

2010 JOINT MINING RECLAMATION CONFERENCE

27th Annual Meeting of the American Society of Mining and Reclamation
12th Annual Pennsylvania Abandoned Mine Reclamation Conference
4th Annual Appalachian Regional Reforestation Initiative Mined Land Reforestation Conference

Bridging Reclamation, Science and the Community



June 5 to 11, 2010 at the Radisson Pittsburgh-Greentree Hotel in Pittsburgh, PA (USA)

Visit the Joint Conference Website at www.PghMiningReclamationConf.com

Advanced Program & Registration Information

The 2010 Joint Mining Reclamation Conference of the 27th Annual Meeting of the American Society of Mining and Reclamation, the 12th Annual Pennsylvania Abandoned Mine Reclamation Conference, and the 4th Annual Appalachian Regional Reforestation Initiative Mined Land Reforestation Conference is scheduled for the week of June 5-11, 2010 in Pittsburgh, Pennsylvania. This combined Conference will provide a forum for the dissemination of information and discussions that may lead to change and innovations in public policy, mining, landscape restoration, and land management issues through research, Field Tours and Technical Workshops.

CONVENERS

American Society of Mining and Reclamation (ASMR)
PA Abandoned Mine Reclamation (AMR) Conference Committee
Appalachian Regional Reforestation Initiative (ARRI)
US Office of Surface Mining Reclamation and Enforcement (OSM)
Stream Restoration Incorporated (SRI)



PROGRAM COMMITTEE

AMERICAN SOCIETY OF MINING AND RECLAMATION

Richard Barnhisel (859) 335-6529 / asmr5@insightbb.com

WESTERN PENNSYLVANIA COALITION FOR ABANDONED MINE RECLAMATION

Andy McAllister 724-832-3625 / andy@wpcamr.org

APPALACHIAN REGIONAL REFORESTATION INITIATIVE

Mike Bower 412-937-2857 / mbower@osmre.gov

U.S. OFFICE OF SURFACE MINING

Lois Uranowski 412-937-2805 / luranowski@osmre.gov

STREAM RESTORATION INCORPORATED

Tom Grote 724-776-0161 / tfgrote@streamrestorationinc.org

FINANCIAL SPONSORS

(to date)

PRIME SPONSOR

Consol Energy

GOLD

US Office of Surface Mining

BRONZE

HDR
Foam Concepts, LLC

Travel and Lodging

Transportation

The Pittsburgh Airport is an International Airport and serves most major airlines. All vehicle rentals are available through national vendors. The Radisson Pittsburgh-Greentree offers complimentary shuttle service from the airport to the Conference hotel, as well as free parking at the hotel itself. The Radisson can be reached at (412) 922-8400.

Meeting Venue and Lodging

Radisson Pittsburgh-Greentree Hotel

101 Radisson Drive

Pittsburgh PA 15205, US

Reservations: 1-800-395-7046 US / Canada Toll-Free

Telephone: 412-922-8400

Fax: 412-922-8981

The Radisson Pittsburgh-Greentree Hotel, located on the southwest side of Pittsburgh, will host all Conference events, meetings and functions. A block of rooms has been reserved for Conference participants at the rate of \$108.00 per night plus tax (\$15.12) until May 22. After May 22, the Conference rate may not be available. Reservations can be made by calling the hotel at 1-800-395-7046. **Be sure** to mention the ASMR Joint Mining Reclamation Conference to secure the Conference rate. For online hotel registration go to <http://www.radisson.com/pittsburghpa> and use code **ASM10** in the promotions code box.

Other hotels within a short driving distance are included below. *The Conference rate does not apply at these hotels.*

Ramada Inn

401 Holiday Drive

Pittsburgh, PA 15220-2730

(412) 922-8100

Best Western Parkway Center Inn

875 Green Tree Road

Pittsburgh, PA 15220

(412) 922-7070

Hampton Inn Pittsburgh-Greentree

555 Trumbull Drive

Pittsburgh, PA 15205

(412) 922-0100

Quality Inn

700 Mansfield Avenue

Pittsburgh, PA 15205

(412) 279-6300

2010 Joint Mining Reclamation Conference Overview

Saturday, June 5

Pre-Conference Field Tours

- 1) Decade-Old and Innovative New AMD Passive Treatment Systems and Reclamation Methods
Note: This is a 2-day Field Tour.

Pre-Conference Workshops

- 1) Erosion Estimates for Mined Lands Using RUSLE 2
Note: This is a 2-day Workshop.
- 2) Semi-Arid Mine Land Reclamation "The Past 40 Years"

Sunday, June 6

Pre-Conference Field Tours

- 1) Decade-Old and Innovative New AMD Passive Treatment Systems and Reclamation Methods
Note: This is a 2-day Field Tour.

Pre-Conference Workshops

- 1) Erosion Estimates for Mined Lands Using RUSLE 2
Note: This is a 2-day Workshop.
 - 3) Mine Drainage Treatment: A Detailed Review of Active Treatment Options, Advantages and Challenges
 - 4) Mobile Computing Technology Developments for SMCRA
 - 5) Modeling and Evaluating Mine Drainage Treatment Using Geochemist Workbench
 - 6) Passive Treatment of Alkaline Fe-Contaminated Mine Waters
 - 7) Communication and Presentation Improvement: "Harness The Power Of Words"
 - 8) Remote Sensing for SMCRA Applications
- ASMR National Executive Committee Meeting
Evening Welcome Reception

Monday, June 7

Welcome and Plenary Session

ASMR General Business Meeting

Poster Session

Lunch provided.

