



2014

PENNSYLVANIA'S
Abandoned Mine Reclamation

CONFERENCE

"Collaboration is Essential"



Celebrating 25 Years!
www.arippa.org



Abandoned Mine Reclamation

June 26-27, 2014
Ramada Conference Center
State College, PA

www.treatminewater.com

Welcome



Dear 2014 Conference Attendees,

On behalf of the Planning Committee, welcome and thanks for joining us!

With a theme of "Collaboration Is Essential", the 2014 Pennsylvania Abandoned Mine Reclamation (AMR) Conference has teamed up with ARIPPA, combining efforts and audiences, to co-host a 2-day dual conference on Abandoned Mine Reclamation and Independent Power Production. Numerous networking opportunities are scheduled, including a happy hour, golf outing and a tour of Penn's Cave.

Industry has long been a part of Pennsylvania's AMR success. By joining forces with ARIPPA this year we hope to showcase our theme, while gaining perspective on an industry that powers the Appalachian Region by burning waste coal and reclaiming thousands of acres of abandoned mine lands at no cost to taxpayers.

Additionally, ARIPPA is celebrating their 25th anniversary. Please make it a point to welcome our industry friends from ARIPPA, renew old acquaintances, have a good time, and help ARIPPA celebrate their 25th Anniversary at the Thursday evening dinner.

This is your conference. Have a great time and make the most of it!
Andy McAllister, Regional Coordinator, WPCAMR

2014 Exhibitors

Susquehanna River Basin Commission (SRBC)
Land and Mapping Services
Hy-Tech Mushroom Compost, Inc.
Harsco Meals & Minerals
EPCAMR & WPCAMR
Stream Restoration, Inc.



www.pacd.org

Thanks for making the conference
possible!

2014 Planning Committee

- * Andy McAllister & Anne Daymut
Western PA Coalition for Abandoned Mine Reclamation, Greensburg PA (lead organization)
- * Robert Hughes & Michael Hewitt
Eastern PA Coalition for Abandoned Mine Reclamation, Ashley PA (co-lead organization)
- * Jeff McNelly & Cristy Doyle, ARIPPA, Harrisburg PA (co-lead organization)
- * Donna (Carnahan) Wagner, PA Department of Environmental Protection, Harrisburg PA
- * Tom Grote, WPCAMR volunteer, Jennerstown PA
- * Glenn Florence, PA Department of Environmental Protection, Harrisburg PA
- * John Stefanko, PA Department of Environmental Protection, Harrisburg PA
- * Tom Clark, Susquehanna River Basin Commission, Indiana PA
- * Leigh Ann Kemmerer, Borton-Lawson Engineering, EPCAMR Board Member, Ashley PA
- * Melissa Reckner, Kiski-Conemaugh Stream Team, Windber PA
- * Cliff Denholm, Stream Restoration, Inc., Mars PA
- * Lois Uranowski, OSMRE, Pittsburgh PA

Who will be awarded the 2014
Mayfly Award?

Welded sculpture by:
Michael Bestwick, Fennelton PA



www.srbc.net

Thursday - Schedule

7:00 - 8:30	Registration (Exhibit Area) 7:00 - 8:30am	
8:30 - 8:45	Welcome (Grand Ballroom): Robert Hughes, EPCAMR Track 1 (Grand Ballroom)Track 2 (Forum Room)	
8:45 - 9:30	Gary Anderson, ARIPPA, Ebensburg Power Company, "23 Years of Reclamation"	Shawn Simmers, Cambria Cogen, "The Synergies Between CFB Power Generation and Waste Coal Pile Reclamation"
9:30 - 10:15	Mike Dziak, Earth Conservancy, "AMD Treatment Alternatives and Reclamation of Mine Scarred Lands"	Lukus Monette, OSMRE, "Little Conemaugh Watershed Modeling Project"
10:15 - 10:45	Break (Exhibit Area) 10:15 - 10:45am	
10:45 - 11:30	Jeff Polenik, Robindale Energy, "Seanor GFCC - A Positive Impact"	Lois Uranowski, OSMRE, "Sustainable Mining and Reclamation: Is this possible?"
11:30 - 12:15	Jonathan M. Dietz and Timothy Gourley, Dietz-Gourley Consulting, LLC "Rushton Mine AMD Treatment Plant: Cost Saving & Performance Enhancing Modifications"	Cliff Denhom, Stream Restoration Inc., "Datashed Overview and Q&A"
12:15 - 5:00	Networking Outings - Box Lunch Pickup in Exhibit Area	
5:00-5:30	Networking and Cash Bar (Outdoor Pavilion weather permitting)	
5:30	Buffet Dinner Mayfly Award (Outdoor Pavilion weather permitting)	

