



**2015 ANNUAL REPORT**  
**Division of Mineral Resources Management**  
**Ohio Department of Natural Resources**



*Front cover:*

*(top) A Rohr clamshell dredge operates on Sober Sand and Gravel Co. Inc. permit IM-193 in Portage County.*

*(middle) National Lime and Stone permit IM-258 in Morrow County.*

*(bottom) Construction of portals for future underground limestone mining on permit IM-1103 (Petersburg Limestone Mine) operated by East Fairfield Coal Co. in Mahoning County.*

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## Mission

Provide for safe and environmentally sound development and restoration of mineral and fossil fuel extraction sites.

## Vision

We will lead change in Ohio through innovation, excellence and partnering in natural resource stewardship.

## Values

We respect and value our external customers, recognizing their diversity, knowledge and needs. We will:

- provide information and promote public awareness;
- provide timely quality services;
- practice the highest ethical standards;
- use the best available technology;
- build employee pride and encourage self-improvement;
- promote and implement teamwork and partnerships; and
- practice high professional standards and responsibility.

## Introduction

The Division of Mineral Resources Management (DMRM) provides for the safe and environmentally sound development and restoration of coal and industrial minerals extraction sites. Four diverse programs address the environmental and safety aspects related to coal and industrial minerals mining.

Program and support services include permitting, hydrology, bonding, inspection and enforcement, abandoned mine land, engineering and design services, mine safety, data and records management, GIS, and central services support.

Expertise is provided by a professional and seasoned staff of geologists, environmental specialists, engineers, blasting specialists, soil scientists, hydrologists, researchers, archaeologists, hydrogeologists, inspectors, geographic and information specialists, and program managers. Division staff work diligently to maintain a high standard of regulatory effectiveness.

## 2015 Accomplishments

### COAL REGULATORY PROGRAM

- In 2015, division staff drafted two Procedure Directives. Procedure Directive 2016-01, which addresses permitting standards, unanticipated events, vegetation standards, liability periods and other provisions related to land eligible for remining, was drafted to replace policy/procedure directive Regulatory 99-1. Procedure Directive 2016-02, provides specific pre-mining data at the time of application for permits containing prime farmland (PFL) and sets procedures for obtaining yields on PFL and non-PFL cropland. Procedure Directive 2016-02 was drafted to replace policy/procedure directive Regulatory 90-1. In November 2015, both drafts were provided to industry, the Office of Surface Mining and the Ohio Environmental Council for review and comment. In addition, public comments were requested on the drafts through the Division's website. These directives will be issued in early 2016.



*Large amounts of rock must be fractured by blasting and removed to expose the underlying coal layer during surface mining by Sands Hill Mining on permit D-1087 (Vinton County), while a drill rig prepares new holes to receive explosives on the blast bench above.*

*A complete description of the division's Blasting Program activities is included with the Industrial Minerals Program Updates (see page 20).*



*More than 4,000 lineal feet of Priority 1 and 2 highwall was backfilled and 41 acres were reclaimed as part of an abandoned mine land (AML) emergency project on the Powelson Wildlife Area located in Muskingum County.*

### ABANDONED MINE LAND (AML) PROGRAM

- The Powelson Wildlife Area located in Muskingum Township, Muskingum County contains disturbed lands left unreclaimed by an abandoned surface mine that was in operation prior to 1962. The operations mined the Middle Kittanning coal (#6 coal) and appear to have been a small shovel operation.

The pre-SMCRA activities led to large segments of highwalls within close proximity to Dresden Road (County Road 2). The abandoned highwalls average 35-40 feet in height with the pits either dry or water filled. Also since the area is public land managed by the Ohio Department of Natural Resources (ODNR) as a hunting area, the highwalls posed hazards due to intense visitation during hunting seasons.

The DMRM isolated 4,200 feet of the Priority 1 and Priority 2 highwalls to be backfilled as it encompasses the most critical of the areas. As a result, approximately 41 acres of the Powelson Wildlife Area have been reclaimed.

## INDUSTRIAL MINERALS REGULATORY PROGRAM

- The division continues to emphasize sharing resources between programs. Several inspectors are now responsible for inspecting both coal and industrial mineral (IM) mine sites in their territory. The IM program also receives assistance from the Division of Water Resources when conducting hydrology modeling at IM sites that are proposing dewatering as part of their mining plan.
- The division proudly gave six reclamation awards to industrial minerals operators in 2015. On September 3, representatives from The Olen Corporation were presented with the ODNR-DMRM Reclamation Award for outstanding reclamation on permit IM-0154 (known as Lucky Sand & Gravel).

Additionally, on November 13 at the Ohio Aggregates and Industrial Minerals Association (OAIMA) annual conference, the division presented five other ODNR-OAIMA Reclamation Awards for outstanding reclamation work to Hanson Aggregates permit IM-0230 (known as Highland Stone), The Olen Corporation permit IM-0154 (known as Lucky Sand and Gravel), Watson Gravel Inc. permit IM-0761, Feikert Sand & Gravel Inc. permit IM-1240, and Solomons Mines Inc. permit IM-1258.



*Feikert Sand & Gravel Inc. operates permit IM-1240, a sand and gravel mining operation in Holmes County. The permit was issued in July 1994. Pictures show grading and reclamation in progress (above) and the same site following grading and planting (below). The operator received recognition from DMRM for their outstanding reclamation on this site.*



*Representatives from The Olen Corporation were presented with DMRM's Industrial Minerals Reclamation Award for outstanding reclamation on permit IM-0154 in Portage County. Accepting the award from Chief Lanny Erdos (left) are Scott Shaver, Area Production Manager; Bryan Bartsch, Mine Planning Specialist; and Andrew Betti, Kokosing Operations Supervisor.*

*The Olen Corporation reclaimed more than 22 acres of land outside of their responsibility, saving the State of Ohio potentially hundreds of thousands of dollars in reclamation costs. Olen implemented an exceptionally innovative erosion control application of surface flow dissipators that greatly reduced site erosion issues.*



