



Monday, 13 May

7am **Registration - Short Course 101 and 301**
Pantlind Concourse (2nd level)

7am **Breakfast - Short Course 101 and 301**
Ambassador Ballroom (2nd Level)

8am **101a -
SC 101- Introduction to Coal Combustion Ash**
Pantlind Ballroom (gold)
Chaired by: Dr. Bob Jewell

SC 101- Introduction to Coal Combustion Ash
» Lisa Burris

8am **301a -
SC 301- Introduction**
Imperial Ballroom (bank)
Chaired by: Dr. PJ Nolan

Introduction
» PJ Nolan

8:15am **301b -
SC 301- Geochemistry of CCP in the Subsurface**
Imperial Ballroom (bank)
Chaired by: Dr. PJ Nolan

Geochemistry of CCP in the Subsurface
» PJ Nolan and Jeff Frazier

8:35am **101b -
SC 101- Lab Tests for Ash Characterization**
Pantlind Ballroom (gold)
Chaired by: Dr. Bob Jewell

SC 101- Lab Test for Ash Characterization
» Robert Rathbone

9am **301c -
SC 301- Empirical Observations and Unresolved Questions on CCP
Leaching: 40 years of EPRI Research**
Imperial Ballroom (bank)
Chaired by: Dr. PJ Nolan

**Empirical Observations and Unresolved Questions on CCP
Leaching: 40 years of EPRI Research**
» Bruce Hensel and Lea Millet

9:10am **101c -
SC 101- Coal Combustion Products**
Pantlind Ballroom (gold)
Chaired by: Dr. Bob Jewell

SC 101- Coal Combustion Products, i.e., scrubber materials
» Ann Palmer

9:45am **101d -
SC 101- The Nature of Poned Ash**
Pantlind Ballroom (gold)
Chaired by: Dr. Bob Jewell

SC 101- The Nature of Poned Ash
» Michael McCarthy

10am **301 Short Course - Coffee Break**
Pantlind Concourse (2nd level)



Continued from **Monday, 13 May**

10:20am **101 Short Course - Coffee Break**
Pantlind Concourse (2nd level)

10:30am **301d -
SC 301- Introduction and Approaches to Modeling, Difference
between Geochemical and Flow Modeling**
Imperial Ballroom (bank)
Chaired by: Dr. PJ Nolan

**Introduction and Approaches to Modeling, Difference between
Geochemical and Flow Modeling**
» PJ Nolan and Cole Mayer

10:40am **101e -
SC 101- Techniques for Harvesting Poned and Landfilled Ash**
Pantlind Ballroom (gold)
Chaired by: Dr. Bob Jewell

SC 101- Techniques for Harvesting Poned and Landfilled Ash
» Greg Landry

11:15am **101f -
SC 101- Coal Combustion Ash Management Practices**
Pantlind Ballroom (gold)
Chaired by: Dr. Bob Jewell

SC 101- Coal Combustion Ash Management Practices
» Glenn Amey

11:15am **301e -
SC 301- Modeling Attenuation and Reversibility**
Imperial Ballroom (bank)
Chaired by: Dr. PJ Nolan

Modeling Attenuation and Reversibility

» Jim Finley, PJ Nolan, and Cole Mayer

12pm **101 and 301 Short Course - Lunch**
Ambassador Ballroom (2nd Level)

12pm **Exhibit Hall Set Up**
Exhibit Hall A, B, C
Chaired by: Alyssa Barto and Brooke Pirmann

1pm **301f -
SC 301- Uncertainty, Interpretation, and Application of Geochemical
Modeling Results and Data**
Imperial Ballroom (bank)
Chaired by: Dr. PJ Nolan

**Uncertainty, Interpretation, and Application of Geochemical
Modeling Results and Data**
» Jim Finley and Jeff Frazier

1:10pm **101g -
SC 101- Technology for Beneficiation and Advanced Materials**
Pantlind Ballroom (gold)
Chaired by: Dr. Bob Jewell

SC 101- Technology for Beneficiation and Advanced Materials
» Nortey Yeboah

1:45pm **101h -
SC 101- Use of Coal Combustion Products in Cementitious Materials**
Pantlind Ballroom (gold)
Chaired by: Dr. Bob Jewell

