

28th Annual Surface Mined Land Reclamation Technology Transfer Seminar

Dear Friends & Associates,

As Chairman of the Indiana Society of Mining and Reclamation, I am pleased to invite you to attend the 28th annual Technology Transfer Seminar to be held December 8 & 9, 2014, at the Ramada Jasper Conference Center (formerly the Jasper Inn & Convention Center), Jasper, Indiana. We have a variety of excellent topics and speakers on the latest trends and technologies in reclamation and mining. On Monday, there will be three concurrent workshops and a Monday evening poster session. The "Water Workshop" is **pending** approval for 5 technical hours of continuing education toward renewal of Indiana Wastewater licenses. There is also a "Clean Air Workshop". The "Blaster Retraining" Workshop is **approved** for 5 hours of continuing education toward IN Blaster Certification renewal; IN Dept. of Homeland Security 5 hours renewal for Regulated Explosives Use-Operator and Regulated Use-Blaster License. Tuesday will be a full day of presentations including a panel session. I look forward to having you join us for this year's seminar. Certificates will be provided that may be used as professional development hours for consideration of meeting requirements for licensed Indiana Professional Engineers.

Sincerely,

Chris Smith

Chairman

ISMR Executive Membership

The Executive Committee of ISMR is comprised of members appointed by the Director of the IN Department of Natural Resources. Chairperson is the Director of the Bureau of Regulatory Team Management. Members are:

Mr. Chris Smith, ISMR Chairman & Deputy Director, Indiana, Dept. of Natural Resources, Ex-Officio Member

Mr. Jim Buck, Buckridge Environmental Engineering, Inc.

Mr. Marvin Ellis, Indiana Dept. of Natural Resources, Division of Reclamation

Mr. John Endress, Natural Resource Professionals

Mr. Tommy Sutton, Triad Mining LLC

Ms. Rose McDaniel, Indiana Department of Environmental Management

Mr. Rich Montgomery, United Minerals Inc.

Ms. Michalene Reilly, Hoosier Energy

Ms. Becky Meyer, Indiana Geological Survey

Mr. Tristan Vance, Indiana Office of Energy Development

Mr. Bryce West, Peabody Energy Inc.

Dr. Terry West, Purdue University

Dr. John Steinmetz, Indiana Geological Survey (Additional Contact)



The Indiana Society of Mining and Reclamation works in partnership with the Indiana Natural Resources Foundation as their financial fiduciary. Since its founding in 1990, the Indiana Natural Resources Foundation has worked with the people of Indiana, the Indiana Department of Natural Resources, advocacy groups, volunteer organizations, and land trusts across the state.

Please welcome the newest members of the Indiana Society of Mining and Reclamation Executive Committee. Mr. Tommy Sutton, Triad Mining, LLC, has accepted the position left vacant by Ray Judy's retirement from the Executive Committee. Ms. Becky Meyer, Indiana Geological Survey, has accepted the position left vacant by Dr. Nelson Shaffer's retirement. Please congratulate these new members and welcome them.

CALL FOR POSTERS

The board would like to invite you to participate in the Monday evening poster session/reception. If you have a technical display that pertains to mining and reclamation and would like to present a display, please contact Becky Meyer, Indiana Geological Survey, at 812-855-6641, to reserve a display area.

Overnight Accommodations: Ramada Jasper Inn & Convention Center is offering a special overnight room rate of \$60.00 plus tax for ISMR attendees. For reservations at this rate, call 800-872-3176 or 812-482-5555 and identify yourself as an ISMR attendee. [Deadline is November 21, 2014.](#)

Questions--Contact Colleen Baughman at 812-665-2207 or cbaughman@dnr.in.gov

CONGRATULATIONS TO

2013 Winner
Indiana Excellence in Mining & Reclamation Award

**United Minerals Company LLC and
Peabody Midwest Mining LLC
Somerville East Mine**

Call For Nominations -- 2014

**Please consider providing a nomination for the 2014
Excellence in Mining & Reclamation Award**

Nominations are being accepted once again for the Excellence in Mining and Reclamation Award (EMRA). This is the Division of Reclamation's highest award for outstanding achievement in the field of surface coal mining and reclamation.