## MINE SAFETY PROGRAM

- Division Mine Safety Inspectors trained 5,886 miners in Annual Refresher Training (ART), first aid, and CPR as required by provisions of the Mine Act. During the year Mine Rescue Operations Coordinators also trained 1,400 miners in Mine Rescue. Staff also trained 20 miners in electrical ART. Staff continued to conduct required training for those contractors who provide a variety of unique logistical support services to the mining industry and its mine sites.
- In 2015 Mine Safety certification staff conducted examinations for 198 miners seeking certifications for key positions such as Mine Foremen, Coal Mine Electricians and Mine Medical Responders. Of those examined, 167 were successful in receiving certification. By both state and federal statute, mines cannot operate without the presence of these certified mine individuals. Six miners received Ohio certification under the reciprocal agreement between Ohio and the state of West Virginia.
- The mining industry experienced one fatality during the year. On July 10, a fatal accident occurred at a sand and gravel dredge operation near Cincinnati. A 50-year old mine superintendent with 26 years of experience was killed while attempting to dislodge a clam shell bucket from the bottom of the pond. The floating dredge capsized which resulted in fatal injuries to the miner.
- Ohio Mine Safety Competition - Eleven teams from Ohio, Pennsylvania and West Virginia competed in the 8th Annual Ohio Mine Safety Training Competition held at the ODNR Mine Safety Training Center in Cadiz. The teams' field event consisted of performing First Aid skills in a smoke-filled environment along with enhancing the skill sets for smoke room exploration and mapping. Individual apparatus 'benching' and team contests were again part of the training agenda. These were scheduled in a manner to run concurrently with the field problems, with the intent to reduce the amount of non-training idle time that teams experience while waiting in 'lock-up' for their turn to compete on the field.
- Mine Rescue Training Activities - In June 2015 Mine Safety staff again provided strong support as field judges, team trainers, and field support personnel to the National Mine Rescue Association (NMRA) Post 6's 34th Annual Ohio Valley Mine Rescue regional training competition held in Moundsville, West Virginia. Twenty-seven teams representing underground coal mine operators in five states participated in this important, high profile training event. Teams competed in working and solving Mine Rescue field problems, Apparatus Benching (troubleshooting and maintenance of the team's breathing apparatus), First-Aid, and Pre-shift examination problems.
- In October 2015 the Mine Safety program sent four inspector-trainers to attend the annual Training Resources Applied to Mining (TRAM). The TRAM Seminar is held each year at the National Mine Health & Safety Academy located at Beaver, West Virginia. At the seminar, participants attend and work in training classes that are presented by safety trainers from numerous states across the country. Ohio Surface Inspectors gather information and program training materials to be used in their upcoming Annual Refresher training classes conducted for Ohio's miners. These classes are held in the months immediately following the TRAM so that material is fresh, updated, and interesting.



*Among the activities offered during "Family Day at the Ohio Statehouse" in January, surface mine safety inspector-trainer Becky Newberry (right) offers hands-on fire suppression instruction to participants, seen here with First Lady Karen W. Kasich (center).*

## INFORMATION TECHNOLOGY SECTION

- Coal Electronic Permitting System (EPS) - In 2015, IT staff phased in additional electronic functions to allow issuance of permits electronically. All incoming revenue logging was converted to be done electronically. A method was developed to allow Coal application invoicing and receipting to be done electronically. Development of electronic submission of Annual/Final Reports and Maps was started and substantial progress has been completed on it.
- AML Electronic Project System (EPS) - This web based system will replace the Access database Pay Estimate system for making payments to contractors, as well as, become the Project Tracking System for Abandoned Mine Land (AML) projects. In 2015, development of methods to create, bid, contract, modify, and pay projects was completed. Testing is ongoing with an early rollout date in 2016 projected.
- Mobile GIS and AutoPDF - An initiative was created to update the Abandoned Mine Land Inventory System (AMLIS) unfunded inventory using Mobile GIS technology. During 2015, the DMRM Mobile GIS process was highlighted during the annual National Association of Abandoned Mine Land Programs conference held in Santa Fe, NM.

In 2015, the Mobile GIS process has led to 544 Priority Documentation Forms being filed; 1,606 Priority 1, 2, and 3 features collected; and has increased Ohio's AML inventory by \$42,934,257 in future projects eligible for federal Abandoned Mine Land funds through the Office of Surface Mining (OSM).

- Implementation of Ruggedized Tablet Computers - The division continued implementation of Windows based tablet computers for field staff to conduct inspections, conduct GIS review using ArcPad, generate GPS enabled pictures, and utilize remote network access. This enables staff to take electronic versions of their maps into the field to do GPS-enabled map review. Additional tablets were configured to be used with AML's new Electronic Project System.

- In 2015, the decision was made to use the existing watersheddata.com platform currently being used by AML for its water data, to house all water data collected by DMRM personnel, contractors, and data reported to DMRM by regulated industries. A scope of work has been developed and the George Voinovich School at Ohio University will begin the development work in 2016.



*DMRM Support Staff who serve our various field offices throughout Ohio include (left to right) Martha Cochran, Cambridge; Jayne Callahan, Zaleski; Debra Yost, Salem; Kay Conway, New Philadelphia; Dona St.Clair, Cambridge; Kay McCombs, Mt. Vernon; Carla Jarvis, Blue Rock; Shelby Schupp, New Philadelphia; and Loretta Reams, Zaleski.*

## 2015 PROGRAM UPDATES

# Coal Regulatory Program

The U.S. Department of Interior's Office of Surface Mining (OSM) Reclamation and Enforcement conditionally approved the state's Coal Regulatory and Permitting Program in 1982.

The OSM determined the Ohio program, as managed by the Division of Mineral Resources Management, is:

- no less stringent than the standards specified in the Surface Mining Control and Reclamation Act (SMCRA) of 1977;
- as effective as the federal rules adopted under SMCRA; and
- adequately funded to operate the program.

The OSM provides oversight and support to the Ohio program. Together, the OSM and the division developed a performance agreement that considers the goals and objectives of both agencies, as well as action plans for regulatory program areas of concern that have not been resolved or will not be resolved within 180 days.

The Coal Regulatory Program involves two primary areas—permitting and bonding along with inspection and enforcement.

### PERMITTING AND BONDING

A team of environmental and engineering professionals, blasting, soils and archaeological specialists, and hydrogeologists perform thorough

reviews of each application for a coal mining and reclamation permit. Detailed reviews by experienced staff ensure that potential environmental impacts are minimized; environmental, and public health and safety measures are included; and statutory requirements and rules are met during the permitting process.

A current estimated cost of reclamation is required to be maintained on each permit, and a performance security in the form of a surety bond, certificate of deposit, letter of credit or cash must be posted to ensure that adequate funds are available to reclaim the site and remediate adverse environmental impacts in the event the performance security is forfeited.

During 2015, staff:

- issued 7 new mining permits, 8 adjacent area permits and 1 exploration permit authorizing coal mining activities on 17,251.7 acres (2,047.9 surface acres and 15,171.2 underground acres, as well as 32.6 acres for exploration);
- invoiced \$1,203,837.50 for performance security to coal mining applicants and permittees;
- processed a total of 231 releases of performance security on coal mining operations for partial and complete reclamation releases on 10,900.84 acres; and
- processed excess bond releases where performance security exceeded the outstanding liability.

Permitting and regulatory staff met quarterly with industry representatives, other regulatory agencies including the U.S. Fish and Wildlife Service, Office of



*The site of American Energy Corporation permit D-425 in Belmont County encompasses an active wash plant, refuse disposal and deep mine.*

Surface Mining, U.S. Army Corps of Engineers and the state and federal Environmental Protection agencies, as well as other interested parties. Rule promulgation and development of procedure directives and guidelines associated with Ohio's coal mining law are conducted in a manner to provide input from the regulated industry and the Ohio Coal Association, as well as the Office of Surface Mining, the Ohio Environmental Council and the public.