**SC 101- Use of Coal Combustion Products in Cementitious
Materials**
» Rod Jones



Continued from **Monday, 13 May**

1:45pm **301g -
SC 301- Tools to Strengthen ASDs: Use and Misuse of Geochemical Evidence**
Imperial Ballroom (bank)
Chaired by: Dr. PJ Nolan

Tools to Strengthen ASDs: Use and Misuse of Geochemical Evidence
» Denise Levitan

2:20pm **101i -
SC 101- Advanced Beneficiated Materials and Non-Cement Uses of Ash**
Pantlind Ballroom (gold)
Chaired by: Dr. Bob Jewell

SC 101- Advanced Beneficiated Materials and Non-Cement Uses of Ash
» Ben Gallagher

2:30pm **301h -
SC 301- Geochemical Changes Observed at CCP Sites After Closure**
Imperial Ballroom (bank)
Chaired by: Dr. PJ Nolan

Geochemical Changes Observed at CCP Sites After Closure
» Jeff Frazier and Denise Levitan

2:55pm **101 Short Course - Coffee Break**
Pantlind Concourse (2nd level)

3pm **301 Short Course - Coffee Break**
Pantlind Concourse (2nd level)

3:15pm **101j -
SC 101- Utilization Trends is CCPs**
Pantlind Ballroom (gold)
Chaired by: Dr. Bob Jewell

SC 101- Utilization Trends is CCPs
» Thomas Adams

3:30pm **301i -
SC 301- Geochemistry for Key CCP Management Decisions and Closing Remarks**
Imperial Ballroom (bank)
Chaired by: Mr. Cole Mayer

Panel Discussion - Geochemistry for Key CCP Management Decisions and Closing Remarks

5pm **Welcome Reception**
Exhibit Hall C

Tuesday, 14 May

7am **Breakfast**
Exhibit Hall C

7am **Registration**
Outside of Ramme

7am **Exhibit Hall Open**
Exhibit Hall A, B, C
Chaired by: Alyssa Barto and Brooke Pirmann

8am **Plenary Session**
Ballrooms B, C, D



Continued from **Tuesday, 14 May**

- 8:30am **CLOSED Meeting – MCAA**
Chase Boardroom
- 10am **Coffee Break**
Exhibit Hall C
- 10:30am **Beneficiation and Processing 1 -
Beneficiation and Processing 1**
Caylor Room
Chaired by: Katherine Coco
- 10:30am **Path Forward to CCR Conveyor Solutions**
» [Mr. Michael Peden](#), [Mr. Don Fuller II](#)
- 11am **THE LEGACY ASH RULE: CAN BENEFICIAL REUSE BE A SOLUTION?**
» [Mr. Tom Kierspe](#)
- 11:30am **Planning for the Future of Beneficial Use**
» [Mr. Gabe Lang](#), [Mr. Don Fuller II](#), [Mr. Nortey Yeboah](#)
- 10:30am **Emerging Technologies 1 -
Emerging Technologies 1**
McKinley Room
Chaired by: Mr. David Bardsley
- 10:30am **Streamlining CCR Compliance using a Groundwater Data
Management System**
» [Mr. Travis Clark](#)
- 11am **Implementing automation and SMART pumping systems in CCR
projects for improved water collection, treatment, and discharge**
» [Mr. Dave Donahue](#), [Mr. Faizan Chowdhury](#)