Thursday's Banquet Dinner and Celebration of ARIPPA's 25th Anniversary is sponsored by the Susquehanna River Basin Commission. Join us for the presentation of the 2014 Mayfly Award and a silent auction of Abandoned Mine-Related Memorabilia.



The conference website, www.treatminewater.com, and the "PA Abandoned Mine Reclamation Community" on Facebook are integral companions to the conference. They are the conference's permanent record and provides valuable extras to the presentations, useful for future reference.

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Thursday - Synopses

8:45 - 9:30	Gary Anderson, ARIPPA, Ebensburg Power, "23 Years of Abandoned Mine Reclamation" This presentation will describe how our plant operates and will summarize the impact AML reclamation has had on the local environment and the communities in Revloc and Nanty Glo, and the expected impact of the next AML reclamation project.
	Shawn Simmers, Cambria Cogen, "The Synergies Between CFB Power Generation and Waste Coal Pile Reclamation" This presentation will link power generation with the beneficial use of ash and waste coal pile removal/reclamation for Cambria Cogen and Colver Power Project.
9:30 - 10:15	Mike Dziak, Earth Conservancy, "AMD Treatment Alternatives and Reclamation of Mine Scarred Lands" Dziak will enumerate the many successes of EC.
	Lukus Monette, OSMRE, "Little Conemaugh Watershed Modeling Project" GIS modeling in the Little Conemaugh River watershed work towards treating multiple mine-pool discharges for acid mine drainage (AMD).
10:45 - 11:30	Jeff Polenik, Robindale Energy, "Seanor GFCC - A Positive Impact" Robindale Energy Services, Inc. entered into a Government Financed Construction Contract (GFCC) and contributed to the process of watershed improvements.
	Lois Uranowski, OSMRE, "Sustainable Mining and Reclamation: Is this possible?" The outcome from applying geomorphic reclamation techniques coupled with natural stream design and ecological reclamation greatly improve our chance of more than just restoring the mining-disturbed land but to elevate that land to a sustainable ecosystem.
11:30 - 12:15	Jonathan M. Dietz and Timothy Gourley, Dietz-Gourley Consulting, LLC "Rushton Mine AMD Treatment Plant: Cost Saving & Performance Enhancing Modifications" The presentation will summarize evaluation efforts along with actual field results from the system evaluation and from the full-scale modifications of the Rushton AMD Treatment Plant.
	Cliff Denhom, Stream Restoration Inc., "Datashed Overview and Q&A" An overview of Datashed will be provided to explain how the free website can be used to manage watershed restoration efforts including storing water quality data and project information.



Foundation for Pennsylvania Watersheds

The Foundation for Pennsylvania Watersheds, FPW, has graciously donated a copy of Part 1 of WaterWise for each Conference attendee. Produced in close collaboration with FPW, WaterWise is attractive science-based programming, produced in a cinematic narrative and visual style for mass-medium distribution, which cross-promotes a companion social-networking website that can galvanize watershed advocates statewide, and that will also be repurposed as unique K-12 curriculum.

Visit www.treatminewater.com for abstracts. And join our Facebook Group!