Former recipients of the Indiana EMRA have received national recognition as a result of participation in awards programs administered by the Office of Surface Mining and the Interstate Mining Compact Commission.

We are very proud of the mining and reclamation operations here in Indiana, and the EMRA program is one way for us to recognize your efforts and to reveal your successes to the rest of the state and the nation.

Who is Eligible for the EMRA?

All surface and underground coal mining operations which have operated under an Indiana permit issued according to IC 14-34 are eligible to be considered for the EMRA. The operator's exemplary performance may be achieved during mining activity, reclamation, or throughout the entire process.

How to Nominate a Coal Mining Operation

Nominations may be submitted by coal companies, mine operators, inspectors, consultants, coal associations, public interest groups, or land owners. Nominations must be received by the Division of Reclamation on or before **Monday, November 3, 2014**, and should be mailed or delivered in person to the following address: **Division of Reclamation, Attn: Brad Loveless, EMRA Selection Committee, 14619 W. State Road 48, Jasonville, IN 47438.**

For information on what a nomination should include, format, etc., contact Brad Loveless or Jerry Heltsley, Division of Reclamation EMRA Selection Committee, 812-665-2207.

Remember, the deadline is **November 3, 2014**.

What a Nomination Should Include

A. Cover sheet containing:

1. Company name.
2. Name and location of the nominated mining operation (including driving directions).
3. Permit number(s) of site being nominated.
4. Name, address, phone number, and E-mail address of person submitting nomination (and/or a company contact person).
5. Names and titles of all individuals directly responsible for on-the-ground reclamation at the nominated site.

B. Narrative: A description of the specific reclamation or environmental control techniques that resulted in exemplary performance under the Surface Mining Law. The narrative should be comprehensive, but not exceed six single-spaced typewritten pages and should describe the mining operation and the specific activity nominated for the award using the following outline:

1. Brief history/background of the mining and reclamation.

2. Description of the nominated activity or reclamation practice, including specific problems, solutions, and unusual circumstances.
 3. On-site effectiveness of the work. This should be documented and quantified with data.
 4. Transferability or value of the accomplishment(s) to other mining and reclamation operations.
 5. Long-term benefits to the landowner and local or regional community.
- C. Color photographs:** The photos should show both the specific activity and the surrounding reclamation. When examined with the narrative description, the photographs should provide a clear understanding of the exemplary accomplishments. Photographs should be 3 megapixel (MP) in size or larger and labeled to explain what the photo shows. "Before and after" photos are desirable, but not required. There is no limit to the number of photographs that may be submitted.
- D. Format (NEW THIS YEAR):** All reclamation award nominations must be submitted in electronic format on a CD or DVD, accompanied by a single color printed version in a three-ring, loose-leaf binder.

Nominations submitted by persons not directly associated with the coal company may not necessarily contain all the above-requested information simply because it may not be available. For nominations of this type, the EMRA Selection Committee will contact the coal company for assistance in preparing the formal nomination packet.

How the EMRA will be Selected

All nominations will be screened by the EMRA Selection Committee, and an on-site visit will be made of each nominated site to assure the following:

1. Information contained in the nomination package accurately reflects current site conditions.
2. On-the-ground performance conforms with the permit.
3. Other mining and reclamation activities at the site do not detract from the award-winning activity.

Each nominee's compliance record will be examined to assure that there are no outstanding violations and to determine that there is no past record of poor cooperation in abating violations.