9) ARRI Forestry Reclamation Approach Workshop

Concurrent Technical Sessions

Science, Community and Reclamation Session Presentations

Technical Division Meetings

Dinner on your own.

ASMR Young Professionals Social

Tuesday, June 8

Poster Session

Concurrent Technical Sessions

ARRI Mined Land Reforestation Session Presentations

Science, Community and Reclamation Session Presentations

Lunch provided.

ARRI Excellence in Reforestation Awards

Three Rivers Boat Cruise on the Monongahela River with the Pennsylvania AMR Mayfly Awards Presentation

Wednesday, June 9

Concurrent Technical Sessions

Science, Community and Reclamation Session Presentations

Lunch provided.

Poster Session Social

ASMR Awards Dinner

Thursday, June 10

Concurrent Technical Sessions (ending at 12 noon)

Lunch on your own.

ASMR National Executive Committee Meeting (pm)

Post Conference Field Tours

2) Oxford Mining Company, LLC's Jockey Hollow Mine Site (Forestry Reclamation Approach Demonstration Site) (ARRI)

3) Mine Drainage Remediation in the Chartiers Creek Watershed

4) Consol Energy Research and Development

5) Active Marcellus Drill Site and Consol Energy/PA Game Commission Conservation Area

Friday, June 11

6) West Virginia Mountaintop Surface Mining, FRA Reforestation and Stream and Wetland Mitigation

Pre-Conference Workshops

Pre-Registration is REQUIRED for all Workshops.

Unless otherwise indicated, lunch is on your own.

Workshops are subject to cancellation if the minimum number of students is not met by May 10, 2010. All Workshop attendees will be notified in the event of a cancellation. Substitutions and/or refund options will be available.

Workshop 1: Erosion Estimates for Mined Lands Using RUSLE 2

Instructor: Dr. Terry Toy
Minimum 10, Maximum 25

Saturday and Sunday, all day.

Erosion control remains the best method of sediment control. And the Revised Universal Soil Loss Equation, version Version 2 (RUSLE 2) is the best, practical, method of soil-loss estimation for erosion-control planning and plan evaluation. Now, RUSLE 2 has been updated and adapted for severely disturbed conditions, including mine sites. In this introductory course, you will receive a free copy of the new RUSLE 2 program; learn where to find additional RUSLE 2 databases for your site, and how to tailor RUSLE 2 for erosion-control planning and plan evaluation. Most importantly, you will gain hands-on experience with RUSLE 2 by loading it onto your laptop computer and working through several common erosion-control scenarios under the guidance of your instructors. You will learn how to compare various erosion-control strategies for your site. Along the way, you will also learn how environmental conditions affect erosion processes and rates. The NRCS has adopted RUSLE 2 for use in soil-conservation planning. Other federal agencies and several states are encouraging the use of RUSLE 2 for erosion-control planning for all types of disturbed lands. RUSLE 2 puts the consultant, reclamationist, and regulator on the same page.

Workshop Cost: \$170 per person

Attendees need to bring own laptop;
attendees will receive course literature and software.

Workshop 2: Semi-Arid Mine Land Reclamation “The Past 40 Years”

Instructors: Bruce Buchanan, Adam Buchanan
Minimum 15, Maximum 30

Saturday (8 hours).

The Workshop will discuss the do's and don'ts of reclamation and what we have learned over the past 40 years. A panel of western experts will provide a Q&A session and share their experience, advice and recommendations. This Workshop is a necessity for the reclamationist who wants to do it once, and do it right.

Workshop Cost: \$140 per person

Attendees need to bring own laptop;
attendees will receive course literature.

Workshop 3: Mine Drainage Treatment: A Detailed Review of Active Treatment Options, Advantages and Challenges

Instructors: Bernard Aubé, Janice Zinck
Minimum 10, Maximum 100

Sunday (8 hours).
Lunch provided.

Neutral mine drainage or acid rock drainage (ARD) formation cannot always be prevented economically, particularly in older mine sites. In many cases, the most economical solution is that of treatment. There are many treatment options available. This course will be primarily on active treatment technologies and what is new in treatment processes. The course will focus on treatment system design and performance, as well process and cost optimization as they relate to actual existing systems. The basics and challenges of active treatment and water management will be discussed along with specific active technologies such as lime neutralization, membrane separation, the treatment of molybdenum, selenium, arsenic, and sulfate. Lime treatment sludge stability and management will also be examined.

Workshop Cost: \$200 per person

A computer is not needed; attendees will receive a CD.

**Workshop 4:
Mobile Computing Technology
Developments for SMCRA**

Instructors: Min Kim, Julian Calabrese, Leslie Bright
Minimum 10, Maximum 40

Sunday afternoon (4 hours).