Permitting and regulatory staff provide periodic mailings to the mining industry and consultants on topics of interest and provide training associated with law and rule changes or programmatic issues impacting the mining industry.

### HYDROLOGY

Permitting and field hydrologists investigated 12 citizens' private water supply complaints and assisted field inspection staff with several mine drainage and other hydrology-related investigations at active and reclaimed mine sites. The division's permitting hydrologists also sent recommendations for the issuance of one Remining Non-Numeric Modified NPDES Permit Application for Surface Coal Mining and Reclamation Permit by the Ohio EPA.

Division hydrologists assisted with the completion of a joint stream study entitled "Assessment of Stream Resources at Regulated Coal Mining and Remining Sites in Ohio". This study was a collaboration between The Ohio State University's Engineering Department and the ODNR DMRM to evaluate stream reconstruction and rebound after mining in the watershed. This report was finalized in June 2015 and presented at the Ohio Mineland Partnership Annual Fall Conference in October 2015.

### FIELD INSPECTIONS AND ENFORCEMENT

Field inspection staff is required to inspect Ohio's coal mining operations to monitor active mining and reclamation to assure compliance with the approved permit. Division inspectors enforce Ohio's laws regulating active mining to protect the public and environment from adverse impacts.

Inspectors monitor and evaluate reclamation to ensure that permit holders restore mined lands and waters



*Successful reclamation several years after surface mining of coal on Sands Hill Mining LLC permit D-2311 (Vinton Co.) shows vegetated fields, trees and a former mining pond the landowner requested be left permanent.*

to productive uses after mining is completed. In 2015, Ohio operators completed final reclamation on 4,732.14 acres.

The division's inspectors are required by law to perform at least one complete inspection of a permitted site every quarter and one partial inspection every month for active mines that have not completed Phase II reclamation requirements. Inspectors examine the mine area, as well as the area surrounding a mine, to



*The reclamation plan for Ohio American Energy Corporation permit D-2180 in Jefferson County requires the operator to restore stream channels and a buffer zone after mining. Tree tubes placed around newly planted seedlings protect and allow the young trees to establish within the stream buffer zone.*

ensure compliance with Ohio's laws and the approved permit.

In 2015, Mineral Resources Inspectors:

- conducted 2,382 coal mining operation inspections;
- responded to 27 public complaints on coal mining operations;
- issued 40 notices of violation and other enforcement actions;
- completed 100% of required inspections;
- conducted 210 bond release inspections recommending approval on 194 reclamation segments totaling 10,595.34 acres; and
- conducted 27 SM-39 inspections releasing 305.5 acres re-affected by other activities.

### 2015 RECLAMATION AWARD

The division's Coal Mining Reclamation Award was presented to Oxford Mining Co. LLC (Oxford Mining) by division Inspection and Enforcement staff in October. The award recognized outstanding reclamation achievement at the Kopka Mine D-2393 located in Tuscarawas County.

DMRM issued permit D-2393 (Kopka Mine) to Oxford Mining on July 13, 2012. Prior to mining site conditions consisted of exposed gob piles, highwalls, pits and poor quality acid mine drainage seeps left from pre-law mining that occurred in the 1950s. The mining and reclamation plan called for contour and auger mining of the #5 Lower Kittanning and #6 Middle Kittanning coal seams. During the mining process the operator encountered unknown coal refuse that had been placed in the #6 coal pits ranging from 15 to 20 feet in thickness.

The operator modified and submitted an additional plan to account for this unexpected environmental obstacle. The coal refuse was removed, segregated and encapsulated with non-toxic material above the reestablished water table. During the mining and reclamation operation Oxford Mining eliminated 4,385 linear feet of existing highwall; buried and encapsulated significant amounts of coal refuse; and capped, resoiled and vegetated a three acre preexisting coal refuse pile. Coal removal was completed on September 29, 2014; backfilling and grading of the

58.3 acre site was completed on October 30, 2014. This work was completed in half the time allowed by law. Resoiling, seeding, liming and mulching activities were completed on November 10, 2014. The site has been successfully restored to a post-mining land use of grazing land.



(left to right) DMRM staff Michael Kosek, Coal Program Manager and Greg Hoffman, Mineral Resources Inspector presented DMRM's Coal Mining Reclamation Award to Oxford Mining Co. LLC staff Nate Leggett, Director Regulatory Affairs; Jerry Piccin, Reclamation Foreman; and Chuck Hothem, Mine Superintendent. Oxford's Kopka Mine permit D-2393 is located in Tuscarawas County.



Kopka Mine (D-2393) reining permit reclaimed 58.3 acres of pre-law, unreclaimed highwalls as well as an existing 3 acre gob pile which was capped, resoiled and seeded with grasses and legumes. Reclamation of this area has reduced acid mine drainage and off-site sedimentation.



Three stages of the mining and reclamation operation are visible in this view of the Oxford Mining Co. LLC surface mining permit D-2325 in Tuscarawas County. At far right, the site is actively being mined; in the center, resoiling is underway; and on the left, the land has been reclaimed.

**REMINING PROGRAM**

The division recognizes there are thousands of acres of abandoned mined lands in need of reclamation yet still contain valuable coal resources. With advancements in mining technologies and numerous recent federal and state incentives for active coal remining, the division is working with the industry as well as state and federal partners, to encourage coal remining permits.

In 2015 the division re-energized the Coal Remining Taskforce consisting of state and federal agencies along with industry representatives to cooperatively develop remining incentives. Much of the focus is on stream and wetland mitigation for remining sites. Also a new Lands Eligible for Remining Reduced Maintenance Procedure Directive was developed and sent to the industry and other stakeholders for comment.

The division successfully approved and issued six new and adjacent area permits for remining of previously disturbed areas; including elimination of 921 acres of pre-law water-filled pit impoundments and mine spoils as well as 44,338 linear feet of dangerous unreclaimed highwalls. This adds to the long list of permits where legacy mining sites in Ohio are being reclaimed by the mining industry through remining, making nearly unusable land productive again.

The Remining Program also works cooperatively with the division’s AML Program to encourage remining and reclamation opportunities for those

mine operators that are mining in close proximity or adjacent to abandoned mined lands by entering into reclamation contracts.

**2015 COAL PRODUCTION**

The Ohio Department of Taxation reported coal production in 2015 at 17.3 million tons, a decrease from tonnage reported in the previous five years.

COAL PRODUCTION IN TONS (2011 - 2015)

2011	27,929,089
2012	26,344,046
2013	24,844,584
2014	23,079,068
2015	17,303,128

**PUBLIC INVOLVEMENT**

Ohio law provides for public participation in the development, revision and enforcement of regulations, standards, reclamation plans or programs. For example, after a permit application has been deemed complete for a surface or underground coal mining operation, the applicant publishes a public notice in a local newspaper identifying the public location where the application may be reviewed. The notice also provides citizens with an opportunity to provide written comments or request an informal conference regarding the permit application.