The EMRA Selection Committee will conduct a technical evaluation of each nomination and assess a ranking for each nomination based upon the following criteria:

CRITERIA AND MAXIMUM POINTS	
Clarity and completeness of nomination package	5
Difficulty in achieving reclamation under existing conditions	20
On-site effectiveness	30
Transferability of the technique or practice	12
Increased public awareness of the Surface Mining Law	8
Long term benefits to the community	15
Exceeds the spirit and intent of the Surface Mining Law	10

When the EMRA Will be Awarded

The 2014 EMRA will be presented at the annual Indiana Society of Mining and Reclamation meeting to be held on Monday and Tuesday, December 8 & 9, 2014, at the Ramada Inn Jasper (formerly Jasper Inn and Convention Center) in Jasper, Indiana. Awards will be presented during the luncheon on Tuesday, December 9th.

Vance “Pat” Wiram Award For Innovation in Reclamation and Mining Technology

Call for Nominations -- 2014

ISMR is seeking nominations for individuals who have made significant contributions to the development or implementation of new technologies or concepts in mining and reclamation. There were no nominations in 2013. We urge you to nominate an individual you feel has gone the extra step in applying new and innovative ideas toward the enhancement of surface mining and reclamation.

Criteria and Eligibility: Individuals having a direct or indirect involvement in surface mining and/or reclamation who deserve recognition for innovative ideas applied to this broad area of interest are eligible. Recipients may be individuals in regulatory agencies, educators, environmentalists, journalists, politicians, mine operators, mining engineers, geologists, or administrative personnel. Nominees for this award must have been active in some area of mining and/or reclamation at the time of their nominations.

Nomination Procedures: All nominations should follow the prescribed format. Identify nominee--Include name, mailing address, and phone number. Identify nominator--Include name, mailing address, and phone number. Clearly identify and evaluate the contributions made by the nominee. List (1) Education--academia field, date, and institution for each degree held; (2) Career--dates, organizations, and locations of all professional positions beginning with current position and ending with the first position; (3) Professional Services--membership in professional societies, service on professional committees, and indicating leadership where appropriate; (4) Past Honors and Awards--any that are appropriate; (5) Justification--identify the primary contributions on which the nomination is based, emphasizing the innovative ideas of concepts for which the nominee is to be evaluated; (6) Supporting Documentation--three letters of support, as well as any other form of documentation. Letters should be solicited and addressed to the nominator.

Nominations Due: Deadline to receive nominations is [Monday, November 10, 2014](#).

Submissions: Two copies of the completed nomination and any supporting documentation should be sent to: ISMR Chairman, 14619 West State Road 48, Jasonville, IN 47438.

Nomination Format: Typed on 8 ½ x 11 paper, double-spaced.

Questions: Contact Colleen Baughman, ISMR Secretary at 812-665-2207 or cbaughman@dnr.in.gov.

WORKSHOP DESCRIPTIONS

WATER WORKSHOP

Pending approval for 5 technical hours of continuing education for wastewater license renewal. (Certificates will be provided for this workshop that may be used as Professional Development Hours for consideration of meeting requirements for licensed Indiana Professional Engineers.)

The Ohio River Basin Water Quality Trading Project, presented by [Greg Youngstrom](#), Senior Environmental Specialist, Ohio River Water Sanitation Commission. Nutrient trading has long been viewed by agricultural, industrial, and environmental stakeholders as a possible solution to controlling nutrient pollution on a large scale. Since farmers and other nonpoint sources can implement best management practices (BMPs)—such as installing buffer zones, cover crops, and other measures—to reduce nutrient pollution at a fraction of the cost and with greater impact than point sources, allowing point sources to offset their nutrient loads by buying credits from farmers could hasten the reduction of nutrients in a watershed. The Electric Power Research Institute (EPRI) is leading an effort to develop an interstate water quality trading program for the Ohio River Basin. Partners in the effort include American Farmland Trust, the Ohio River Valley Water Sanitation Commission, and the Ohio Farm Bureau. Using scientific research and a sophisticated watershed model, the full scale project could result in a multi-industry market that may accelerate water quality improvements and establish a model for other domestic regional trading markets.