Recent advances in mobile computing and GPS have provided important applications for real time mapping and data collection in surface mine reclamation. A variety of field devices offer features that improve the reliability, flexibility, and convenience of GIS data collection. Implementation of the Bluetooth communication now allows for wireless operation. Remotely-sensed and aerial imagery in a variety of formats are supported across multiple form factors and displays. Software functionality has been enhanced to incorporate more data formats and better integrate real-time GPS positioning with GIS data sets. The Workshop will describe and demonstrate new devices and supporting software from GIS arena. Live data collection and imagery display will be performed in short field sessions during the last part of the Workshop.

Workshop Cost: \$35 per person

Attendees need to bring own laptop;
attendees will receive course literature.

**Workshop 5:
Modeling and Evaluating Mine
Drainage Treatment Using Geochemist Workbench**

Instructor: Brent Means
Minimum 3, Maximum 15

Sunday (8 hours).

This class is aimed at providing attendees with an understanding of how to apply the geochemical modeling program, Geochemist Workbench, to model the treatment chemistry of active and passive treatment systems. The class is focused on the practical application of modeling and will use data collected from various mine discharges and treatment systems to cover the following topics:

- Creating activity and Eh/pH diagrams to identify solubility controls on mine drainage;
- Developing strategies to constrain a model to produce usable “real-world” results;
- Modeling chemical consumption, treatment pH, and effluent chemistry for NaOH, CaO, Ca(OH)₂, lime slurry, CaCO₃, and Na₂CO₃ treatment systems and predicting the treatment costs;
- Modeling the effect of CO₂ pre-aeration on chemical consumption and treatment costs (chemical savings versus mechanical aerator operation);
- Using a model to develop a comprehensive watershed restoration strategy to achieve in-stream restoration goals for abandoned mine land scenarios;
- Evaluate the performance of VFP, ALD, and bioreactors;
- Modeling CO₂ exsolution kinetics for passive and active aeration devices;
- Modeling heterogeneous and homogenous iron oxidation to size ferrous reactor tanks and passive treatment.

Because of time constraints, the class is more geared-towards watching instructor-led examples than learning the software. However, attendees are invited to follow along using their own laptop and a supplied trial-version of Geochemist Workbench, if desired.

Workshop Cost: \$50 per person

Attendees need to bring own laptop;
attendees will receive course literature and software
(trial version).

(Pre-Conference Workshops Continued)

**Workshop 6:
Passive Treatment of Alkaline Fe-Contaminated Mine Waters**

Instructor: Bob Hedin
Minimum 8, Maximum 26

Sunday (8 hours).
Box lunch provided.

The most successful use of passive treatment has been in the treatment of alkaline Fe-Contaminated waters. This chemistry is typical of many deep mine discharges in Western PA and is also common wherever mining occurs in alkaline strata. Hedin Environmental is a leader in the design and construction of passive systems for these waters. The morning session will present design considerations including: passive treatment background; chemical characterization; pretreatment with ALDs; loading measurements; design and sizing of passive systems; cost estimation; operation and maintenance requirements; sludge recovery and sale; and NPDES compliance. Experiences and data from existing systems will be highlighted.

The afternoon session will be at the Wingfield Pines Passive Treatment System, which is located 10 miles from the Conference venue. The system contains innovative aeration and design features. The system's design, construction, and performance will be detailed. Its evolution into a regional educational and artistic asset will be highlighted.

Workshop Cost: \$205 per person **A computer is not needed;** attendees will receive course literature.

**Workshop 7:
Communication and Presentation Improvement: "Harness The Power Of Words"**

Instructors: Adam Buchanan, Bruce Buchanan
Minimum 10, Maximum 40

Sunday (8 hours).

Refine your presenting skills by learning the do's and don'ts of public speaking and presenting information. Learn how to analyze your audience and how to best communicate using "The Platinum Rule". Learn PowerPoint skills to spice up your presentations. Learn how to get more out of meetings to increase productivity and reduce stress. Presenters will also be offering PowerPoint consultations provided throughout the week of meetings that is included in the registration fee.

Workshop Cost: \$160 per person **A computer is not needed;** attendees will receive course literature.

**Workshop 8:
Remote Sensing for SMCRA Applications**

Instructors: Dianne Osborne, Janine Ferarese, Lukus Monette
Minimum 10, Maximum 40

Sunday (8 hours).

This Workshop will provide a basic overview of what remote sensing is and how it can be used to support SMCRA Title IV and V applications. Attendees will learn what types of remotely sensed imagery are available, what imagery costs, how to decide what type of imagery to use, and how to get imagery. Current remote sensing SMCRA projects and the use of data mining tools to support these applications will be presented.

Workshop Cost: \$50 per person **A computer is not needed.**

**Workshop 9:
ARRI Forestry Reclamation Approach Workshop**

Instructors: Dr. Jennifer Franklin, Dr. Jeff Skousen, Dr. Rick Sweigard, Ron Rathfon, Vic Davis Monday (3 hours).
Minimum 5, Maximum 50

This Workshop will provide an overview of the Forestry Reclamation Approach (FRA). Each of the FRA's five steps will be described and discussed, and examples demonstrating step-by-step field application will be presented.

Workshop Cost: Free **A computer is not needed;**
attendees will receive course literature.