- 11:30am **Ash Beneficiation in the Production of Waste Liner Materials**
» [Mr. Cyril Attwell](#), [Dr. Kelley Reynolds-Clausen](#), [Ms. Pheny Mvuyana](#)
- 10:30am **Regulatory Issues 1 -
Regulatory Issues 1**
Cain Room
Chaired by: Ms. Susan Jackson
- 10:30am **Navigating Challenges Presented by State CCR Regulations**
» [Mr. Brian Hennings](#), [Mr. Eric Tlachac](#), [Mr. Victor Modeer](#)
- 11am **Applying CCR Lessons Learned to Legacy Rule Implementation**
» [Mrs. Sarah Holmstrom](#), [Mr. Greg Tieman](#)
- 11:30am **Proposed Effluent Limitations Guidelines for CCR Landfill
Leachate and Legacy Wastewater**
» [Ms. Lindy Johnson](#), [Mr. William Kennedy](#)
- 10:30am **Geotechnical 1 -
Geotechnical 1**
Manz Room
Chaired by: Dr. PJ Nolan
- 10:30am **Dewatering System Installation Methods for Ash Dewatering and
Deep Depressurization- A Case Study**
» [Mr. Shawn Coughlin](#), [Mr. Christopher Gee](#), [Mr. Christopher Jones](#), [Dr. Paul Schmall](#)
- 11am **Modeling in Support of Dewatering and Closure Construction of
an Upstream Raise CCR Surface Impoundment**
» [Mr. Craig Schuettpeitz](#), [Dr. Tanya Walkenbach](#), [Mr. Todd Stong](#), [Mr. Shane Stockdill](#)
- 11:30am **PVC LINER INTERFACE FRICTION AND SLOPE STABILITY**
» [Mr. John Klamut](#), [Mr. Ron Harris](#), [Mr. James Shields](#)



Continued from Tuesday, 14 May	
10:30am	Project Specific Cases 1 - Project Specific Cases 1 <i>Kruger Room</i> Chaired by: Mr. Joe Keller
10:30am	How to Find CCRMUs – Case Studies on Demolition Projects » Ms. Cassie Dumoulin , Mr. Mark Rokoff
11am	How to Create a Multi-Faceted Strategic Communications Playbook About Coal Ash Management » Ms. Tamara Hinton
11:30am	Dry FGD Byproduct Characteristics and Utilization In China – Development and Trends » Dr. Muhcheng Wu , Dr. Qingfa Su, Dr. Jianchun Wang, Mr. Yongrui Chen, Mr. Hong Chen, Mrs. Canfeng Xu, Mr. Maoyuan Lu, Mr. Yiqiang Lai, Mr. Yuan Zhang, Mr. Chunyuan Lin
10:30am	Cement and Concrete 1 - Cement and Concrete 1 <i>Ramme Room</i> Chaired by: Dr. Tristana Duvallet
10:30am	Carbon Credit Generation for Harvested and Beneficiated Ash » Ms. Kayla Carey
11am	Calcined Clay Cement: The New Fly Ash for Low Carbon Concrete? » Prof. Rod Jones
11:30am	Advancements in Coal Ash Specifications: What's Needed for Concrete Use Today? » Dr. Lawrence Sutter
10:30am	Panel Discussion - 'Utility Perspectives on Beneficial Use of Harvested CCR' <i>Adams Room</i> Chaired by: Donnie Seward
10:30am	Utility Perspectives on Beneficial Use of Harvested CCR » Dr. Michael Turnbow , Mr. Brett Mitchell , Mr. Chris Gee
10:30am	Groundwater and Environment 1 - Groundwater and Environment 1 <i>Robl Room</i> Chaired by: Mr. Graham Crockford
10:30am	Dewatering Optimization Strategies in Support of Closure by Removal (CBR) to Accelerate Groundwater Cleanup at CCR Sites with Case Study » Mr. Sean Larkin , Dr. Jacob Chu
11am	Understanding the Challenges of Establishing Suitable Groundwater Monitoring Systems for Compliance with the Legacy Rule Revisions to CCR Regulations. » Mr. Wayne Weber , Mr. James Feild, Mr. Rob Heimbach, Mr. Chris hoglund
11:30am	CCR Dewatering – Back to the Basics » Mr. Gregory Landry
10:30am	Landfill and Pond Issues 1 - Landfill and Pond Issues 1 <i>Goss Room</i> Chaired by: Mr. Ron Hager
10:30am	CCR Landfills - Part 1: Groundwater Considerations during Design and Construction » Mr. Johnathan Ebenhack , Mr. Jerry Wylie



Continued from **Tuesday, 14 May**

11am **CCR Landfills - Part 2: Using a Graphical Interpretation with Model Simulations to Predict Groundwater Elevations During and After CCR Landfill Construction**

» [Mr. Jerry Wylie](#), Dr. Rong Yu

11:30am **Considering the Big Picture: Planning and Designing for a Multiple CCR Landfill Site**