## Abandoned Mine Land Program

Serious public health and safety problems and environmental concerns still exist with surface and deep coal mining that occurred prior to the reclamation standards used today. Problems vary and may include: dangerous highwalls, pit impoundments, mine subsidence, streams degraded by acid mine drainage, flooding, landslides, and open mine portals and shafts.

As a result, the Abandoned Mine Land (AML) Program, with federal- and state-funded components, was created to address high priority mine-related issues. These problems are addressed through the design and construction of reclamation projects.

The Council on Unreclaimed Strip Mined Lands (CURSML) approves the federal grant from the Office of Surface Mining (OSM) and all state AML projects. The council is composed of 11 members including six legislators, three citizens, the chief of the DMRM, and a designee of the director of the Ohio Department of Natural Resources (ODNR).

The AML Program, which has been managed by the division since 1974, provides jobs and economic benefits to Ohio's Appalachian region through reclamation and construction projects. In 2015, 23 projects were bid for construction through the AML Program totaling approximately \$5.5 million. These projects occurred in 21 different Ohio counties.



*Township Road 115 (Jefferson County) sustained damage when a landslide occurred in spring 2015. The road was originally built on spoil left from surface mining prior to 1976. The division began stabilization of the site in 2015 and will complete the project in 2016.*

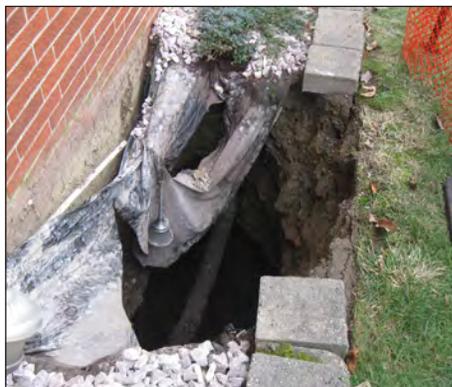
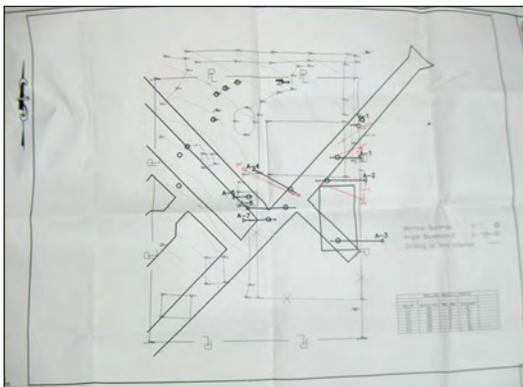
### STATE ABANDONED MINE LAND PROGRAM

The state-funded AML Program supports numerous projects which are funded by state severance taxes on coal and a limited number of industrial mineral pre-law sites in Ohio. The state-funded program emphasizes environmental restoration associated with mining, which occurred before April 10, 1972.

Projects primarily focus on coal-related environmental restoration, such as the restoration of streams impacted by acid mine drainage. This program is also responsible for providing supplemental funding for the reclamation of industrial minerals mining sites that were left in an unreclaimed state and where the forfeited surety bond is insufficient to complete the restoration.

In 2015, the CURSML approved funding for two projects totaling \$200,000. The Daniels Reclamation Project involves standard reclamation of barren spoil piles and associated water filled pits. The reclamation will reduce acid mine drainage in the Little Raccoon Creek watershed. This project is funded cooperatively with federal AML funds at a 50% cost share.

*A basement wall shows damage caused by mine subsidence that affected five properties in Massillon (Stark County). Actively under construction in 2015 and ongoing in 2016, the Seese Subsidence Project required drilling into an underground mine complex and filling voids with grout to stabilize multiple areas.*



*The Littlejohn Subsidence Emergency Project addressed several dangerous mining-related sinkholes that opened suddenly in March on adjacent properties in Wintersville, Jefferson County. An opening 20 feet deep exposed a house foundation. Another sinkhole in the yard measuring 15 feet in diameter and 7 feet deep was lined and filled with stone before backfilling.*

The second project is the West Fork AML Enhancement Project and is a no-cost project to the State of Ohio through direct negotiated contract with a mining operator, B&N Coal, in Noble County. A pre-law underground mine will be “daylighted”, or mined through, to remove the coal and eliminate legacy acid mine drainage that discharges from the site and into the West Fork of Duck Creek.

### **FEDERAL ABANDONED MINE LAND PROGRAM**

The other component of the Abandoned Mine Land Program is funded by the OSM, which is supported by a federal severance tax on coal mined nationwide. The federal Surface Mining Control and Reclamation Act of 1977 authorized this program.

Annual grants fund the highest priority public health, safety and environmental problems associated with areas mined prior to August 3, 1977. In 2015, the division was awarded an AML grant for \$13.2 million to support the design and/or construction of 31 non-emergency projects, two acid mine drainage projects, and emergency projects as they arise.

The AML Program is supported by an in-house engineering and design services group, hydrologists, and the environmental specialists/project officers. Division engineers provide a variety of services including project design, surveying, consultant management, construction oversight, regulatory reviews and revisions, and complaint investigations. Hydrologists investigate water complaints, collect and analyze water data and participate in the design team for water related projects. Environmental specialists

manage the National Environmental Policy Act and Army Corps of Engineers permitting, eligibility determinations, project planning, as well as right-of-entries and coordination with outside agencies.

The AML staff’s work resulted in the following accomplishments in 2015:

- reclamation of 5,360 feet of dangerous highwalls;
- stabilization of 4.12 acres of landslides and seepage;
- sealing of 2 mine portals and vertical openings;
- restoration of 4.5 acres of clogged streams;
- contracted 17 projects;
- construction of \$4.3 million and completion of \$4.07 million in reclamation projects.

### **NON-EMERGENCY HEALTH AND SAFETY PROJECTS**

Non-emergency abandoned mine land problems are categorized by the level of risk posed to the general public and property. Priority 1 problems are deemed extremely dangerous while Priority 2 problems are also dangerous, but to a lesser degree. Projects are selected from the program’s inventory of abandoned mine land hazards, which are developed from mining-related complaints and field investigations.

### **EMERGENCY HEALTH AND SAFETY PROJECTS**

The AML Program responds quickly to emergency complaints and situations resulting from abandoned mine land conditions that present immediate and substantial threats to public safety. Since 1992, Ohio’s program has administered the design and construction of emergency projects. Prior to 1992, this was a function of the federal Office of Surface Mining.

Beginning in 2011, the Office of Surface Mining no longer provided funding for this program separate from non-emergency grant funding. As a result, emergency project funding was shared with funding for Priority 1 and 2 public health and safety problems.

In 2015, the AML Emergency Program investigated 88 potential emergency complaints. As a result of investigative efforts, 38 projects were approved to eliminate significant hazards. These projects include 26 open sinkholes, 9 underground mine subsidences, and 3 landslides. A total of \$1,209,682 was spent on emergency projects in 2015.