For more detailed descriptions of these Workshops go to:

www.PghMiningReclamationConf.com

Pre- and Post-Field Tours

Pre-Registration is REQUIRED for all Tours.

All Field Tours depart from the Radisson, see final program for final departure times.

Field Tours are subject to cancellation if the minimum number of students is not met by May 10, 2010. All Field Tour attendees will be notified in the event of a cancellation. Substitutions and/or refund options will be available.

Pre-Conference Tours

1. Decade-Old and Innovative New AMD Passive Treatment Systems and Reclamation Methods

Coordinator: Margaret Dunn
Minimum 30, Maximum 55

Saturday, June 5 to Sunday, June 6:
Depart 9 am, Saturday morning - Return 5 pm, Sunday evening.
Box lunches and snacks provided 1st and 2nd days of the trip.
Saturday night dinner will be on your own.

Join us for a two-day Field Tour of sites illustrating various approaches to restore land and water resources impacted by abandoned coal mining activities in Pennsylvania. Described will be "lessons-learned", upgrades to older systems, and long-term maintenance requirements. The first day will highlight the 13-year old passive system treating iron- and aluminum-bearing acidic drainage and a demonstration of the Appalachian Regional Reforestation Initiative. Resource recovery of manganese-bearing solids will also be demonstrated at a passive system in the Slippery Rock Creek Watershed. The evening of June 5 will be spent enjoying the beautiful rustic town of St. Mary's including a Tour of the Straub Brewery, which boasts of an "Eternal Tap" for sampling. Overnight accommodations will be at the Best Western in St. Mary's PA.

The second day will include the Dents Run Watershed in the Pennsylvania Wilds to visit both active and passive systems (we may also see an elk herd!!) with a guided Tour by the PA Bureau of Abandoned Mine Reclamation. This two-day Tour is hosted by the PA Department of Environmental Protection, PA Department of Conservation and Natural Resources, Bennetts Branch Watershed Association, Slippery Rock Watershed Coalition, Stream Restoration Inc., and BioMost, Inc.

Cost: \$180 per person

Attendees bring: overnight bag that includes appropriate June hiking clothes; boots/walking boots, insect repellent and a hat. Binoculars and cameras recommended.

Post-Conference Tours

2. Oxford Mining Company, LLC's Jockey Hollow Mine Site (ARRI Tour) (Forestry Reclamation Approach Demonstration Site), Cadiz, OH

Coordinators: Mike Hiscar and Jeff Emmons
Minimum 14, Maximum 200

Thursday, June 10: Depart 8 am - Return 5 pm.
Lunch and snacks provided by Oxford Mining, LLC.

The Oxford Mining Company, LLC, the winner of ARRI's 2008 Regional Excellence in Reforestation award, has reclaimed the Jockey Hollow permit using the Forestry Reclamation Approach (FRA). The FRA reclamation method complies with state and federal regulations, and is intended to ensure that trees planted will not only survive but will thrive. The state of Ohio owns the surface of the mine site, which is managed by the Ohio Department of Natural Resources' Division of Wildlife as part of the Jockey Hollow Wildlife Area. The area was surface mined in the 1950's and 1960's leaving over 10,000 feet of exposed highwall, ungraded spoil piles, barren areas, and numerous water-filled pits. The vegetation found onsite was a combination of early successional and second growth hardwoods and grasses such as fescue. The original topsoil and subsoil were absent from this site as a result of the pre-law mining. Oxford was able to create an excellent growth medium for planting trees by identifying an alternative re-soiling material consisting of a mixture of sandstones and shales, and end dumping the material to create loose and uncompacted soil materials. The reclaimed site features a variety of planted and volunteer hardwood trees (including American chestnut) with a ground cover that is comprised of planted and volunteer species; early survival and growth of the planted hardwoods is excellent, as expected. The Tour will visit the award-winning reclaimed site, which was planted in 2008 and 2009, and an active Oxford mining site, where reclamation operations are also reestablishing native hardwood forest as the post-mining land use using the FRA reclamation technique.

Field Tour Cost: No charge

Attendees need to bring: steel toed boots.

Attendance limited to the 1st 200 people signing up for the trip.

(Pre- and Post-Field Tours Continued)

3. Mine Drainage Remediation in the Chartiers Creek Watershed

Coordinators: Bob Hedin and Rich Beam
Minimum 8, Maximum 26

Thursday, June 10: All day.
Box lunch included.

This Field Tour will expose participants to mine drainage remediation projects in the Chartiers Creek watershed. The Conference is taking place in the Chartiers Creek watershed and the Tour stops are all within 20 minutes of the hotel. The trip stops will include a passive system that treats a 1500 gpm discharge, a 200 gpm discharge where a system will be constructed in 2010; a discharge that is the largest source of mine drainage pollution in the watershed; and a reclamation project that eliminated a major inflow to a deep mine. Each site visit will be led by one of the project organizers. The participants will receive handouts and have a chance to review construction plans.

Field Tour Cost: \$60 per person

4. Consol Research and Development

Coordinator: Consol Energy
Minimum 29, Maximum 50

Thursday, June 10: Depart 8 am - Return 2 pm.
Lunch provided.