Ditching for a Better Tomorrow, presented by [Kent Wamsley](#), Upper Wabash Project Director, The Nature Conservancy. Today's environment is being taxed with having to do a lot; provide food on fewer acres to meet a growing population, weather changes are causing more severe droughts and floods, and habitat loss is on the rise as a result of both agriculture demands and development. Infrastructure of old is not able to address the issues we face today, and specifically our once flawlessly performing agricultural drainage ditches are suffering and becoming inadequate in their performance. As more tile is put in, the water it carries is getting to the ditch quicker resulting in bank failures, sedimentation, poor water quality, and increased capacities in the ditch. The balance between drainage and the environment is the two-stage ditch; it takes the current ditch structure and adds floodplain benches that are grassed which trap sediment and nutrients, reduces peaks of storm events, reduces velocities, and simply provides for a more stable system with reduced maintenance. Two-stage ditches provide the drainage needed for our ag lands, cleaner water locally and downstream, and provides the shelter in the form of habitat for many forms of wildlife making it a win/win for the agriculture and the environment.

Vegetative Alternatives for a "Standard" Hard Armor Industry, presented by [Christa Petzke](#), Engineering Products Manager, D2 Land & Water Resource, Inc. The civil engineering market is trying to adapt to a more environmental conscious industry. We have begun to learn that vegetation is not only our best protection against erosion, but also aids in storm water quality & volume countermeasures, and vegetative alternatives are being carefully evaluated where previously designed hard armor systems (riprap especially) were considered standard. This presentation will focus on the types of available products to aid designing in the permitting process. The benefit of a decade of advancement in the erosion control business enables the evaluation of project sites for a specific shear stress and velocity to find the most cost effective alternative. Types of products to be discussed include, but are not limited to turf reinforce mats, cellular confinement, transitional mats, and coir logs. Guidance will be given to when each family of products are appropriate, as well as approximate installed costs. Project profiles will be used to highlight how these systems have previously been used, as well as their cost advantage.

Construction Site Run-Off Quality Control Measures, presented by [Sue Bock](#), Rule 5 Storm Water Specialist, Indiana Dept. of Environmental Management. This presentation will cover basic erosion and sediment control practices for pre-construction, during active construction, and post construction.

Third Party Laboratory Audits and Developing SPCC plans, presented by [Jason Heck](#), Systems Administrator, Alliance Coal LLC. This includes an overview of the justification, process, and conclusions in auditing third party laboratories, including reasons for the audits and their results in helping with permit compliance. A discussion on SPCC plans which are a requirement by 40 CFR 112 of any company keeping and storing petroleum materials in excess of 1320 gallons above ground in a container greater than 660 gallons or 42,000 gallons underground. This discussion will review purpose, scope, and preparation in SPCC development.

THE U.S. CLEAN AIR ACT WORKSHOP

(Certificates will be provided for this workshop that may be used as Professional Development Hours for consideration of meeting requirements for licensed Indiana Professional Engineers.)

An Overview of the U.S. Clean Air Act with Focus on the U. S. Mining Industry, presented by [William Monnett](#), President, McVehil-Monnett Associates, Inc. The federal statute and associated federal and state regulatory programs affecting the mining industry will be reviewed. Topics covered will include a brief history of the federal statutes, National Ambient Air Quality Standards (NAAQS), federal New Source Review (NSR), and state-level minor source permitting, federal end-of-stack regulations for criteria (NSPS) and hazardous pollutants (NEBHAPs), federal operating permits, and compliance issues. The presentation will also touch on the basics of air pollution science, including an overview of emissions estimation processes for fugitive dust, air quality modeling, and best available control/management practices for fugitive dust.

Solid Waste Regulations, presented by [Theresa Bordenkecher](#), Section Chief of Industrial Waste Compliance, Indiana Dept. of Environmental Management. This presentation will discuss Indiana's solid waste regulations and how those regulations are applied when solid waste becomes airborne.

Fugitive Dust-Crossing the Boundary, presented by [Tammy Haug](#), Compliance & Enforcement Manager of Office of Air Quality, Indiana Dept. of Environmental Management. This includes a discussion on fugitive dust from surface coal mines. The presentation will define IDEM's definition of fugitive dust and the potential sources and controls, as well as reviewing control plans and permits. It also includes a discussion of IDEM's and coal mines rolls in controlling fugitive dust.