### ACID MINE DRAINAGE ABATEMENT PROJECTS

The division recognizes the role the Acid Mine Drainage (AMD) Program plays in assisting the public in its desire to restore the quality of local watershed resources impacted by acid mine drainage. As a result, the division sets aside up to 30 percent of its annual grant for improving acid mine drainage-impacted streams. As with other restoration projects, the goal is to restore streams to pre-mining ecological conditions and construct remediation activities which will benefit the local environment.

The AMD Program (AMD set-aside) funded two projects in 2015. The first was the Big Four Wetland project in the Monday Creek Watershed. A series of three wetland cells were constructed in the Big Four Hollow on Wayne National Forest property downstream of previously installed passive acid mine



*The Flint Run Wetland Project, Jackson County required the construction of three temporary stream crossings along the haul road used to transport material to the cross berm location.*

drainage treatment systems to reduce metals, such as aluminum and iron, from entering Monday Creek. The project was finalized and began treating water in the fall of 2015. The Monday Creek Watershed Restoration Partnership (Rural Action) was awarded a grant from the Ohio EPA through the Section 319 Non-Point Source program and contributed \$70,919.46 toward the project cost.

A second project, the Flint Run Wetland Project, was also completed in 2015. The project consisted of installing a large berm in the Flint Run stream to enhance a large wetland downstream of acid mine drainage sources and treatment systems. The berm will stabilize the wetland and provide for long term and consistent iron settling/removal. The project will



*Big Four Wetland Project - Additional wetland construction (left) in 2015 downstream of existing limestone leach beds (right) serves to treat water by trapping and storing metals rather than transporting them into Monday Creek in Hocking County.*

reduce iron loads in Flint Run and Little Raccoon Creek. Matching funds for the project were provided by the Ohio Valley RC&D of \$95,500 through an Office of Surface Mining Watershed Community Assistance Program grant.

### AML GEOTECHNICAL SERVICES

The AML Program supports a geotechnical services unit comprised of a geologist, two drilling specialists and a variety of drilling equipment. The unit performs investigations to evaluate potential mine-related problems and to assist in the design of projects.

In 2015, the division's geotechnical specialists provided assistance on 45 complaint investigations and project designs by completing 3,924 feet of subsurface drilling.

Drilling activities included:

- emergency complaint investigations and designs – 21 sites totaling 2,276 feet drilled; and
- non-emergency complaint investigations and designs – 24 sites totaling 1,648 feet drilled.

### HISTORIC PRESERVATION SERVICES

In 2011, the AML program changed how it maintains compliance with Section 106 of the National Historic Preservation Act. Previously the division contracted with a historic preservation professional to conduct initial evaluations of the potential historical impacts of reclamation projects. This work is now completed by our in-house environmental specialists through a programmatic agreement with the Ohio Historic Preservation Office and the Office of Surface Mining. The division then contracts with a qualified specialist (Hocking College) to complete Phase I evaluations of sites for which it has been determined there is a potential for adverse impact on eligible or registered sites, and to determine mitigation measures where applicable.

### BOND FORFEITURE PROGRAM

In addition to the AML Program, the division is responsible for the restoration of land left unreclaimed by coal and industrial mineral mine operators who did not fulfill their original reclamation obligations under existing regulations. When reclamation has not been fulfilled, the division collects forfeited bond monies from the mine operator (permittee) or from



*Reclamation on D-2294 Forfeiture Project, one of six Valley Mining Inc. abandoned sites to undergo restoration at a cost to the State.*

the operator's (permittee's) surety bond company. The division then designs restoration plans and contracts with a third party to reclaim the impacted areas.

Supplementary to forfeited bond monies, severance taxes on each ton of coal and industrial minerals are collected to supplement the per-acre bond amount. These funds are used when the cost to reclaim an area exceeds the bond forfeited for that operation.

In October 2014, division Coal Regulatory staff issued bond forfeiture orders to Valley Mining Inc. on six abandoned mine sites in Belmont, Tuscarawas, Guernsey, Stark and Jefferson counties. The division's AML/Forfeiture staff has collected forfeited bond monies and is in the process of designing restoration plans for the sites. One of the Valley Mining Inc. sites, D-2294, was reclaimed in 2015 for a cost of \$71,750.

In addition, a maintenance project was completed on Miller D-1121 for a sediment pond that needed repair after large rain events damaged the intake and outlet structures after reclamation. The repairs were completed in 2015 for a cost of \$58,662.85.

One project was completed on an Industrial Mineral forfeiture site in 2015. A pond repair was completed on the Zerger Quarry IM-0070 reclamation project. The large pond spillway was damaged during an extremely large rain event and repairs were made at a cost of \$112,892.67.

### ENGINEERING AND DESIGN SERVICES

Division engineers provide a variety of services including project design, design consultant management and construction oversight, regulatory reviews and revisions, and complaint investigations.

In 2015, staff completed 60 designs on AML non-emergency, emergency, acid mine drainage and forfeiture projects.

#### IN-HOUSE DESIGNS COMPLETED (2013-2015)

	2013	2014	2015
Non-emergency in-house designs	18	20	20
Non-emergency unit price designs	0	0	0
AMD in-house designs	5	5	3
Emergency in-house designs	6	27	6
Emergency unit price designs	20	7	26
Forfeiture in-house designs	1	1	5
Total	50	60	60



Roof collapse of an underground coal mine, abandoned in 1919, caused a sink hole subsidence to open suddenly in 2015 and drain a Tuscarawas County residential pond (upper left). An emergency in-house plan designed by division engineers called for filling the 8 foot deep cavity with polyurethane foam (upper right) and concrete (lower left) to form a plug-type structure, followed by a clay liner and surface grading prior to re-filling the pond (lower right). The Hykes Subsidence Project was complete in 2015.



*Permit IM-1047 is a sand and gravel mining operation in Portage County with ongoing contemporaneous mining and reclamation. The operator has relocated, graded and revegetated a drainage waterway running through the permit's affected area. The permit was originally issued in June 1989 and is operated by Shelly Materials Inc.*

## Industrial Minerals Regulatory Program

Ohio is a major producer of non-fuel minerals, also known as industrial minerals. The industrial minerals produced in Ohio, listed in order of highest to lowest per ton production include:

- limestone and dolomite
- sand and gravel
- salt
- sandstone and conglomerate
- shale
- clay

The state's first surface mining laws were enacted in 1974 with the establishment of Ohio Revised Code Chapter 1514, which required an industrial minerals operator to submit a detailed plan for mining and reclamation, and to post a reclamation assurance bond in order to obtain a permit for mining.

Surface mining refers to all or any of the process used to extract minerals from the earth or from the surface of the land by surface excavation methods, such as open pit mining, dredging, placering or quarrying. This includes the removal of overburden for the purpose of determining the location, quantity and quality of mineral deposits. Also the incidental removal of coal at a rate of less than one-sixth the total weight and less than fifty percent of revenues of minerals and coal removed during the year.

Significant changes were made to Ohio's surface mining laws in 2002, which incorporated requirements for groundwater hydrology modeling and blaster certification, and an updated public and interagency application notification process.