Presentation on research projects and a Tour of CONSOL's R&D campus. Visitors will learn about CONSOL's various research projects, the majority of which are focused on pollution reduction, greenhouse gas reduction and carbon capture and sequestration, and our state-of-the-art analytical lab. Visitors will tour CONSOL's analytical lab, metallurgical coke lab, and pilot plants. Our most recent pilot plant project is a pressurized fluidized bed combustion unit designed to burn waste coal and includes CO₂ capture technology.

Field Tour Cost: \$50 per person

Consol Energy will be providing hard hats and safety glasses;
closed toed shoes only - no heels.

5. Active Marcellus Drill Site and Consol Energy/PA Game Commission Conservation Area

Coordinators: Consol Energy and the PA Game Commission
Minimum 10, Maximum 20

Thursday, June 10: Depart 8 am - Return 5 pm.
Lunch provided.

During the morning, visit an active Consol Energy Marcellus Shale Drill Site in near-by Green County and observe the technologies behind the removal of natural gas from shale. Experts will be available to explain all aspects of the gas removal process including drilling techniques, hydraulic fracturing, and disposal of used fracture water.

The afternoon will consist of a visit to PA State Game Lands 245 where Consol Energy, in conjunction with the PA Game Commission, has constructed a stream remediation and created wetlands project after longwall mining. When subsidence of the surface occurs after longwall mining under streams in Pennsylvania, permit provisions require a plan to address the impacts to the original stream channel gradient. CONSOL Energy requested and received approval for an alternative to traditional re-grading of the stream channel to take advantage of the new wetland habitats that are sometimes created in stream valleys after longwall mining. This Field Tour will view a project where prior to mining earthwork was completed to create stabilized wetlands adjacent to the stream channel after mining and subsidence occurred on State Game Lands 245 in Washington County Pennsylvania.

Field Tour Cost: \$50 per person

Attendees bring: field clothes and boots.
Consol Energy will provide hard hats when needed.

6. West Virginia Mountaintop Surface Mining, FRA Reforestation and Stream and Wetland Mitigation

Coordinator: Jeff Skousen
Minimum 25, Maximum 47

Friday, June 11: Depart 6 am - Return 6 pm.
Breakfast and lunch provided. Dinner on your own.

ICG Eastern – Birch River operates a large mountaintop mining complex near Cowen, WV. The operation takes four seams of coal using a dragline and a suite of excavators and trucks. Topsoil handling, overburden blasting and special handling, reclamation, and water management will be observed and discussed. Coal removal and equipment used on the mine will be seen.

We will also observe reforestation plots established 5 years ago. We will also observe a new planting using the FRA approach: substrate selection, minimal compaction, low amounts of ground cover, and hardwood tree plantings. Our last stop will observe stream and wetland mitigation, and discuss revised wildlife plans for post-mining land use.

Field Tour Cost: \$87 per person

Attendees bring: a hard hat and boots.

For more detailed descriptions of the Field Tours go to: www.PghMiningReclamationConf.com

Social Tours

Preregistration is REQUIRED for all Tours.

All Social Tours depart from the Radisson, see final program for final departure times.

Social Tours are subject to cancellation if the minimum number of attendees is not met by May 10, 2010. All Social Tour attendees will be notified in the event of a cancellation. Substitutions and/or refund options will be available.

Meadowcroft

Coordinator: Jeff Trump
Minimum 24, Maximum 55

Sunday, June 6: Depart 10:30 am - Return 4 pm.
Lunch provided.

Meadowcroft Rockshelter, the oldest site of human habitation in North America, provides a unique glimpse into the lives of prehistoric hunters and gathers. This National Historic Landmark features a massive, 16,000-year-old rock overhang used by our earliest ancestors for shelter and the new enclosure provides visitors with a unique, never-before-seen perspective into the oldest and deepest parts of this internationally-renowned archeological excavation.

In addition to ancient history at the Rockshelter, visitors can step back in time to experience rural life over 150 years ago. Meadowcroft Village recreates all of the charming qualities of an Upper Ohio Valley village from mid-19th century.

Tour Cost: \$57 per person

River of Steel Tour

Coordinator: Jeff Trump
Minimum 24, Maximum 55

Thursday, June 10: Depart 9:00 am - Return 3:00 pm.
Lunch is on your own.

Pittsburgh - a dynamic place - is located at the confluence of the Allegheny, the Monongahela and the Ohio. There is a certain flavor about Pittsburgh that tells visitors that it is alive and exciting!

This Tour follows the experiences and the stories of the immigrant workers and their families that poured into this region, from the heights of Mount Washington to the heart of the Monongahela Valley. The Tour will start at the top of Mt. Washington (have your camera ready for this stop!), continue to the Cookie Table, one of Pittsburgh's famous ethnic traditions, and finish at the site of the 1892 Battle of Homestead, where a young struggling union stood its ground against the titans of industry, Andrew Carnegie and Henry Clay Frick. Following the Tour we will visit the Strip District, the center of wholesale produce marketing in Pittsburgh, and you will have a chance to wander through the outdoor produce markets, bookstores, ethnic foods specialty shops, fish markets and restaurants. It is here that the uniqueness of Pittsburgh history becomes evident. You will have time to shop and have lunch on your own. We will provide guide books for the area so we can make your stay a productive one.

