



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 **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
- 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 **Large Scale Treatment Plants at Abandoned and Bond Forfeiture Sites**
 Rob Rice and Dave McCoy
 West Virginia Department of Environmental Protection
 Charleston, 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.