



# **West Virginia Mine Drainage Task Force**

## **2022 PROGRAM** **WEST VIRGINIA MINE DRAINAGE TASK FORCE SYMPOSIUM** **Marriott Waterfront Hotel** **Morgantown, West Virginia** **October 4-5, 2022**

### **Tuesday Morning, October 4, 2022**

- 8:00 – 9:00 am      Registration
- 9:00 – 9:05 am      Welcome: Ben Faulkner, Chairman of the Task Force, Princeton, WV  
Moderator: Randy Maggard, American Consolidated Natural Resources,  
Monongah, WV
- 9:05 – 9:30 am      **WVDEP Update on Mining, Reclamation, and AMD Treatment**  
Jon Rorrer, Acting Director  
West Virginia Department of Environmental Protection  
Charleston, WV
- 9:30 – 10:00 am      **OSM Update on Mining, Reclamation and AMD**  
Tom Shope, Regional Director, Appalachian Region  
Office of Surface Mining Reclamation and Enforcement  
Pittsburgh, PA
- 10:00 – 10:30 am      BREAK
- 10:30 – 11:00 am      **Strategy for AMD Treatment on Watershed Scales**  
Paul Ziemkiewicz  
West Virginia Water Research Institute  
Morgantown, WV

11:00 – 11:30 am      **Large Scale Treatment Plants at Abandoned and Bond Forfeiture Sites**  
Rob Rice and Dave McCoy  
West Virginia Department of Environmental Protection  
Charleston, WV

11:30 – 12:00 pm      **Data Needed for Selection and Design of AMD Treatment Systems**  
Tim Danehy  
Biomost, Inc.  
Mars, PA

12:00 – 1:30 pm      Lunch

**Tuesday Afternoon, October 4, 2022**

1:30 – 1:35 pm      Regroup  
Moderators: Jennie Henthorn, Henthorn Env. Serv., St. Albans, WV  
Jamie Gwinn, Arch Resources, Charleston, WV

1:35 – 2:00 pm      **2021-22 Legislative Issues on Mining, Reclamation and Water Quality**  
Jason Bostic  
West Virginia Coal Association  
Charleston, WV

2:00 – 2:30 pm      **Successful AMD Abatement – Broad Top, PA**  
Joe Mills  
Skelly and Loy  
Morgantown, WV

2:30 – 3:00 pm      **A Design and Build Active Treatment Plant for the Globe Mine  
High Strength Mine Discharge**  
Jon Dietz  
Iron Oxide Technologies, LLC, & Smith Gardner, Inc.  
Ridgway, PA

3:00 – 3:30 pm      BREAK

3:30 – 4:00 pm      **Two Case Studies of Enhancing Decarbonation by Utilizing Iron Oxidation**  
Brent Means and Rich Beam  
Office of Surface Mining  
New Cumberland, PA

- 4:00 – 4:30 pm      **PHREEQ-N-AMDTreat+REYs Water-Quality Modeling Tools to Evaluate Acid Mine Drainage Treatment Strategies for Recovery of Rare Earth Elements**  
                                  Charles Cravotta  
                                  US Geological Survey  
                                  New Cumberland, PA
- 4:30 – 5:00 pm      **Development of Pilot Plant for Extraction of Rare Earth Elements from AMD Products**  
                                  Paul Ziemkiewicz  
                                  West Virginia University  
                                  Morgantown, WV
- 5:00 – 5:30 pm      **Effectiveness of the T&T AMD Treatment Plant on Muddy Creek**  
                                  Ben Fancher  
                                  West Virginia Department of Environmental Protection  
                                  Philippi, WV

**RECEPTION – 5:30 to 7:30 pm**

**Wednesday Morning, October 5, 2022**

- 8:00 – 8:05 am      Moderator: Tiff Hilton, WOPEC, Lewisburg, WV
- 8:05 – 8:30 am      **10+ Year Passive Treatment System Performance Evaluation**  
                                  Tim Danehy  
                                  Biomost, Inc.  
                                  Mars, PA
- 8:30 – 9:00 am      **Beginnings of AMD Passive Treatment in North America**  
                                  Bob Kleinmann and Jeff Skousen  
                                  Editor-in-Chief of Mine Water and Environment and WVU  
                                  Pittsburgh, PA and Morgantown, WV
- 9:00 – 9:30 am      **Anna S Mine: A Century of Mining and Reclamation**  
                                  Bob Hedin  
                                  Hedin Environmental  
                                  Pittsburgh, PA
- 9:30 – 10:00 am      **Co-treating AMD and Municipal Wastewater in Existing Conventional Wastewater Treatment Plants**  
                                  Travis Tasker and Ben Roman  
                                  St. Francis University  
                                  Loretto, PA

10:00 – 10:30 am      **BREAK**

10:30 – 11:00 am      **Monitoring Brown Trout Invasion in a Native Brook Trout Stream Post Mine Drainage Remediation – A Cautionary Tale**  
Tom Clark and Brianna Hutchison  
Susquehanna River Basin Commission  
Harrisburg, PA

11:00 – 11:30 am      **Mine Pools as a Valuable Municipal and Economic Water Resource in the Central Appalachian Coalfields**  
Hannah Patton and Ben Faulkner  
Virginia Tech  
Blacksburg, VA

11:30 – 12:00 pm      **Coagulation and Flocculation Water Treatment**  
Jonathan Ceslovník  
Nalco Water  
Charleston, WV

12:00                    **Adjourn**

1:00 – 3:00 pm        **WORKSHOP – PHREEQ-N-AMDTreat Model to Evaluate Water-Quality Effects from Passive and Active Treatment of Mine Drainage**  
Charles Cravotta and Brent Means  
US Geological Survey and OSMRE  
New Cumberland, PA

**Instructions for the Workshop**

An introduction to the program will be given in the presentation earlier during the conference (see abstract). The workshop will emphasize water-quality modeling using these tools to evaluate various treatment strategies. The workshop begins with a brief Power Point presentation and then will provide demonstrations on how to use the models for examples provided. Participants will use the models so laptop computers will be necessary for them to bring to the workshop. Software will be made available (either via the web ahead of time or on a flash drive for installation during the workshop). The instructors will demonstrate how the information from the models can be used with the currently available version of AMDTreat 5.0. Those already familiar with AMDTreat will be ahead of the learning curve.