The Industrial Minerals Regulatory Program involves two primary areas—permitting and bonding along with inspection and enforcement.

Inspection staff, assisted by expert environmental specialists, hydrogeologists, blasting specialists and engineering staff, performs complete and thorough reviews of each application for each industrial mineral mining permit submitted for approval.

Detailed reviews ensure that environmental impacts are minimized, all necessary environmental safeguards are in place, and that all statutory requirements are met during the permitting process. During the permitting process, multiple agencies, including local governments, are invited to provide input and comments regarding individual permits.

A performance bond in the form of a surety bond, certificate of deposit, letter of credit or cash must be posted to provide funds for reclamation of a mine site if an operator fails to complete reclamation. Proof of public liability insurance is also required prior to the start of mining.

**PERMITTING AND BONDING**

During 2015, the division issued 8 new industrial minerals permits on 637.9 acres and 14 amendments on 397.7 acres. Staff reviewed and approved 62 modifications to permits and 1 permit renewal.

In addition, the division

- invoiced \$95,500 in performance bond for industrial minerals applicants;
- invoiced \$229,575 in performance bond or industrial minerals permit transfers;
- processed a total of 73 releases of performance security on industrial minerals mining operations for excess bond, partial reclamation releases and complete reclamation releases which totaled 1036.2 acres.

Final reclamation was completed on 512.5 acres that had been affected by mining.

Industrial minerals staff makes it a priority to participate in periodic meetings with industry representatives to promote open communication, as well as provide training and clarification to assist

consultants and applicants with the permitting process. Rules related to Ohio’s industrial minerals mining law are written with input from the regulated industry, the Ohio Aggregates and Industrial Minerals Association, the Ohio Environmental Council and the public.



*Rohr Excavating LTD began mining limestone and clay in 2011 from permit IM-2368 in Holmes County. A haul truck is being loaded with limestone prior to heading to the crusher. Blasting is not needed to remove stone from this site.*

**INDUSTRIAL MINERALS PERMITTING ACTIVITY (2011-2015)**

Year	New Permits	Amendments	Exempt	Modifications	Transfers	Renewals	Total Current Permits
2011	8	12	3	82	29	30	667
2012	5	30	1	213	22	26	636*
2013	3	22	4	97	33	14	618*
2014	17	16	6	88	11	2	616*
2015	6	14	2	62	22	1	607*

\*The decrease in total permits is reflective of older inactive sites having the final reclamation releases approved and an increase in operators adding acreage to existing permits (amendments) rather than obtaining new permits.

**INDUSTRIAL MINERALS PRODUCTION IN TONS (2011-2015)**

	2011	2012	2013	2014	2015
Limestone & dolomite	52,710,175	58,305,506	57,562,592	64,838,092	67,030,787
Sand & gravel	27,742,189	30,479,982	28,708,583	31,796,806	35,854,972
Salt	5,635,712	4,261,370	3,964,757	5,597,994	5,702,461
Sandstone & conglomerate	1,433,528	1,708,957	1,343,705	1,631,210	1,539,729
Clay	274,310	289,322	389,816	636,260	1,331,353
Shale	760,485	421,154	886,853	1,070,030	1,042,575
<b>TOTAL</b>	<b>88,556,399</b>	<b>95,466,291</b>	<b>92,856,306</b>	<b>105,570,392</b>	<b>112,481,877</b>

## ANNUAL INDUSTRIAL MINERALS PRODUCTION ACTIVITY

An industrial minerals permit has a term of 15 years, with the option to apply for renewal at the end of the term. The work of the division continues throughout the life of each operation. During a permit's lifecycle, an operation may be actively removing minerals, temporarily inactive (held for future reserves) or completely finished with mining and in a reclamation phase. The number of active permits fluctuates from year to year (as seen on page 18). However, the division remains diligent to ensure that each permitted operation meets all environmental requirements during all phases of mining and reclamation.

During 2015, the Industrial Minerals Program was responsible for monitoring 607 permitted industrial minerals operations in 87 out of 88 counties (Henry County in northwest Ohio currently has no issued mine permits). Mineral production increased at over 300 active sites with a total of 112,481,877 tons of minerals being produced. This was a 6.5% increase in production from 2014.

## GROUND WATER MODELING FOR DEWATERING PERMITS

Applicants are required to submit a ground water model for review or submit data for ODNR to model when a new permit that includes dewatering is received or an amendment or modification to deepen an existing permit is submitted. The review and completion of ground water models is done in coordination with ODNR Division of Water Resources.

In 2015, the division received two requests to model data. Four models and one model modification to mine deeper were completed by the division and ODNR Division of Water Resources.

## FIELD INSPECTIONS AND ENFORCEMENT

Mineral resource inspectors enforce the laws associated with permitting and regulating active mining to protect the public and the environment from adverse impacts. Individual inspectors may be responsible for more than 100 surface mine permits; their inspection regions range from 10-15 counties each.

Staff is required to inspect the industrial minerals mining operations to monitor active mining and reclamation to ensure compliance with the approved permit and that operators restore mined lands to productive uses. During an inspection, inspectors examine the mining area, as well as the landscape surrounding the mine, to identify any issues that may require attention.

Although there are no statutory requirements as to frequency of inspections, the Industrial Minerals Program has established a goal of conducting quarterly inspections on all mine sites annually.

In 2015, division staff conducted 2,038 mine site inspections. Of those inspections, 23 were administrative related, 916 were partial inspections and 1,122 were complete inspections. The division also responded to 26 formal complaints regarding mining operations during the year.

A breakdown of the division's investigations of complaints is as follows:

- Water well – 6
- Illegal mining – 6
- Blasting – 10
- Drainage/Flooding/Erosion - 4

During 2015, 20 Chief's Orders were issued for the following categories:

- Blasting violations - 4 flyrock, 1 airblast exceedance, and 2 ground vibration exceedance
- Delinquent reclamation - 7
- Abandonment of surface mining permit - 2
- Mining without a permit - 2
- Bond forfeiture - 2



*A Caterpillar 324E long reach trackhoe mines sand and gravel for William Albert Inc. on permit IM-193 in Coshocton County.*



*Melvin Stone Company LLC operates IM-1298 (Plano Road Plant) in Ross County for production of limestone, sand and gravel. The permit has an approved blasting plan and dewatering to facilitate mining.*

## BLASTING

The Blasting Program provides services primarily to four division program areas: Permitting, Mine Safety, Coal Regulatory, and Industrial Minerals. It investigates citizen complaints concerning blasting (ground vibration, airblast, flyrock, and alleged damage to structures); coordinates the Ohio Blaster Certification Program; reviews the blasting plan section of mining permit applications; processes citizen requests for preblast surveys; and assists inspectors, citizens, mining companies, consultants, blasters, lawyers, insurance adjusters, engineers, and various governmental agencies with blasting regulation interpretation and compliance problems.