WORKSHOP DESCRIPTIONS (continued)

BLASTER RETRAINING WORKSHOP

(APPROVED 5 Continuing Renewal Hours for IN Blaster Certification renewal; IN Dept. of Homeland Security 5 hours renewal for Regulated Explosives Use-Operator and Regulated Use-Blaster License; and 5 Indiana Professional Development Hours for Indiana Professional Engineers)

Moderators: *Phyllis Hart and Rick Grossman, Blasting Specialists, Indiana DNR-Division of Reclamation.*

Explosives Performance Testing—Case Histories: *John Wiegand, President, Vibronics, Inc.* Millions of pounds of explosives are used in Indiana on an annual basis. Explosives are used in the construction, quarrying, mining, and demolition activities. There are many types of explosives available to the blaster. The Blaster-In-Charge must choose the proper type of explosive for his or her application. Explosive companies provide technical data sheets detailing performance specifications for their products. These performance specifications are often based on precise, controlled laboratory tests. The published performance specifications often represent ideal conditions. The conditions in which the explosives are used in the field may not be as ideal. This presentation will discuss tests that are available to capture explosive performance in these “not-so ideal conditions”. We will also present case-histories showing data obtained during actual field blasting. Field testing can also help identify improper application of these products.

MS: *Tom Hairhoger, Technical Representative, Austin Powder Company.* Blasting related topic.

Blast Plans are for Everyone: *Ken Eltschlager, Mining/Explosives Engineer, Office of Surface Mining, Pittsburgh, PA.* What are blast plans? Who should develop the plan? What should be covered in the plan? Blast plans are regulatory or contractual requirements for some blasting applications but are essential for quality control and liability protection of the blasting company. This presentation will discuss blast plan formulation, development, and implementation.

Agenda -- Monday, Dec. 8, 2014 (Eastern Time)

11:30am-12:00 pm Registration

12:00-5:00 pm 3 **Concurrent** Workshops (Seating is Limited)

THE U. S. CLEAN AIR ACT WORKSHOP: (Certificates will be provided for this workshop that may be used as Professional Development Hours for consideration of meeting requirements for licensed Indiana Professional Engineers.)

***[William Monnett](#), President, McVehil-Monnett Associates, Inc. *An Overview of the U. S. Clean Air Act with Focus on the U.S. Mining Industry*

***[Theresa Bordenkecher](#), Section Chief, Indiana Dept. of Environmental Management. *Solid Waste Regulations.*

***[Tammy Haug](#), Compliance & Enforcement Manager, Indiana Dept. of Environmental Management. *Fugitive Dust-Crossing the Boundary.*

OR

WATER WORKSHOP: **Pending** approval for 5 *technical* hours of continuing education for wastewater license renewal. (Certificates will be provided for this workshop that may be used as Professional Development Hours for consideration of meeting requirements for licensed Indiana Professional Engineers.)

***[Jason Heck](#), Systems Administrator, Alliance Coal LLC. *Third Party Laboratory Audits and Developing SPCC Plans*

***[Sue Bock](#), Storm Water Specialist, Indiana Dept. of Environmental Management. *Construction Site Run-Off Quality Control Measures*

***[Greg Youngstrom](#), Senior Environmental Specialist, Ohio River Water Sanitation Commission. *The Ohio River Basin Water Quality Trading Project*

***[Christa Petzka](#), D2 Land & Water. *Vegetative Alternatives for a "Standard" Hard Armor Industry*

***[Kent Wamsley](#), Upper Wabash Project Director, The Nature Conservancy. *Ditching for a Better Tomorrow*

OR

BLASTER RETRAINING WORKSHOP: (APPROVED--5 continuing education hours for IN Blaster Certification renewals; IN Dept. of Homeland Security 5 hours renewal for Regulated Explosives Use-Operator and Regulated Use-Blaster License; and 5 Indiana Professional Hours for Indiana Professional Engineers). At workshop completion, training certificates will be provided to those with multiple blasting licenses and the IN Dept. of Homeland Security licenses. Those with IN Certified Blaster license will be credited with the completed hours from the attendance sheet. Workshop registration includes 2014 membership to the Tri-State Chapter of the International Society of Explosive Engineers.