Thursday

Thursday

Friday - Schedule

7:00 - 8:30	Registration and Light Breakfast (Exhibit Area) 7:00 - 8:30am	
8:30 - 8:45	Welcome (Grand Ballroom): Andy McAllister, WPCAMR	
8:45 - 9:30	Chris Abruzzo, Secretary, PA Department of Environmental Protection. KEYNOTE ADDRESS	
Track	Track 1 (Chairman's Room)	Track 2 (Forum Room)
9:30 - 10:15	Cara Santelli, "Microorganisms Contributing to Manganese Remediation in Passive Treatment Technologies"	Amy Wolfe, Trout Unlimited, "A Decade of Progress for the West Branch Susquehanna Restoration Initiative"
10:15 - 10:45	Break (Exhibit Area) 10:15 - 10:45am	
10:45 - 11:30	Eric Cavazza and Brian Bradley, PA DEP, "An Analysis of Pennsylvania's Accelerated Response Program – Pennsylvania's Alternative to the Federal Office of Surface Mining's (OSM) Emergency Program"	Shawn Rummel, Trout Unlimited, "Recovery of Coldwater Ecosystems Following Treatment of Abandoned Mine Drainage: Looking Beyond Water Quality to Determine Successful Treatment"
11:30 - 12:15	Bob Hedin, Hedin Environmental, "Effective Passive Treatment of Coal Mine Drainage"	Amy Wolfe, Trout Unlimited, "15 Years of Assessment, Abatement, and Recovery in the Lower Kettle Creek Watershed: What's Next?"
12:15 - 1:30	Lunch Speaker: Greg Conrad, Interstate Mining Compact Commission (Atrium) 12:15 - 1:30pm	
Track	Track 1 (Chairman's Room)	Track 2 (Forum Room)
1:30 - 2:15	Umar Mycka, Poison Ivy Horticulturist, "Observing A Familiar Stranger: Poison Ivy"	Operations and Maintenance Panel - Part One Art Rose, Penn State University, "Performance of 25 Passive Treatment Systems in PA"
2:15 - 3:00	Brad Shultz, Skelly and Loy, "Broad Top Township Six Mile Run AMD Treatment & Waste Coal Reclamation Project"	Operations and Maintenance Panel - Part Two
3:00 - 3:30	Break (Exhibit Area) 3:00 - 3:30pm	
3:30 - 4:15	William D. Burgos, Bradley Kaley and Yizhi Sheng, Penn State University, "Bioreactors for low-pH Fe(II) oxidation also remove remarkable amounts of total Fe"	Operations and Maintenance Panel - Part Three
4:15 - 5:00	Joe Pizarchik, OSMRE, "OSMRE Perspective"	
5:00	Conference Ends Door Prizes – Must be Present to Win!	

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Friday

Friday - Synopses

8:45 - 9:30	Chris Abruzzo, Secretary, PA Department of Environmental Protection. KEYNOTE ADDRESS E. Christopher Abruzzo was nominated by Governor Tom Corbett to serve as Secretary of the Department of Environmental Protection on September 20, 2013. His nomination was confirmed by the Senate on December 9, 2013. Prior to his confirmation as Secretary of the Department of Environmental Protection, Abruzzo served as Acting Secretary of DEP. He was appointed as Acting Secretary by the Governor on April 13, 2013. In his role as Acting Secretary, Abruzzo made it a priority to improve transparency at the agency and to work more closely with the public and environmental stakeholders in the development of policy and regulations. In addition, he led the Department through a reorganization designed to better serve both internal and external partners on matters concerning environmental education, energy, and environmental justice. As Acting Secretary, Abruzzo worked to unify the regional offices and the central office to promote consistency in the decision making and permitting processes. Further, he emphasized DEP's role as both regulators and problem-solvers to protect the environment and to help the regulated community achieve environmental compliance.
9:30 - 10:15	Cara Santelli, "Microorganisms Contributing to Manganese Remediation in Passive Treatment Technologies" A diverse community of bacteria, fungi, and algae can promote Mn oxide precipitation in passive remediation systems in PA. Many of the microbes in the treatment beds are common soil organisms that likely came from the surrounding, uncontaminated environment but are capable of existing in metal-rich waters.
10:45 - 11:30	Amy Wolfe, Trout Unlimited, "A Decade of Progress for the West Branch Susquehanna Restoration Initiative" This presentation will discuss the accomplishments of the West Branch Susquehanna Restoration Initiative over the past ten years as made through the efforts of TU and member agencies and organizations of the West Branch Susquehanna River Task Force and West Branch Susquehanna Restoration Coalition, as well as the needs and challenges that remain on the horizon as work continues toward the recovery of the West Branch Susquehanna watershed.
10:45 - 11:30	Eric Cavazza and Brian Bradley, PA DEP, "An Analysis of PA's Accelerated Response Program – Pennsylvania's Alternative to the Federal Office of Surface Mining's (OSM) Emergency Program" In October of 2010, the federal Office of Surface Mining (OSM) ceased implementing the Federal Emergency Program to address suddenly occurring, high-priority, abandoned mine land (AML) problems in Pennsylvania. In response to the cessation of the Emergency Program by OSM, Pennsylvania chose to not accept delegation of the Emergency Program from OSM but rather to set up an Accelerated Response Program to address the AML problems traditionally dealt with by OSM.
	Shawn Rummel, Trout Unlimited, "Recovery of Coldwater Ecosystems Following Treatment of Abandoned Mine Drainage: Looking Beyond Water Quality to Determine Successful Treatment" This project aims to provide a better understanding of how post-treatment monitoring should be conducted in order to ensure that both the water quality and biological communities are responding positively to the treatment. Preliminary results have shown improvements in water quality following treatment of AMD as well as a shift in the benthic macroinvertebrate community from pollution tolerant taxa to pollution sensitive taxa.