» [Mr. Andrew Rodzianko](#), Ms. Monica Moody

10:30am **Mining and Reclamation 1 - Mining and Reclamation 1**

Marksberry Room (B)

Chaired by: Mr. John Watrous

10:30am **Use of Harvested Fly Ash and Landfilled FGD Materials for Mine Reclamation**

» [Dr. Tarunjit Butalia](#)

11am **Novel Mining Materials Based on Fly Ash**

» [Dr. Dong Zhang](#), Dr. Yang Dong, Dr. Jinder Jow, Dr. Si-yu Gong, Dr. Chun-lei Geng, Mr. De-hai Lin

11:30am **Manufacturing of LEED Sustainable Building Materials from Previously Landfilled Off-Spec Fly Ash**

» [Mr. Randall Stremmel](#)

10:30am **Ash Management 1 - Ash Management 1**

Marksberry Room (A)

Chaired by: Mr. Zac Fillmore

10:30am **Coal Combustion Products Worldwide - On the Stretch from Suitability to Sustainability**

» Mr. Craig Heidrich, Dr. Jinder Jow, Mr. Thomas Adams, [Dr. Hans-loachim Feuerborn](#)

11am **Design and Construction Challenges with Construction of a Landfill in a Former CCR Basin**

» [Mr. Kory Anstead](#)

11:30am **Innovative Solutions for a Unique CCR Facility Closure - A Case Study**

» [Ms. Brittany Hebbeler](#), Mr. Nathan Bader, Mr. Shane Harris

11:30am **WWCCPN Meeting - CLOSED Meeting - WWCCPN Meeting**

Chase Boardroom

12pm **Lunch**

Exhibit Hall C

1pm **Beneficiation and Processing 2 - Beneficiation and Processing 2**

Caylor Room

Chaired by: Robert Rathbone

1pm **Changes in the Nature of Midwestern Fly Ash Over the Past Two Decades: I. Chemistry and Mineralogy**

» [Dr. Bob Jewell](#), Dr. Thomas Robl, Ms. Anne Oberlink

1:30pm **Changes in the Nature of Midwestern Fly Ash Over the Past Two Decades: II. Air Classification and the Pozzolanic Characteristics of the Ash**

» [Dr. Thomas Robl](#), Dr. Bob Jewell, Ms. Sydney Dendekker, Ms. Anne Oberlink

2pm **Beneficial Use of Fly-Ash through Soil Stabilization and Portland Cement Concrete Mix**

» [Dr. Adam Kaplan](#), Dr. M. A. Karim, Dr. Youngguk Seo

2:30pm **Collaborative utilization of fly ash and desulphurization wastewater**

» Ms. Xia Wang, Dr. Yang Dong, [Dr. Jinder Jow](#)



Continued from **Tuesday, 14 May**

3pm **Use of Visualization Software as a Tool for Site Characterization**
 » [Mr. Kevin Cernik](#), Mr. Craig Schuettpelez, Mr. Shane Stockdill, Mr. Todd Stong

1pm **Emerging Technologies 2 -
 Emerging Technologies 2**
McKinley Room
 Chaired by: Mr. Bradford Cooley

1pm **Removal of Selenium from Difficult-to-treat Wastewaters Using an Innovative Reductive-adsorptive Media**
 » [Mr. Patrick McKeown](#), Dr. Madan Tandukar, Dr. Steve Woodard, Mr. Mike Nickelsen

1:30pm **Wicking Wells, a new novel method to remediate dissolved solids in groundwater**
 » [Mr. Shane McDonald](#)

2pm **Efficacy and Applications of Microbial Induced Calcium Carbonate Precipitation in Coal Ash Management**
 » [Mr. William Odle](#), Prof. Brina Montoya, Dr. Pegah Ghasemi

2:30pm **An Innovative and Cost-Effective Boron Adsorbent Media**
 » [Ms. Allison Kreinberg](#), Mr. Rob Ferree, Dr. Duane Graves

1pm **Regulatory Issues 2 -
 Regulatory Issues 2**
Cain Room
 Chaired by: Ms. Leslie Miller

1pm **CASE STUDY: BEST PRACTICES IN IMPLEMENTING THE FACILITY EVALUATION REPORT (PER THE LEGACY CCR SI RULE)**
 » [Mr. Mark Rokoff](#)