During 2015, blasting program staff and assistants:

- investigated 19 new blasting annoyance and/or damage complaints (10 coal-related, 9 quarry-related);
- evaluated 6 incidents of flyrock cast beyond the permit limits (1 coal-related, 5 quarry-related);
- conducted seismographic monitoring of blast vibrations at 34 homes (25 coal-related, 9 quarry-related);
- processed 3 citizen requests for preblast surveys (coal only);
- reviewed and logged 3 preblast survey reports (coal only);
- reviewed 54 applications for blaster certification (18 new, 36 renewals); and

- reviewed 15 blast plans (6 coal-related, 8 quarry-related, 1 AML-related).

Despite more than an estimated 8,000 blasts in Ohio's surface coal mines and quarries, there were no verified incidents of structural damage to homes from blast vibrations, and the six off-site flyrock incidents caused no injuries and no significant property damage.

Special projects included:

- helped present the Ohio Drilling & Blasting Conference;
- gave presentations on seismographic data interpretation at the Ohio Drilling & Blasting Conference, the MSHA Mine Blasting Safety & Application Seminar, and the West Virginia DEP's annual Blaster Refresher;
- conducted a five-day course for 16 persons seeking certification as a surface mine blaster;
- participated on the Standards Committee of the International Society of Explosives Engineers, to improve field practice guidelines and annual calibration certifications for blasting seismographs; and
- continued working with a group of state and federal blasting regulators to improve blaster certification programs across the Appalachian region.

## PUBLIC INVOLVEMENT

When mining is proposed in areas that have not been previously zoned for mining, or significant amendments and modifications are proposed for existing permits, the division provides opportunities for the public to become involved in the industrial minerals permitting process. When a permit application is deemed administratively complete, the applicant (operator) is required to publish a public notice in a local newspaper for any area that is not zoned or has not had a conditional use for mining approved within 365 days. The notice identifies a public location where the application may be reviewed and copied, as well as provides the public an opportunity to make comments or request an informal conference regarding the permit application.

Staff schedules and attends meetings with applicants, citizen groups, landowners and other individuals interested in mining activities, and provides copies of industrial minerals mining applications, permits and public record items upon request. This year, as in the past, Division staff partnered with the Ohio Aggregates & Industrial Minerals Association by participating in the Project Stone teacher's workshop for a Q & A session held at Wright State University.

Division staff also assisted with the Division's exhibit at the Ohio State Fair and toured the Cargill Salt Mine under Lake Erie.



*A Northwest powershovel is seen mining and loading clay into a semi-truck on permit IM-0047. Belden Brick Co. produces clay, shale, limestone and coal from this Tuscarawas County mining operation. The permit was originally issued in 1976 and expires in 2021.*

## Mine Safety Program

Established in 1872 to protect miners and the mines in which they work during the extraction of resources, the Ohio Mine Safety Program promotes safe mining practices through four major program services of mine rescue, mining inspections and safety audits, certification testing of mining officials and the safety training of miners.

The division's Mine Safety Inspectors and Mine Rescue Operations Coordinators possess vital agency and industry experience necessary to positively interact with miners, and influence safety performance and behavior among miners and mine operators.

### MINE FACILITY SAFETY INSPECTIONS AND AUDITS

Mine Safety law mandates the division to conduct quarterly inspections of all underground coal and industrial minerals mines, and at all surface coal mines.

Inspections are also conducted at surface industrial minerals (IM) mines, when the following conditions exist:

- Inspections are conducted at surface IM operations that are not regularly inspected by the Mine Safety and Health Administration (MSHA);
- Increased Mine Safety inspections are mandated for any surface IM operation that has exceeded the Non-Fatal Days Lost Incidence Rate (NFDLIR) for the previous year;
- Increased Mine Safety inspections are mandated immediately for any surface IM operation that has experienced a fatal or serious mining accident.

Mine Safety also conducts non-regulatory safety audits at surface IM operations for which the division has been requested by the mine operator to provide Annual Refresher Training (ART) for its miners. Miners are required by MSHA to receive this approved training at intervals not to exceed 12 calendar months.

During 2015, Mine Safety Inspectors conducted 181 IM safety audits, 190 regular IM and coal inspections,



*An underground coal mine air course walkway.*

and 6 re-inspections. As a result of these activities, 208 unsafe conditions were identified and corrected by way of written issues.

Quarterly inspections were conducted at all 17 of Ohio's underground mining operations. Of these, ten are coal, two are salt and five are limestone. Two of these coal operations in southeastern Ohio are large longwall mines with annual tonnages continuing in the millions. Two coal mines closed permanently during 2015 due to the downturn in the coal markets. The salt mines are located in the Cleveland and Mentor areas on the shores of Lake Erie. These underground mines extend well out beneath the lake itself, several thousand feet below the surface. The annual tonnage for these operations also numbers in the millions.

Oil and gas well plugging or re-plugging operations are closely inspected in locations where existing well bores have intersected the coal seams of active underground coal mining operations. These locations and activities are critical in that miners will be physically mining through, or mining in close proximity to these well bores. It is therefore imperative to ensure they are properly plugged in accordance with strict guidelines, specifications and requirements intended to ensure the safety of miners during the mining process.

### MINE SAFETY COMPARISON

Preliminary data for CY2015 indicate that Ohio miners' Non-fatal Days Lost Incidence Rates (NFDLIR) ranked below the national average in both coal and industrial mine-type categories for surface and underground IM operations.



**SAFETY TRAINING AND CERTIFICATION**

Miner safety training is critical to improving the health and safety of Ohio’s miners and the working conditions in the mines. In an effort to reduce fatalities, accidents, and mining-related illnesses, mine safety inspectors train miners and contractors in ways to recognize and respond to hazards, and to address health and safety concerns.

In 2015, 5,886 mine workers were trained by division Mine Safety staff in a variety of areas including first aid, CPR and annual refresher courses; 20 miners were trained in electrical annual refresher courses; another 1400 miners were trained in Mine Rescue Part 49.

Certification staff conducts testing for a variety of underground and surface mining positions, such as Mine Foreman, Coal Mine Electrician and Mine Medical Responder. Structured examinations mandated by state law serve to ensure that the applicant possesses the necessary applicable mining experience, and has acquired the skills and knowledge to be certified to work in these important positions.

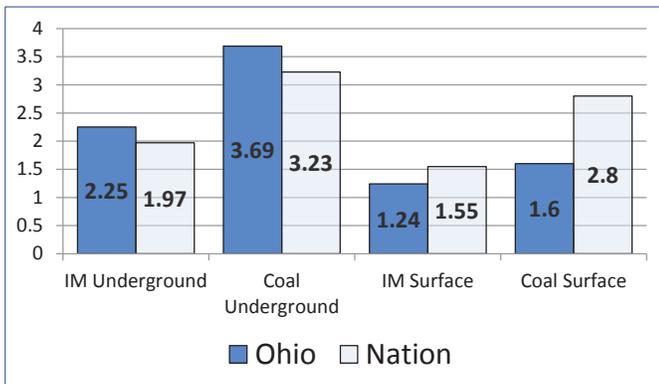
Certification is an essential part of promoting and maintaining the safety and productivity of Ohio’s mining community. In 2015, division staff certified 167 of the 198 applicants examined, of which the majority sought foreman certification for underground and surface mining. Six miners received Ohio certification under the reciprocal agreement between Ohio and the state of West Virginia.