Friday

Friday - Synopses

Friday	11:30 - 12:15	<p><i>Bob Hedin, Hedin Environmental, "Effective Passive Treatment of Coal Mine Drainage"</i></p> <p>Contaminated mine drainage on abandoned coal mine sites can be treated by passive or active treatment techniques. Passive treatment is less costly than active treatment, but its reliability is often questioned. This paper presents a simple design approach that has been used to design passive treatment systems in Pennsylvania for the past 20 years. Four systems that demonstrate commonly utilized passive technologies are described and long-term data are presented. The systems have provided highly reliable and effective treatment for 3-18 years. The data demonstrate that properly designed, constructed, and maintained passive treatment systems are a highly cost-effective solution for contaminated mine discharges on AML sites.</p>
		<p><i>Amy Wolfe, Trout Unlimited, "15 Years of Assessment, Abatement, and Recovery in the Lower Kettle Creek Watershed: What's Next?"</i></p> <p>Since the inception of the partnership between TU and KCWA in 1998 through TU's national Kettle Creek Home Rivers Initiative, numerous assessments (including hydrogeological studies and airborne remote sensing surveys) were conducted, and nine passive treatment systems, a land reclamation project, and a mine pool stabilization project have been completed.</p>
	1:30 - 2:15	<p><i>Umar Mycka, Poison Ivy Horticulturist, "Observing A Familiar Stranger: Poison Ivy"</i></p> <p>The goal of this program is to share new observations and understandings gained through careful study of both the literature of poison ivy and live plants in the field. We hope to be able to articulate this knowledge in a format that is easily understandable and readily transferable to interested individuals. The ultimate goal of this talk is to help reduce the instance of exposure to poison ivy and the rash it so easily causes.</p>
		<p><i>Operations and Maintenance Panel - Part One</i> <i>Art Rose, Penn State University, "Performance of 25 Passive Treatment Systems in Pennsylvania"</i></p> <p>In part one of this three part series, Rose presents a survey by PA DEP in 2009-2010, a disturbing number of publically funded passive AMD treatment systems have "failed". This presentation discusses what "failure" means, why it happens, and how to prevent it.</p>
	2:15 - 3:00	<p><i>Brad Shultz, Skelly and Loy, "Broad Top Township Six Mile Run AMD Treatment & Waste Coal Reclamation Project"</i></p> <p>For more than 30 years, Broad Top Township has worked to improve the quality of life for its citizens by addressing the negative environmental impacts related to Abandoned Mine Lands (AMLs) and Abandoned Mine Drainage (AMD). Results in Six Mile Run are impressive.</p>
		<p><i>Operations and Maintenance Panel - Part Two</i></p> <p>In this three part series, three speakers will present three different approaches to operations and maintenance of AMD treatment systems. Join Art Grguric of Blackleggs Creek Watershed Association, Bill Gongaware, O&M contractor for PA DEP, and Tim Danahey, BioMost, to learn how they deal with tough O&M issues.</p>