The bus will then pick everyone back up and return to the hotel.

Tour Cost: \$34 per person

Falling Water and Flight 93 Memorial

Coordinator: Jeff Trump
Minimum 24, Maximum 55

Thursday, June 10: Depart 8:30 am - Return 5:00 pm.
Box lunch provided.

At the Flight 93 Memorial, you will be greeted by a guide who will tell you the story of that fateful Sept. 11th day. During the visit, you will be updated on the plans for a more permanent memorial and visit the Flight 93 Chapel to learn more about the crash victims. A boxed lunch will be served on the bus following the Tour.

Fallingwater - This breathtaking house was judged by the American Institute of Architects in 1986 to be the nation's most successful example of architectural design. It is described as the clearest expression of Wright's ideal...that man can live in harmony with nature. Your guide will provide interesting background about the home, the Kaufmann family, and the colorful Frank Lloyd Wright and his other architectural works during the scenic drive to the home.

Tour Cost: \$ 75 per person

For more details go to: www.PghMiningReclamationConf.com

Evening Welcome Reception

The 2010 Joint Mining Reclamation Conference Welcome Reception is open to all attendees and will be held from 6:00 pm to 8:00 pm on Sunday, June 6 in the Junior Ballroom of the Radisson Pittsburgh-Greentree Hotel. Light appetizers and refreshments as well as a cash bar will be available. Renew old acquaintances and meet new people that share mutual professional interests.

Vendors and Exhibitors

The Conference's vendors and exhibitors serve as an important focal point for participant interaction. All coffee and refreshment breaks will be held in the Junior Ballroom alongside the exhibits and displays. All exhibit arrangements should be made through the ASMR website: www.asmr.us. The information for this year's Conference can be found under Annual Meetings, 2010 Pittsburgh PA. Exhibitor and Vendor details can also be found at:

www.PghMiningReclamationConf.com

Plenary Session

The Plenary Session will be held Monday morning, June 7 at 8 am in the Radisson Pittsburgh-Greentree Hotel. The Keynote Speakers will address the Conference theme.

Concurrent Technical Sessions

The concurrent technical sessions will start on the afternoon of Monday, June 7 and conclude on Thursday, June 10 at 12 noon. Paper presentations covering a broad spectrum of topics will be presented during these technical sessions. All presentations will take place onsite. Descriptions and additional information for the technical sessions, paper titles and authors can be found on the Conference's website:

www.PghMiningReclamationConf.com

ASMR Young Professionals Social Event

The ASMR Young Professionals group will be hosting their first annual social event in a "night on the town" on Monday, June 7, from 7 pm to 12 am. During this event, you will have a chance to meet, socialize and network with other young professionals as well as a select group of our more seasoned ASMR members. It will be a great opportunity to meet the people you will see throughout the week, share tips on advancing your career and find out how to get more involved with ASMR. Transportation to and from this event will be provided. Hors d'oeuvres, beer, cocktails and soft drinks will be served all for the low ticket price of **\$15 for ASMR members and \$20 for non-members**. If you want to bring your spouse, you are encouraged to do so. (They would pay the non-member price.)

Wondering if you're a young professional and should attend this event? If you've been doing reclamation at a mine, conducting research or teaching at an academic institution, consulting, regulating or doing anything reclamation associated as a career for **<10 years**, you're invited!

CONFERENCE ACTIVITIES

ASMR National Executive Committee Meeting

*Sunday, June 6
9:00 am - 5:00 pm*

Welcome Reception

*Sunday June 6
6:00 pm - 8:00 pm*

ASMR Young Professionals Social

*Monday, June 7
7:00 pm - 12:00 am (midnight)*

ARRI Excellence in Reforestation Awards

*Tuesday June 8
12:00 pm*

Three Rivers Boat Cruise and PA AMR Mayfly Awards

*Tuesday June 8
5:30 pm - 11:00 pm
(shuttle service starts at 5:30 pm)*

Poster Session Reception

*Wednesday, June 9
5:00 pm - 6:30 pm*

ASMR Awards Banquet

*Wednesday, June 9
7:00 pm*

Technical Division Business Meetings
(will be taking place; see details in final program)

ASMR National Executive Committee Meeting

*Thursday, June 10
1:30 pm - 4:30 pm*

ARRI Mined Land Reforestation Conference and the Excellence in Reforestation Awards

On Tuesday, June 8, ARRI speakers will present information concerning mined land reforestation. Invited speakers include past winners of ARRI's Excellence in Reforestation Awards and other experts in the field of reforestation on mined lands. The session will highlight award winning reclamation using the Forestry Reclamation Approach (FRA) from mine operators throughout the Appalachian Region and will also discuss innovative applications of the FRA. During the regular lunch, ARRI will present the Excellence in Reforestation Awards. Also, the State award winners from the past year will be recognized and the Regional Award Winner will be announced. The Regional Award is presented to the State Award Winner that best exhibited use of the FRA during reclamation. **The luncheon is open to all registered Conference participants and the cost is included in the registration fees.**

Three Rivers Boat Cruise and the PA AMR Mayfly Awards

The Ohio River Watershed – Fuel for a Nation: Hosted By Consol Energy
June 8, 2010: Departs 7:00 pm - Docks 10:00 pm.

