) project NEPA documents are available to the public. Based on these findings, the IAO is assured that the Indiana AML Program is properly carrying out NEPA compliance actions.

Indiana's Data Entry into the Abandoned Mined Land Inventory System: This evaluation began as a result of an Audit Report: Inventory System and Performance Results of the Abandoned Mine Land Program, Report No. 2003-I-0074. In order to implement a remedy for the Inspector General's 2003 finding, and the recommendation to "Establish a quality control system that ensures that States, Tribes and OSM, as applicable, review and certify the accuracy of data entered into AMLIS," in EY 2004, the IAO certified that Indiana had in place an adequate system to ensure that data entered into the AMLIS is accurate.

In EY 2007, the IAO conducted its third annual review of data entered into the AMLIS by the State to verify that it matched ground truth information maintained in hard copy.

The IAO also verified that the State's certified procedures to ensure AMLIS data accuracy was being properly maintained. Then the IAO obtained the Problem Area Description (PAD) from the web-based version of AMLIS for 21 entries the State made during EY 2007, and compared that data with information from a hard copy of the PAD, or from AML Project files if hard copy PADS were not available since States are no longer required to maintain them. The IAO's evaluation was sufficient to conclude that the Indiana AML Program is successfully ensuring data accuracy in AMLIS.

#### APPENDIX A:

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

When OSM's Directive REG-8, Oversight of State Programs, was revised in December 2006, the reporting period for coal production on Table 1 was changed from a calendar year basis to an evaluation year basis. The change was effective for the 2007 evaluation year. In addition to coal production figures for the current year, Table 1 also contains the coal production figures from annual evaluation reports for the two most recent prior years. Therefore, for the 2007 annual evaluation report, coal production figures are provided for 2005, 2006 and 2007. In order to ensure that coal production for these three years are directly comparable, the calendar year production figures from the 2005 and 2006 annual evaluation reports were recalculated on an evaluation year basis (July 1 – June 30). This should be noted when attempting to compare coal production figures from annual evaluation reports originating both before and after the December 2006 revision to the reporting period.

TABLE 1 – COAL PRODUCTION

TABLE 2 – INSPECTABLE UNITS

TABLE 3 – STATE PERMITTING ACTIVITY

TABLE 4 – OFF-SITE IMPACTS

TABLE 5 – ANNUAL STATE MINING AND RECLAMATION RESULTS

TABLE 6 – STATE BOND FORFEITURE ACTIVITY

TABLE 7 - INDIANA STAFFING

TABLE 8 – FUNDS GRANTED TO INDIANA BY OSM

TABLE 9 - STATE INSPECTION ACTIVITY

TABLE 10 - ENFORCEMENT ACTIVITY

TABLE 11 – LANDS UNSUITABLE ACTIVITY

TABLE 12 – POST-MINING LAND USE ACREAGE (OPTIONAL)

#### TABLE 1

# Coal Produced for Sale, Transfer, or Use (Millions of Short Tons)

Period	Surface Mines	Underground Mines	Total
Coal production <sup>A</sup> for entire State:			
Evaluation Year			
EY 2005	23.514	10.535	34.049
EY 2008	23.858	11.021	34.879
EY 2007	23.924	10.579	34.503

A Coal production as reported in this table is the gross tonnage which includes coal that is sold, used, or transferred as reported to OSM by each mining company on form OSM-1 line 8(a). Gross tonnage does not provide for a moisture reduction. OSM verifies tonnage reported through routine auditing of mining companies. This production may vary from that reported by States or other sources due to varying methods of determining and reporting coal production. Provide production information for the latest three full evaluation years to include the last full evaluation year for which data is available.

#### TABLE 2 Inspectable Units As of June 30, 2007 Number and Status of Permits Permitted Acreage<sup>B</sup> Inactive (100's of acres) Coal mines Active or Nbr.of Phase II bond and related facilities temporarily inactive Insp. Abandoned Totals Units<sup>A</sup> release State/Private Federal Lands Lands Lands IΡ PP ΙP PP ΙP PР IΡ PР IΡ PP PP IΡ Total LANDS FOR WHICH THE STATE IS THE REGULATORY AUTHORITY Surface 0.0 0.0 1,085.0 3,002.9 4,087.9 87 mines Undergrour О 14 0 15 13 0.0 0.0 0.0 73. 73.5 Other o 0 11 0.0 0.0 0.0 112. 112.2 11 facilities 11 16 116 109 0.0 0.0 1,085. 3,188. 4,273.6 132 Total number of permits: 1.21 Average number of permits per inspectable unit (excluding exploration sites): 3.920.74 Average number of acres per inspectable unit (excluding exploration sites): Number of exploration permits on State and private lands: 0 On Federal lands<sup>C</sup>: 0 14 On Federal lands<sup>C</sup>: 0 Number of exploration notices on State and private lands: IP: Initial regulatory program sites PP: Permanent regulatory program sites A inspectable units include multiple permits that have been grouped together as one unit for inspection frequency purposes by some State programs. B When a single inspectable unit contains both Federal lands and State/Private lands, enter the permitted acreage for each land type in the appropriate category. C includes only exploration activities regulated by the State pursuant to a cooperative agreement with OSM or by OSM pursuant to a Federal lands program. Excludes exploration regulated by the Bureau of Land Management.