[Phyllis Hart](#) and [Rick Grossman](#), IN DNR, Division of Reclamation. *Moderators*

***[John Wiegand](#), President, Vibronics. *Explosive Performance Testing—Case Histories*

***[Tom Hairhoger](#), , Austin Powder Company. *Blasting Topic*

***[Ken Eltschlager](#), Mining/Explosives Engineer, Office of Surface Mining. *Blast Plans are for Everyone*

5:00-7:00 pm Poster Session and Reception

Agenda -- Tuesday, Dec. 9, 2014 (Eastern Time)

- 7:45-8:30 am Registration
- 8:30-8:45 am **Welcome:** Chris Smith, Deputy Director, Indiana Department of Natural Resources; ISMR Chairman.
- 8:45-9:00 am **An Update on the Office of Surface Mining Reclamation and Enforcement:** Mr. Len Meier, Chief, Alton Field Division, Mid-Continent Region, Office of Surface Mining. This presentation will cover current initiatives, rulemaking, and other activities in the Office of Surface Mining Reclamation and Enforcement as they relate to coal mining and reclamation in Indiana.
- 9:00-9:15 am **IGS Update:** Dr. John Steinmetz, Indiana State Geologist, Indiana Geological Survey. Covers recent enhancements to the IGS's field and laboratory capabilities, as well as demonstrate recent additions to the IGS website (igs.indiana.edu) that allow remote users to access and utilize data, information, and digital mapping features.
- 9:15-9:30 am **2013 EMRA Award Winner-United Minerals Company, LLC—Reclamation Techniques at Somerville East Mine:** Ms. Karen Risner, Reclamation Specialist, United Minerals Company, LLC. This presentation provides an overview of the site and techniques utilized to achieve a successful reclamation product. Various techniques, both textbook and experimental, were implemented to achieve terrestrial and aquatic habitat that is stable, valuable, and aesthetically pleasing. Mitigation monitoring over the past 4 years reveals a positive trend toward both stream and wetland mitigation.
- 9:30-10:15 am **LiDAR—High-Resolution Digital Elevation Data and Application in Indiana:** Dr. John Steinmetz, Indiana State Geologist, Indiana Geological Survey. A discussion on LiDAR basics: what it is, how it works, and some essential LiDAR vocabulary. Will also briefly cover the elements of data acquisition and processing, and the availability of LiDAR data in Indiana
- LiDAR for Refuse Expansion Planning:** Mr. Matthew Greer, Engineering Technician, Gibson County Coal. A brief overview of how you can utilize state LiDAR data for topographic analysis. The example will show how an underground mine would use the data to develop an accurate estimate of potential refuse storage possibilities. Will demonstrate how raw data can be used for planning and spatial analysis. The specific example will highlight the main steps of converting raw LiDAR data into raster and contour datasets in ESRI's ArcGIS environment. The data can also be used in AutoCAD / Carlson environments. Supplemental information will be available for those interested in an in-depth review of the example.
- 10:15–10:30 am **BREAK** and Door Prize Drawings
- 10:30-11:45 am **PANEL SESSION--Green House Gases:**
John Holloway, Partner, Sutherland, Asbill & Brennan LLP: 111(b) and 111(d)
Jay Patterson, Air Quality Team Leader, Hoosier Energy REC: Anticipated Indiana effects
Katie Sweeney, Sr. Vice President, National Mining Association : Discussion of the overall effects on coal mining
- 11:45 am-1:00 pm AWARDS LUNCHEON
- 1:00-1:30 pm **Proposed Rule for Waters of the U.S.:** Ms. Wendy Melgin, Wetlands Section Chief, USEPA Region 5. This presentation will discuss the proposed rule for Waters of the U.S. which was issued by the U. S. Environmental Protection Agency and the U.S. Army Corps of Engineers. This proposed rule clarifies which waters would fall under federal Clean Water Act jurisdiction.
- 1:30-2:00 pm **Environmental Justice Initiatives at the Environmental Protection Agency:** Ms. Katie Sweeney, Senior Vice President, National Mining Association. A review of the efforts of EPA to incorporate environmental justice into the rulemaking and permitting processing with discussion on some of the legal defenses applicable in environmental justice litigation.
- 2:00-2:30 pm **Dust Suppression and Haul Road Stabilization:** Mr. Miles Clark, Principle Partner, Pennz Roads Technologies. Maintenance costs are becoming more and more important for the mining industries. A technology that was developed 22 years ago by Pennzoil is now being looked at again and compared to traditional dust control methods. Pennz Suppress lowers costs over 50% for dust control and haul road maintenance. An eco-safe heavy resin that bonds dirt and gravel; and waterproofs haul roads is compared to other types of dust control.
- 2:30-2:45 pm BREAK
- 2:45-3:15 pm **The Coal Industry and Cultural Resources Management:** Ms. Beth McCord, Senior Principal Investigator and Indiana Branch Manager, Gray & Pape Inc. This presentation will provide a review of typical coal projects and the cultural resources experience. The standard approaches to archaeological or historic architectural surveys will be presented.
- 3:15-3:45 pm **Governor's Energy Plan:** Mr. Tristan Vance, Director, Indiana Office of Energy Development. This presentation will include a description of the state's current energy policy, including an overview of a new State Energy Plan.
- 3:45-4:15 pm **Clay and Shale Mining in Indiana:** Mr. Kevin Geier, Inspection & Enforcement Team Leader, IN Division of Reclamation. The Indiana Division of Reclamation administers Indiana Code 14-36-1 pertaining to the mining of clay, shale, and oil shale. These are typically small operations impacting much smaller areas than a coal mine. This presentation will provide an overview of these types of mining and their requirements in Indiana.
- 4:15-4:30 pm **Closing** – Grand Prize Drawing