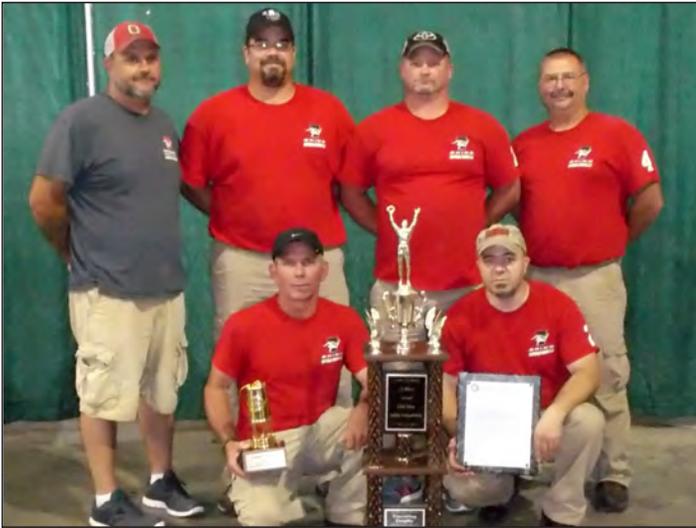
The NFDLIR equation is used to compare and evaluate the frequency of injuries within various types and sizes of mining operations. By using the equation, similar mining operations with larger numbers of employees and man-hours worked can be accurately and fairly compared to smaller operations. Using this standard equation also enables state-to-state and state-to-national data comparison.

$$NFDLIR = \frac{\text{Number of injury occurrences}}{\text{Number of employee hours}} \times 200$$

In 2015, 104 lost time injuries occurred in Ohio’s mining industry in comparison to 123 lost time injuries in 2014. This is a decrease of 15% from the 2014 data.

2015 INCIDENCE RATES (Ohio Average Compared to the National Average)





*Ohio's Hopedale Mine Rescue Team received the best score among teams participating in the field event during the Ohio Mine Safety Training Competition.*

### **MINE RESCUE TRAINING COMPETITIONS**

The division's Mine Safety Inspectors and Mine Rescue Operations Coordinators officiate and participate in the planning, administration, team support and judging of multiple underground mine rescue training competitions annually throughout the geographic region of Ohio, Pennsylvania, West Virginia and northern Virginia.

Mine rescue training competitions are designed to test the knowledge and technical skills of a team, and to evaluate the team's emergency response and preparedness level. Teams work problems related to simulated underground mine fires, explosions and other potential mine emergency scenarios. To maintain MSHA certification as a Mine Rescue team, federal law requires that the team must train a minimum of 96 hours per year and must compete in a minimum of two sanctioned mine rescue training competition exercises per year. It is important to note that an underground mine cannot operate without mine rescue team coverage provided by at least two certified mine rescue teams.

At all training competition events, mine rescue teams must compete in the mine rescue field problem exercise to receive credit toward meeting the MSHA team certification requirement. However, at many of the contests, they also compete in the 'benching' competition which tests a team member's skill in the

maintenance, trouble-shooting and repair of the closed circuit breathing apparatus, the Drager BG-4. Many teams also have one or more team members compete in the pre-shift examiner contest. The pre-shift tests the mine examiner's knowledge and ability to identify, correct, report and record hazards in a manner that would normally be done prior to the beginning of each mining shift. Some teams also enter members in the First Aid competitions.



In 2015, the division hosted its 8th annual Ohio Mine Safety Training Competition with eleven teams participating from Ohio, Pennsylvania and West Virginia. Since its beginning in 2008, the contest was intended to assist Ohio teams in complying with team certification requirements, and therefore was open to Ohio teams only. However, participation requirements were soon revised to allow mine operators with mines in both Ohio and other neighboring states, such as Pennsylvania and West Virginia, to afford their teams of the competition's training and compliance benefit.

Mine Safety staff also provided strong support for the National Mine Rescue Association (NMRA) Post 6's Annual Ohio Valley Mine Rescue competition. In 2015, twenty-seven teams representing underground coal mine operators in five states participated in this important, high profile training event. Mine Safety staff routinely work as judges in a reciprocal manner with the surrounding state competitions that include state agency mine safety officials from Ohio, Pennsylvania and West Virginia, along with officials from the Mine Safety and Health Administration.

## MINE RESCUE OPERATIONS

The division maintains mine rescue stations strategically located in eastern Ohio near the towns of Barnesville, Glouster and Cadiz. Each mine rescue station maintains the necessary equipment to support mine rescue teams' response to a mine emergency incident. They also maintain an emergency vehicle to transport this equipment to the mine.

All mine rescue equipment is serviced, tested, calibrated, and maintained in a state of readiness. One of the four rescue vehicles is specially equipped to service Drager BG-4 self-contained breathing apparatus at remote sites, and to provide rapid turnaround for reuse during a mine emergency. The division also maintains foam generating fire-fighting equipment and a mobile air quality lab van in Cambridge, capable of providing mine gas analysis and enhanced logistical support for the rescue or recovery effort.



Under an agreement with the federal Mine Safety and Health Administration and agreements with underground mine operators, the state Mine Rescue Network provides coverage to all Ohio underground coal mines and to all underground IM operations with the exception of one limestone mine located in the southwestern part of the state, which has elected to utilize a private rescue contractor. As required by state statute, and under provisions of Ohio's agreement with MSHA, each Ohio mine rescue station is thoroughly inspected for compliance every six months by MSHA inspectors. All of Ohio's stations were found to be in compliance in 2015 and ready to respond.

## Central Support Services

### INFORMATION TECHNOLOGY

The Central Services Information Technology section is responsible for providing Information Technology support and leadership for the division, including project management, business analysis, and developing and maintaining the division's computer programs/applications such as the Central Tracking System, the Electronic Coal Permitting System, and the division Geographic Information Systems.

The staff analyzes business processes and deploys solutions to improve business efficiencies. Additionally, IT staff routinely work with employees to support all hardware and software needs, as well as coordinate computer training.

### COMMUNICATIONS

Communications' responsibilities include publications development, media relations, public inquiries and public records requests, web site development, and other marketing and public affairs support.

### FISCAL SERVICES

Inventory, purchasing and fiscal responsibilities include preparing and monitoring the annual budgets and grants; developing internal budget controls and tracking all division accounts; processing expenditures; revenue deposits and reconciliations; and maintaining equipment inventory and Fleet Ohio files.

### HUMAN RESOURCES

Human resources and labor management responsibilities include handling all activities related to hiring, transferring, retiring or separating employees; employee certification and training; and coordinating employee benefits and training opportunities.



**Ohio Department of Natural Resources  
Division of Mineral Resources Management**

[minerals.ohiodnr.gov](http://minerals.ohiodnr.gov)