The Role of the Division of Reclamation (DOR)

The Indiana Department of Natural Resources, Division of Reclamation (DOR) is responsible for regulating the mining of coal and the restoration of lands disturbed by coal extraction. The DOR is divided into two program areas - Regulatory and Restoration. This pamphlet pertains only to the restoration program. For a complete description of the regulatory program, which oversees active coal mining operations and the reclamation of the land by the coal company after the extraction of coal, please refer to the "Citizen's Guide to Coal Mining and Reclamation in Indiana."

Restoration Program

The Restoration Program is comprised of two areas; Abandoned Mine Land (AML) reclamation and Bond Forfeiture. The abandoned Mine Land Program reclams areas disturbed by coal mining on which mining activity took place prior to implementation of the Federal Surface Mining Control and reclamation Act of 1977 (SMCRA). The other portion of DOR's Restoration Program, Bond Forfeiture, focuses on restoration of sites mined, but on which the permittee did not fulfill the obligations of SMCRA. The purpose of the reclamation is to alleviate the safety, health and environmental hazards, of past coal mining practices while improving productivity and enhancing the landscape. It is the goal of the Indiana Restoration Program to remedy those adverse effects of past coal mining conducted prior to August 3, 1977 which:

(1) Impact the public safety and health and (2) those which foster environmental degradation. In addition to reclamation of coal mine sites abandoned before August 3, 1977 with health safety or environmental problems, any site affected by a coal mining operation during the period of August 4, 1977 until July 29, 1982 (the interim period) where funds available for reclamation from a bond or other financial guarantee are not sufficient to provide for adequate reclamation can be addressed under the Restoration Program. Other sites which may be addressed under the Restoration Program are the insolvent surety sites. These are sites where coal mining operations occurred between August 4, 1977 and November 5, 1990 and the coal operator's bonding company became bankrupt during this period, and as of November 5, 1990, the funds immediately available from the bankruptcy proceedings are not sufficient for adequate reclamation.

Abandoned sites may contain a variety of problem types including: dangerous highwalls, hazardous equipment, acid water, open shafts, and mine entries, subsidences, trash, abandoned structures, lack of drainage control, barren spoil, coal processing wastes, soil stockpiles, non-productive or low productive farmlands, lack of any or an acceptable vegetative cover, severe erosion, undesirable surface water bodies, adverse impacts on nearby residential areas or communities, and others.

Tree planting on a reclaimed AML site
Acid mine drainage treatment on the Midwestern mine in Pike County

Reclamation of post-1977 sites is based on the post-mining land uses and contours as originally approved by the state in the mining permit. The intent of final reclamation on all post-1977 sites is to restore the land to productive pre-mining land uses; however site characteristics and the conditions of the land after abandonment may preclude full restoration to current reclamation standards.

Approximately 107 million dollars have been spent in Indiana correcting more than 900 AML sites. A list of counties and the expenditure of AML funds per county, through April 2009 is provided in Table 1.

In addition to the AML sites, 11.1 million dollars have been spent on 138 bond forfeiture sites.

Regardless of whether the work is on a bond forfeiture site or an AML site, the problems, causes, and steps for correction are the same.

Soilermaker, an alkaline combination of recycled industrial by-products, is an alternative to lime, fertilizer, and soil cover.

### Table 1

<table>
<thead>
<tr>
<th>County</th>
<th># of Sites</th>
<th>Cost</th>
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<tbody>
<tr>
<td>Clay</td>
<td>178</td>
<td>$6,091,429.18</td>
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<tr>
<td>Daviess</td>
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<td>Dubois</td>
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<td>Fountain</td>
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<td>Gibson</td>
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<td>Greene</td>
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<td>Martin</td>
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<td>Owen</td>
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<td>Parke</td>
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<td>Perry</td>
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<td>Pike</td>
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<td>Sullivan</td>
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<td>Vermillion</td>
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<td>Vigo</td>
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<tr>
<td>Warrick</td>
<td>152</td>
<td>$24,052,975.01</td>
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<td>Total</td>
<td>919</td>
<td>$106,911,975.71</td>
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</table>

Site 1056 in Pike County prior to reclamation.
The Reclamation Process

Potential reclamation sites are investigated to see if the problems are mining related and to determine if reclamation is necessary. Sites in need of reclamation are inventoried and prioritized and selected for reclamation based upon priority or need. The more serious or threatening the conditions, the sooner they may be scheduled for work. These priorities are divided into three categories. **Priority One** sites are those that have documented occurrences of mine related deaths or serious personal injuries or where such occurrences appear imminent. **Priority Two** are those which adversely impact the public safety, health, or general welfare. **Priority Three** sites are those which cause environmental degradation.

After a site is determined to be eligible for AML reclamation, a scope of work is prepared and submitted to OSMRE for approval. Each site is also reviewed by other agencies for environmental and archaeological factors.

Site 1056 after reclamation.

Funding

Funding must be requested and approved through the Office of Surface Mining Reclamation and Enforcement (OSMRE) before AML sites can be reclaimed. OSMRE is a federal agency within the Department of Interior which is responsible for overseeing each state’s coal mine reclamation program. Each year the State of Indiana receives an allocation of funds from the federal government.