# TABLE 3

# State Permitting Activity As of June 30, 2007

Type of		Surfa mine		U	ndergr mine			Othe facilit			Tota	ls
Application	App. Rec.	lasued	Acres	App. Rec.	Issued	Acres A	App. Rec.	lssued	Acres	App. Rec.	Issued	Acres
New Permits	9	5	7,399	1	1	1,033	0	0	0	10	6	8,432
Renewals	4	5		4	3		0	0		8	8	
Transfers, sales, and assignments of permit rights	48	21		7	0		2	3		57	24	
Small operator assistance	0	0		0	0		0	0		0	0	
Exploration permits										0	0	
Exploration notices											14	
Revisions (exclusive of incidential boundary revisions)		259			41			9			309	
Revisions (adding acreage but are not incidental boundary revisions)	0	0	0	0	0	0	0	0	0	0	0	0
Incidental boundary revisions	14	18	96	15	15	52	0	0	0	29	33	148
Totals	75	308	7,495	27	60	1,085	2	12	0	104	394	8,580

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

A includes only the number of acres of proposed surface disturbance.

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

Indiana

EY 2007, ending June 30, 2007

# TABLE 4

# OFF-SITE IMPACTS (excluding bond forfeiture sites)

RESO	URCES AFFEC	TED		People			Land			Water		9	Structures	j
DEGREE OF IMPACT			Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major
TYPE OF IMPACT	Blasting	0	0	0	0	0	0	0	0	0	0	0	0	0
	Land Stability	3	0	0	0	3	0	0	0	0	0	0	0	0
AND TOTAL	Hydrology	13	0	0	0	6	0	0	5	1	1	0	0	0
	Encroachment	5	0	0	0	5	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	21	0	0	0	14	0	0	5	1	1	0	0	0

Total number of inspectable units (excluding bond forfeiture sites): 109
Inspectable units free of off-site impacts: 98
Inspectable units with off-site impacts: 11

# OFF-SITE IMPACTS ON BOND FORFEITURE SITES

RESOURCES AFFECTED				People			Land			Water		\$	Structures	5
DEGREE OF IMPACT			Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major
TYPE OF	Blasting	0	0	0	0	0	0	0	0	0	0	0	0	0
IMPACT AND	Land Stability	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	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
OF EACH TYPE	Other	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0

Total number of inspectable units (only bond forfeiture sites): 0
Inspectable units free of off-site impacts: 0
Inspectable units with off-site impacts: 0

	TABLE 5								
	Annual State Mining and Reclama	ition Resu	lts						
Bond		Durin	g this Evaluat	ion Year					
release phase	Applicable performance standard	Total acreage released	Acreage also released unde under Phase II Phase II						
Α	В	С	D	E					
Phase I	Approximate original contour restored     Topsoil or approved alternative replaced	6,182							
Phase II	- Surface stability - Establishment of vegetation	6,197	0						
Phase III	Post-mining land use/productivity restored     Successful permanent vegetation     Groundwater recharge, quality and quantity restored     Surface water quality and quantity restored	8,733	0	0					
	Bonded Acreage A		Acres during this evaluation year						
Total nu	mber of new acres bonded during this evaluation year			3,593					
Number	of acres bonded during this evaluation year that are considered remining, if	avallable	0						
Number	of acres where bond was forfelfed during this evaluation year		0						
	Bonded Acreage Status	(	Cumulative Ac	res					
Total nu	mber of acres bonded as of the end of last review period (June 30, 2006) <sup>B</sup>		71,39	7					
Total nu	mber of acres bonded as of the end of this review period (June 30, 2007) <sup>B</sup>		66,25	7					
release :	ocres bonded that are between Phase I bond release and Phase II bond as of June 30, 2007 B			0					
Sum of a	acres bonded that are between Phase II bond release and Phase III bond as of June 30, 2007 <sup>B</sup>			0					
	Disturbed Acreage		Acres						
Number	of Acres Disturbed during this evaluation year		2,99	2					
	of Acres Disturbed at the end of the on year (cumulative)			0					
	ed acreage is considered to approximate and represent the number of acres disturbed to ed acres in this category are those that have not received a Phase III or other final boro	-	-	-					