Friday - Synopses

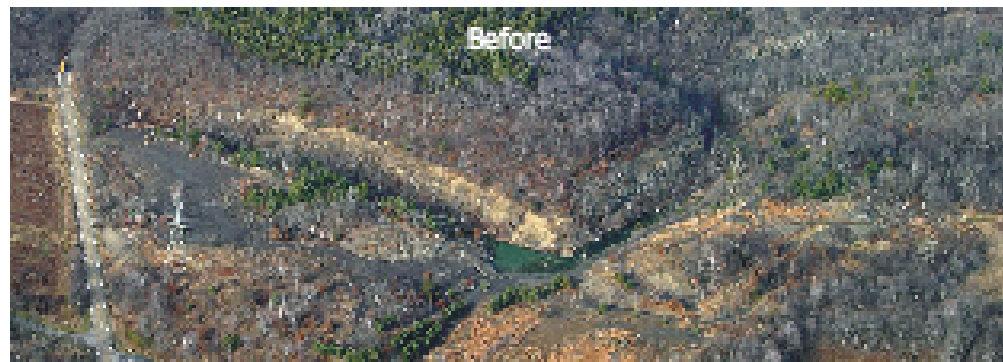
Friday	3:30 - 4:15	<p><i>William D. Burgos, Bradley Kaley and Yizhi Sheng, Penn State University, "Bioreactors for low-pH Fe(II) oxidation also remove remarkable amounts of total Fe"</i></p> <p>Low-pH Fe(II) oxidation influences the geochemistry of anoxic, Fe(II)-rich acid mine drainage (AMD). At many sites this is evidenced by the development of terraced iron formations (TIFs) formed via the oxidative precipitation of iron(III)-oxyhydroxysulfate minerals. In laboratory experiments using flow-through, continuously-stirred, chemostatic bioreactors, we measured GDM values ranging from 40 to 160 (g FeT d-1 m-2).</p>
		<p><i>Operations and Maintenance Panel - Part Three</i></p> <p>In this three part series, three speakers will present three different approaches to operations and maintenance of AMD treatment systems. Join Art Rose of Penn State University, Art Grguric of Blackleggs Creek Watershed Association, Bill Gongaware, O&M contractor for PA DEP, and Tim Danahey, BioMost, to learn how they deal with tough O&M issues. In part three, our O&M panel will take questions from the audience about the systems and methods they presented in part one.</p>
	4:15 - 5:00	<p><i>Joe Pizarchik, OSMRE, "OSMRE Perspective"</i></p> <p>Joe Pizarchik is the Director of the OSMRE. In his previous position with PA DEP, he was one of the authors of Pennsylvania's Environmental Good Samaritan Act. Mr. Pizarchik helped develop Pennsylvania's program for volunteers to clean up abandoned coal refuse sites and helped develop Pennsylvania's program for mine operators to establish trust funds as a means of meeting their financial obligation to ensure funds are available to perpetually treat the discharges caused by their mining. Joe will provide an update on policies related to AMR.</p>
	5:00	<p>Conference Ends Door Prizes – Must be Present to Win!</p>

FRIDAY LUNCH SPEAKER:

Greg Conrad, Interstate Mining Compact Commission
The Interstate Mining Compact Commission, IMCC, is a multi-state governmental organization representing 24 mineral producing states. IMCC exercises several powers on behalf of member states, all of which are of a study, recommendatory or consultative nature providing a forum for interstate action and communication on issues of concern to the member states. As executive Director, Mr. Conrad is responsible for overseeing legislative and regulatory issues for both coal and hardrock minerals, including surface mining and reclamation, mine waste, coal combustion by-products, identification and restoration of abandoned mine lands, financial assurance, mine safety and health and surface and ground water quality and quantity.

DEP's Bureau of Abandoned Mine Reclamation

Welcomes Attendees to the Annual PA AMR Conference



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