The Restoration Program receives 100% federal funding for administration and construction of Abandoned Mine Lands projects. In December 2006, Congress re-authorized the AML program which extends the fee collection for the Program through the year 2021. Under the re-authorization, there will be a graduated 20% cumulative reduction of fees collected from active coal mining operations. Starting in 2008 and extending through 2021, the fees will be reduced from 35 cents to 28 cents per ton on surface mined coal and 15 cents to 12 cents per ton on underground mined coal. These fees are paid to (OSMRE) by the coal mining companies.

Bond forfeiture site reclamation is funded from forfeited reclamation bonds and civil penalty collections from mine operators.
Landowner Input

Upon approval for reclamation, site ownership is verified, landowners are contacted and the restoration program and the proposed project are explained to them. Right of entry is then obtained to enter the property for survey and design purposes. At this time, the landowners provide input into the proposed reclamation project. Every effort is made to incorporate feasible landowner requests into the reclamation design.

Design and Entry Phase

Data obtained from the site survey and/or aerial photography is utilized to develop a conceptual plan for the project. Several issues, such as historic preservation, environmental regulations, landowner concerns, permit requirements, water quality enhancement, and post reclamation land use are considered when designing an AML project.

Upon completion of the conceptual plan, a rough set of design plans is presented to the landowner for input and approval. With mutual agreement on the scope of work, a right of entry is obtained from the landowner. The right of entry is a legal document signed by the landowners giving the State of Indiana permission to do the reclamation work. When all pertinent issues have been addressed and rights of entry obtained, a final set of plans and specifications is prepared for bid purposes.

Bid Phase

Completed plans and specifications for each project are sent to the DNR's Division of Engineering to be advertised for competitive bid. Any qualified contractor may submit a bid. This bid and contract phase usually takes from 3 to 5 months.

Throughout the construction period, restoration staff closely monitored progress to
ensure contract compliance. When construction is completed, a final inspection is held to determine if all contract obligations have been met.

Grouting operations underway on a shaft in Daviess County.

The Indiana Department of Natural Resources, Division of Reclamation, has adopted the Abandoned Mine Land Emergency Reclamation Program to better protect Indiana citizens.

This program addresses sudden occurrences or discoveries related to abandoned mines that pose a threat to public health and safety when no other entity is authorized or capable of responding. Eligible occurrences may involve underground mine subsidence (sink holes), highwalls, open shafts, mine adits (openings), hazardous mine structures, landslides or rockfalls, mine fires, or any other mine related danger. Citizens may report emergencies to the DOR office by calling toll free within Indiana at 1-800-772-MINE (6463) or 812-665-2207.

Public Participation

The Abandoned Mine Land program in Indiana considers public participation to be a valuable and necessary part of its restoration operation. The public is encouraged to contact our office with any concerns or questions they may have in regard to mining related problems or the AML program.

Citizens are welcome to visit the Division of Reclamation Office located on State Highway 48 approximately 1/2 mile west of Jasonville, Indiana. Inquiries may also be made by phone, in writing, or on the World Wide Web at: www.in.gov/dnr/reclamation

What Happens After Reclamation is Completed?

After the contractor completes the work, the site remains under a warranty period for one year. This gives the site time to stabilize and allows the vegetation to become established. During this period, the contractor is responsible for correcting deficiencies that may develop.

Following the expiration of the warranty period, management responsibility reverts to the landowner and the right of entry expires according to the date on the right of entry document. The DOR staff can supply the owner with management ideas to safeguard the reclamation site into the future.

Emergency Program

Mine Subsidence Insurance
Since the 1800's, more than 900 million tons of coal has been removed by underground mining in Indiana. In the early days, many mines were never surveyed, thus no maps exist to describe the extent of abandoned underground mines. Geologists estimate that up to 150 square miles of underground coal mines exist in the 26 coal producing counties in Indiana.

**Conventional homeowners insurance does not cover damage caused by mine subsidence.** However, insurance protection sponsored by the State of Indiana is available for homeowners through your insurance agent in those counties most susceptible to mine subsidence damage from inactive underground coal mines.

In 1986, the Indiana legislature established the Indiana Mine Subsidence Insurance (IMSI) Program to provide insurance to property owners in the 26 Indiana coal producing counties. Property owners in the following counties are eligible for this insurance: Clay, Crawford, Daviess, Dubois, Fountain, Gibson, Greene, Knox, Lawrence, Martin, Monroe, Montgomery, Orange, Owen, Parke, Perry, Pike, Posey, Putnam, Sullivan, Spencer, Vanderburgh, Vermillion, Vigo, Warren, and Warrick.

**Burning gob fire in Parke County**

Maps of abandoned underground mine works are available through the Indiana Geological Survey in Bloomington 812-855-7636. Maps are also available for viewing at the Division of Reclamation office in Jasonville.

Insurance coverage is designed only for abandoned underground mines. Compensation or repairs for damage caused by active underground mining is the responsibility of the mine operator.

You may add subsidence insurance to your homeowner’s policy at any time. However, in order to file a claim for subsidence damage, your property must be insured with subsidence insurance prior to the damage.

**Effective July 1, 2001, the maximum amount of coverage for dwellings and non-dwellings is $200,000.** For more information about mine subsidence insurance, contact your insurance agent or the Indiana Mine Subsidence Insurance (IMSI) Program at the Indiana Department of Insurance: **1-800-332-IMSI (4674).**

Citizens may research surface and underground mining information on the Indiana Geological Survey web site at: [www.igs.indiana.edu](http://www.igs.indiana.edu)