INDIANA SOCIETY OF MINING AND RECLAMATION 2010 TECHNOLOGY TRANSFER SEMINAR DECEMBER 6 & 7, 2010

Monday, December 6, 2010

12:00 pm - 5:00 pm

3 CONCURRENT WORKSHOPS

NPDES Permitting, DMR Reporting, and Spill Prevention Countermeasures and Control Workshop

Presented by: **Rose McDaniel, Catherine Hess,** *Indiana Dept. of Environmental Management*, and **Barbara Carr,** *U.S. Environmental Protection Agency*

(Approved: 5 technical hours of continuing education for wastewater license renewal)

Stream Morphology Classification Workshop

Presented by: **Mike Sandefur, Tim Sandefur, and Sean Jones,** Wetland Services, Inc., Evansville, IN (Approved: 5 general hours of continuing education for wastewater license renewal)

Blaster Retraining Workshop

Presented by: Phyllis Hart and Rick Grossman, Blasting Specialists, IN DNR, Division of Reclamation—moderators; Ken Eltschlager, Office of Surface Mining, Pittsburgh, PA; Dennis Clark, Office of Surface Mining, Knoxville, TN; Michael 'Mick' Fritz, Fritz Consulting, Jasper, GA; and Stan Capobianco, IN Dept. of Homeland Security.

(Approved: 5 continuing education hours for Indiana Blaster Certification and Indiana Department of Homeland Security Regulated Explosive Use-Blaster License renewals)

5:00 pm - 7:00 pm **POSTER SESSION AND RECEPTION**

Tuesday, December 7, 2010

8:30 am - 8:45 pmWelcome

Bruce Stevens, Director, Division of Reclamation, IN Department of Natural Resources.

8:45 am – 9:15 am

Identifying Subsidence-Prone Areas and High-Priority Improvements for Preemptive Mine Grouting in Southwest Indiana

Laura Montgrain, GIS Inventory Specialist, Div. of Reclamation, IN DNR. Use of GIS data to identify areas which are high risk for catastrophic mine subsidence, to help determine preemptive mine void stabilization efforts.

9:15 am – 9:45 am Light Distance and Range Finding (LIDAR) Use

> **James Moffitt,** photogrammetry Manager, Williams Aerial & Mapping, Inc. (presenting for Rick Kosinski). Includes actual projects completed using LIDAR and photogrammetry for DNR reclamation sites. Looks at raw data, process of filtering and editing, flight planning, and more.

9:45 am - 10:15 am Acid-Mine Drainage in Sulfate-Reducing Bioreactors - A Look Inside the SRB Cell Tracy Branam, Research Scientist/Geochemist, Indiana Geological Survey. One of the newest innovations for reducing contaminant loads in acidic mine drainage is the SRB cell. It combines bacterial sulfate reduction with alkalinity-producing capability to treat

areas. Discussion of how and why it works.

10:15 am – 10:30 am Break-Door Prize Drawings

10:30 am - 11:00 am Potential for Underground Coal Gasification in Indiana

Denver Harper, Geologist, IN Geological Survey (presenting for Maria Mastalerz). Evaluation of the potential for UCG in Indiana. Discussion of screening criteria. geological characteristic, thickness and depth of coal seams, heating value, ash/sulfur content, and more.

11:00 am - 11:30 am Creating a Honey Corridor: The Challenges and Rewards of Coal Country Beeworks

Tammy Horn, Founder, Coal Country Beeworks, Eastern Kentucky University. An overview of the practice of partnering with coal companies to develop reclamation practices that reduce impacts on pollinators and the reclamation which provides a threeseason bloom to create a honey corridor.

11:30 am – 12:00 pm EPA's Coal Combustion Residual (CCR) Rulemaking

James Roewer, Director, Utility Solid Waste Activities Group, Washington, D.C. A discussion of the rule background, status, and implications for utility operations, including disposal, beneficial use, and mine placement.

12:00 pm – 1:30 pm Awards Luncheon

1:30 pm - 2:00 pmEconomic Recovery versus Natural Resource Industries

Richard Mourdock, Indiana State Treasurer, Keynote Speaker.

2:00 pm - 2:30 pm

Implications on Coal Mining by Federal Budgeting and Rulemaking Initiatives
Michalene Reilly, Environmental Services Department Manager, Hoosier Energy Rural
Electric Company. EPA officials have stated there is now a policy within the agency to
raise the cost of coal-fired generation to the point where the cost of renewable power will
be cost effective. This presentation will address the environmental pressures on coalfired generation and the implications for coal, based on these new and proposed
requirements expected over the next 3 years.

2:30 pm - 2:45 pm

Break-Door Prize Drawings

2:45 pm - 3:15 pm

Aquaculture as a Postmining Activity for Surface and Deep Mine Sites

James Tidwell, Chair, Division of Aquaculture, Kentucky State University. Reclaiming mined land as purpose-built production ponds and completed deep mines used to increase domestic production of commercial channel catfish, freshwater shrimp, rainbow trout, and more.

3:15 pm - 3:45 pm

Overview of the Office of Surface Mining's Efforts to Better Protect Streams from the Adverse Impacts of Coal Mining

Paul Ehret, *Branch Chief, Technical Services, Office of Surface Mining, Alton, IL.* OSM has stated in its notice of intent to conduct an environmental impact statement for the Proposed Stream Protection Rule that "it would not be fair, appropriate, scientifically valid or consistent with the principles of SMCRA to apply the new protections only in central Appalachia". Presentation about what elements it will likely include.

3:45 pm - 4:15 pm

Mine Tourism

Dr. Nelson Shaffer, *Section Head, Coal & Industrial Minerals, Indiana Geological Survey.* Mine tourism attracts hundreds of thousands of visitors each year. Opportunities to reuse mined lands for tourism will be reviewed.

4:15 pm - 4:30 pm

Closing – Grand Door Prize Drawing