Hosted by Consol Energy (the nation's largest producer of high-Btu Bituminous coal), the Three Rivers Boat Cruise is an opportunity to see Pittsburgh from a unique vantage point while learning about the region's rich past, mingling with representatives from the energy and mining industries, watershed organizations, municipal and state and federal agencies all while enjoying the flavor of Pittsburgh with an excellent Captain's Buffet in the company of local entertainers under a sparkling skyline. The PA Abandoned Mine Reclamation Conference Committee will highlight the evening with the awarding of its Mayfly Award to an individual for their lifetime commitment to reclamation in PA.

For over 250 years, Pittsburgh and its rivers have been the gateway through which coal, oil, steel, and other commodities have made their way to the rest of the country. Even today, the region's extensive network of waterways continues to be the lifeblood for commercial transportation--providing "Fuel for a Nation". This Cruise will include locking through the Braddock Lock and Dam with an explanation by the USACOE and the Port of Pittsburgh Commission. Join us and see why Pittsburgh is called, "The City of Bridges"!

Cruise departure from Station Square, Pittsburgh, PA on the Gateway Clipper's Empress. Transportation provided to and from Radisson Hotel.

**Shuttle service to the dock starts at 5:30 pm.
Return shuttle service starts at 10:15 pm.**

Cost: \$60.00 per person

Casual Attire.

Poster Session

The posters will be on display from Monday, June 7 through Wednesday evening, June 9. A Poster Session and Social will be held Wednesday evening, June 9 at 5:00 pm to 6:30 pm. The authors will be available for presentations and discussions of their research investigations, results and interpretation during the social. Poster titles and author information can be found on the Conference website <http://www.pghminingreclamationconf.com/>. Light appetizers and refreshments will be available.

Catered Events

Continental breakfasts in the morning and coffee, tea, soft drinks and snacks in the afternoon will be available in the Junior Ballroom for all Conference participants. In addition, a Welcome Reception, the ARRI Reforestation Awards Lunch, the ASMR Awards Dinner, light evening refreshments during the poster session and catered buffet lunches will be provided to all participants and are included in your registration fee.

TECHNICAL SESSIONS

ARRI - FRA Workshop

Ecology: Establishment and Evaluation of Switchgrass

Ecology: Oil and Gas Reclamation; Carbon Storage

Ecology/Land Use: Geomorphology, Stream Habitat, and Endangered Species

Forestry and Wildlife: Reforestation, Reclamation and Post Mining Land Use

Forestry Reclamation Approach Success Stories (ARRI)

The Forestry Reclamation Approach Today (ARRI)

Innovative Applications (ARRI)

Science, Community and Reclamation

Soil and Overburden: Mine Refuse Reclamation

Soil and Overburden: Soils and Land Cover

Water Management: Biological and Biochemical Reactors

Water Management: Metal Removal

Water Management: Passive Treatment

Water Management: Alkaline Additions; Treatment Costs

Water Management: Watershed Studies

Water Management: Flow Models

Water Management: Policy, Guidance, and Alternative Analysis

2010 JOINT MINING RECLAMATION CONFERENCE

**27th Annual Meeting of the American Society of Mining and Reclamation
12th Annual Pennsylvania Abandoned Mine Reclamation Conference
4th Annual Appalachian Regional Reforestation Initiative Mined Land Reforestation Conference**

Radisson Hotel, Pittsburgh-Greentree (USA)
June 5 - June 11, 2010

REGISTRATION FORM

In order to facilitate transportation, lodging, meeting room space, and catering requirements for Conference activities, we strongly encourage Pre-Registration. Pre-Registration for the entire Conference is \$270.00 or \$100.00 per day until May 10, 2010; Late Registration for the entire Conference is \$325.00 or \$125 per day. Student and Non-Profit Registration is \$135.00. Workshop and Tour costs are extra and are detailed below.

Name	Company/Affiliation		
Address			
City	State/Province	Zip/Mail Code	Country
Phone	Email Address		Date

GENERAL AND TECHNICAL SESSIONS

- Pre-Registration (until May 10, 2010) (per person) **\$270.00**
Includes Monday, June 7 to Thursday, June 10, 2010.
- One Day Registration (until May 10, 2010)..... (per person) **\$100.00**
Check day/s: Mon Tue Wed
- Late Registration (after May 10, 2010) (per person) **\$325.00**
Includes Monday, June 7 to Thursday, June 10, 2010.
- Late One-Day Registration (after May 10, 2010) (per person) **\$125.00**
Check day/s: Mon Tue Wed
- Student Registration (per person) **\$135.00**
(Submit copy of ID with Registration Form.)
- Non-Profits Registration (per person) **\$135.00**
(Submit copy of the 501(C)(3) Letter of Determination.)

WORKSHOPS

Pre-Registration is requested prior to May 10; otherwise first-come, first-serve basis.

Check the box beside the Workshop you are interested in, in order to sign up.