Registration Form

PRE-Registration fees are valid ([THRU Nov. 17, 2014](#))

12/08 (Monday) Workshop only -- **\$60.00**

12/08 (Monday) workshop & poster session + 12/09 (Tuesday) sessions & luncheon -- **\$60.00**

12/09 (Tuesday) session & luncheon only -- **\$40.00**

Full-time student rate for all of 12/08 (Monday) & (Tuesday) 12/09 -- **\$20.00**

LATE Registration fees ([AFTER Nov. 17, 2014](#))

12/08 (Monday) Workshop only -- **\$70.00**

12/08 (Monday) workshop & poster session + 12/09 (Tuesday) sessions & luncheon -- **\$70.00**

12/09 (Tuesday) session & luncheon only -- **\$50.00**

Full-time student rate for all of 12/08 (Monday) & (Tuesday) 12/09 -- **\$30.00**

CHECK ALL SESSIONS YOU WILL ATTEND

MONDAY, December 8, 2014:

WORKSHOP---CHOOSE **ONLY ONE** WORKSHOP:

- Blaster Retraining Workshop
- Clean Air Workshop
- water Workshop

POSTER SESSION AND RECEPTION

TUESDAY, December 9, 2014:

Full Day Primary Session Luncheon

Name _____

Title _____

Organization _____

Address _____

City/State/Zip _____

Phone _____ Fax _____

E-mail _____

****IF YOU DO NOT WANT YOUR NAME, AND E-MAIL INCLUDED IN OUR PUBLIC ATTENDANCE LIST, PLEASE CHECK HERE ****

\$ _____ TOTAL PAYMENT check money order

No credit cards accepted. Make check or money order **payable to: Indiana Natural Resources Foundation.** [Mail form & fee to:](#) COLLEEN BAUGHMAN, ISMR SECRETARY, 14619 WEST STATE ROAD 48, JASONVILLE, IN 47438.