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

TABLE 6			
State Bond Forfeiture Activity (Permanent Program Permits)			
Bond Forfeiture Reclamation Activity by SRA	Number of Sites	Dollars	Acres
Sites with bonds forfeited and collected that were unreclaimed as of June 30, 2006 (end of previous evaluation year)	1		282
Sites with bonds forfeited and collected during Evaluation Year 2007 current evaluation year)	0	\$ 0	0
Sites with bonds forfeited and collected that were re-permitted during Evaluation Year 2007 (current evaluation year)	0		0
Sites with bonds forfeited and collected that were reclaimed during Evaluation Year 2007 (current evaluation year)	0		0
Sites with bonds forfeited and collected that were unreclaimed as of June 30, 2007 (end of current evaluation year) <sup>A</sup>	1		282
Sites with bonds forfeited but uncollected as of June 30, 2007 (end of current evaluation year)	0		0
Surety/Other Reclamation (In Lieu of Forfeiture)			
Sites being reclaimed by surety/other party as of June 30, 2006 (end of previous evauation year) <sup>B</sup>	1		79
Sites where surety/other party agreed to do reclamation during Evaluation Year 2007 (current evaluation year)	0		0
Sites being reclaimed by surety/other party that were re-permitted during Evaluation Year 2007 (current evaluation year)	0		0
Sites with reclamation completed by surety/other party during Evaluation Year 2007 (current evaluation year) <sup>C</sup>	1		79
Sites being reclaimed by surety/other party as of June 30, 2007 (current evaluation year) <sup>B</sup>	0		0
A line when said to see the said and said and the said said the said and the said a			

 $<sup>^{\</sup>wedge}$  Includes data only for those forfetture sites not fully reclaimed as of this date

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

<sup>&</sup>lt;sup>C</sup> This number also is reported in Table 5 as Phase III bond release has been granted on these sites

Indiana EY 2007, ending June 30, 2007

TABLE 7		
State Staffing (Full-time equivalents at end of evaluation year)		
Function	EY 2007	
Regulatory Program		
Permit Review	11.00	
Inspection	19.00	
Other (administrative, fiscal, personnel, etc.)	12.00	
Regulatory Program Total	42.00	
AML Program Total	20.00	
Total	62.00	

# TABLE 8

#### Funds Granted To Indiana BY OSM

(During the Current Evaluation Year)

(Actual Dollars, Rounded to the Nearest Dollar)

Type of Funding	Federal Funds Awarded During Current Evaluation Year	Federal Funding as a Percentage of Total Program Costs	
Regulatory Funding			
Administration and Enforcement Grant	\$ 1,787,798	50.00 %	
Other Regulatory Funding, if applicable	\$ 0	0.00 %	
Subtotal	\$ 1,787,798		
Small Operator Assistance Program	\$ 0	100 %	
Abandoned Mine Land Reclamation Funding A	\$ 4,975,622	100 %	
Totals	\$ 6,763,420		

A Includes funding for AML Grants, the Clean Streams initiative and the Watershed Cooperative Agreement Program.

Indiana EY 2007, ending June 30, 2007

TABLE 9		
State Inspection Activity During Current Evaluation Year		
Inspectable Unit	Number of Inspections Conducted	
Status	Complete	Partial
Active A	594	828
Inactive A	151	211
Abandoned <sup>A</sup>	13	16
Total	758	1,055
Exploration	0	0
A Use terms as defined by the approved State program.		

Indiana EY 2007, ending June 30, 2007

TABLE 10		
State Enforcement Activity  During Current Evaluation Year		
Type of Enforcement Action	Number of Actions	Number of Violations
Notice of Violation	56	61
Failure-to-Abate Cessation Order	6	6
Imminent Harm Cessation Order	0	0
A Do not include those violations that were vacated.		

Indiana EY 2007, ending June 30, 2007

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

TABLE 12 Optional			
Post Mining Land Use Acreage (after Phase III bond release)			
Land Use	Acreage Released during this Evaluation Year		
Cropland	3,548		
Pasture/Hayland	890		
Grazing Land	0		
Forest	1,185		
Residential	93		
Fish & Wildlife Habitat	2,207		
Developed Water Resources	593		
Public Utilities	0		
Industrial/Commercial	13		
Recreation	0		
Other (please specify): Public Roads	109		
Other (please specify): Access Roads	35		
Other (please specify): Other	59		
Other (please specify):	0		
Other (please specify):	0		
Other (please specify):	0		
Other (please specify):	0		
Other (please specify):	0		
Total	8,732		

#### APPENDIX B:

This Appendix contains the Indiana Department of Natural Resources, Division of Reclamation comments on the draft Evaluation Report, which the IAO received on August 23, 2007. The State's comments are presented below.

----Original Message----

From: Stevens, Bruce A. [mailto:bstevens@dnr.IN.gov]

Sent: Thursday, August 23, 2007 8:32 AM

To: Andrew Gilmore Subject: Annual Report

The Division of Reclamation has reviewed the draft Indiana annual report and has no comments to put forth. Thanks for the opportunity to review and for the compliments within the report.

Bruce Stevens, Director Indiana Department of Natural Resources Division of Reclamation (812) 665-2207

The Alton Field Division Chief's disposition of the State's comments is presented below.

# **Disposition of Comments:**

No changes necessary.