- 1. Erosion Estimates for Mined Lands Using RUSLE 2 (per person) **\$170.00**
Saturday, June 5, to Sunday, June 6, 8:00 am - 5:00 pm.
- 2. Semi-Arid Mined Land Reclamation "The Past 40 Years" (per person) **\$140.00**
Saturday, June 5, 8:00 am - 5:00 pm.
- 3. Mine Drainage Treatment: A Detailed Review of Active Treatment Options, Advantages & Challenges (per person) **\$200.00**
Sunday, June 6, 8:00 am - 5:00 pm. Lunch provided.
- 4. Mobile Computing Technology Developments for SMCRA..... (per person) **\$35.00**
Sunday, June 6, 12:30 pm - 4:30 pm.
- 5. Modeling and Evaluating Mine Drainage Treatment Using Geochemist Workbench (per person) **\$50.00**
Sunday, June 6, 8:00 am - 5:00 pm.
- 6. Passive Treatment of Alkaline Fe-Contaminated Waters..... (per person) **\$205.00**
Sunday, June 6, 8:00 am - 5:00 pm. Box lunch provided.
- 7. Communication and Presentation Improvement: "Harness the Power of Words" (per person) **\$160.00**
Sunday, June 6, 8:00 am - 4:00 pm.
- 8. Remote Sensing for SMCRA Applications (per person) **\$50.00**
Sunday, June 6, 8:00 am - 5:00 pm.
- 9. ARRI Forestry Reclamation Approach Workshop.....**\$0.00**
Monday, June 7, 1:30 pm - 4:30 pm.

REGISTRATION FORM (continued)

FIELD TOURS

Pre-Registration is requested prior to May 10; otherwise first-come, first-serve basis.

Check the box beside the Field Tour you are interested in, in order to sign up.

- 1. Decade-Old and Innovative New AMD Passive Treatment Systems and Reclamation Methods..... (per person) \$180.00
 Saturday, June 5, 9 am to Sunday, June 6, 5 pm.
 Registration cost covers transportation, meals (except Saturday evening), lodging with continental breakfast, snacks & beverages.
- 2. (ARRI Trip) Oxford Mining Company LLC's Jockey Hollow Mine Site\$0.00
 Forestry Reclamation Approach Demonstration Site, Cadiz, OH
 Thursday June 10. Includes transportation, lunch, snacks & beverages. (Limited to the first 200 people who sign up.)
- 3. Mine Drainage Remediation in the Chartiers Creek Watershed (per person) \$60.00
 Thursday June, 10. Registration cost provides for transportation, lunch, snacks and beverages.
- 4. Consol Energy Research and Development (per person) \$50.00
 Thursday, June 10. Registration cost provides for transportation, lunch, snacks and beverages.
- 5. Active Marcellus Drill Site and Consol Energy/PA Game Commission Conservation Area..... (per person) \$50.00
 Thursday, June 10. Registration cost provides for transportation, lunch, snacks and beverages.
- 6. West Virginia Mountaintop Surface Mining, FRA Reforestation and Stream and Wetland Mitigation (per person) \$87.00
 Friday, June 11. Registration cost provides for transportation, breakfast, lunch, snacks and beverages.

SOCIAL TOURS

Pre-Registration is requested prior to May 10; otherwise first-come, first-serve basis.

Check the box beside the event you are interested in, in order to sign up.

- 1. Meadowcroft (per person) \$57.00
 Sunday, June 6. Registration fee provides for transportation, tour and lunch.
- 2. Rivers of Steel Tour (per person) \$34.00
 Thursday, June 10, 9 am - 3 pm. Registration fee provides for transportation and tour. Lunch is on your own.
- 3. Falling Water and Flight 93 Memorial (per person) \$75.00
 Thursday, June 10., 8:30 am - 5 pm. Registration fee provides for transportation, tours and lunch.

OTHER FUNCTIONS

Check the box beside the event you are interested in, in order to sign up.

- Three Rivers Boat Cruise: Come Experience the City of Bridges (per person) \$60.00
 Tuesday, June 8, 7 pm – 10 pm (transportation included).

Number of Guests: _____

Total Amount: \$ _____

Attendance for the Boat Cruise is limited. Registration by May 10, 2010 is necessary; first-come, first-serve basis.

- ASMR Young Professionals Social.....

Number of Guests: Members: (\$15.00 per person) _____ Non-Members: (\$20.00 per person) _____ Total Amount: \$ _____

- ASMR Awards Banquet.....\$0.00

Wednesday, June 9 (free for all Joint Conference Registrants).

Number of Additional Guests: (\$25.00 per person) _____

Total Amount: \$ _____

TOTAL AMOUNT OF REGISTRATIONUS DOLLARS \$ _____

No refunds after May 10, 2010.

METHOD OF PAYMENT

Check payable to ASMR Credit Card: Visa Master Card Card # _____ - _____ - _____ - _____ Exp. Date _____

Card Holder Name (print) _____ Signature _____

Note: A \$5.00 credit card processing fee will be added to all Registrations if paid by credit card.

REGISTRATION AND PAYMENTS

Mail checks or credit card information to:

ASMR, 3134 Montavesta Road, Lexington, KY 40502
Or fax all payment information to: 859.335.6529

CONTACT INFORMATION

Richard Barnhisel
Phone: 859.351.9032 (cell)
Fax: 859.335.6529 (located in my home)

Registration also accepted by email: asmr5@insightbb.com