1:30pm **Legacy Rule Implementation Deadlines: Examining the Agency vs. Industry Disconnect**
 » [Mr. Lucas Carr](#), Mr. Eric Tlachac, Mr. Brian Hennings

2pm **Legacy Rule Insights and Challenges**
 » [Mrs. Arica DiTullio](#)

2:30pm **Proposed CCR Legacy Rule - Making Sense from Chaos**
 » [Mr. Will Mattingly](#), [Mr. Charla Barnes](#)

3pm **Proposed Legacy Rule - Groundwater Compliance Nuances and Lessons Learned**
 » [Mr. Matt Dagon](#), Dr. Peter Thibodeau

1pm **Cement and Concrete 2 -
 Cement and Concrete 2**
Manz Room
 Chaired by: Dr. Neal Berke

1pm **Exploring Rapid Solidifying Fly Ash Cementitious Materials for Making Structural Components**
 » [Ms. Tulie Chakma](#), [Mr. Stephen Gordon](#), Dr. Shaurav Alam, Dr. John Matthews

1:30pm **The durability of mortars and concrete with a high volume of Ordinary Portland Cement (OPC) substituted by a fly ash calcium sulfoaluminate binder**
 » [Dr. Peeter Paaver](#)

2pm **Performance of 5-year old concrete made with spray dryer absorber material**
 » [Mr. Benjamin Gallagher](#), Mr. Sundar Chithiraputhiran, Mr. Travis Collins

2:30pm **The Future of CCR "Green Cement" Technology to Reduce CO2 and Provide High-Performance Products**
 » [Mr. Russell Stapp](#)



Continued from Tuesday, 14 May	
1pm	<p>CCP Chemistry and Classification 1 - CCP Chemistry and Classification 1 <i>Kruger Room</i> Chaired by: Dr. Heileen Hsu-Kim</p>
1pm	<p>Coal Ash Impoundment Characterization » Mr. Jimmy Knowles</p>
1:30pm	<p>Coal Ash Constituents and Treatment Options » Mrs. Christine Harris, Mr. Rob Orlando</p>
2pm	<p>Exploring Non-Traditional Coal Ash as a Sustainable Alternative in Concrete: Performance Analysis and Predictive Modeling » Mr. Behzad Tahmouresi, Dr. Tyler Ley</p>
2:30pm	<p>An Evaluation of On-Site X-Ray Fluorescence (XRF) Analysis on Coal Combustion Residuals » Mr. Christopher Frishcosy, Dr. Ashley Manning-Berg, Ms. Linen Cooper, Mr. Robert Hageman, Mr. Timothy Moyers, Ms. Tara Masterson, Mr. Nicholas McClung</p>
3pm	<p>Application of Data Science Techniques to Estimate Soluble Alkali Contribution from Fly Ashes for Determination of Concrete Pore Solution Chemistry » Prof. Anol Mukhopadhyay</p>
1pm	<p>Environmental Issues 1 - Environmental Issues 1 <i>Ramme Room</i> Chaired by: Mr. Jason House</p>
1pm	<p>A Practical Approach to Manufacturing Sintered Lightweight Aggregates (LWA) from Unrecycled Coal Combustion Ash (CCA) » Mr. Yousif Alqenai, Mr. Mohammadamin Zooyousefin, Ms. Thuy Nguyen, Dr. Mo Balapour, Mr. Yaghoob (Amir) Farnam</p>

1:30pm	<p>Ash Utilisation for The Protection and Improvement of Electrical Transmission Infrastructure » Mr. Cyril Attwell, Dr. Kelley Reynolds-Clausen, Ms. Pheny Mvuyana</p>
2pm	<p>Managing Ash Pond Closure Waters: Technology Selection and Design Considerations » Mr. Philip Benson</p>
2:30pm	<p>Corrective Action Sustainability: Holistic Decision Support Tool » Mr. John Kondziolka, Ms. Ari Lewis, Mr. Bruce Hensel, Mr. Andrew Bittner</p>
3pm	<p>Heavy Metals Reduction and Sequestration at Coal Combustion Residuals (CCR) Sites » Mr. Lowell Kessel</p>
1pm	<p>Panel Discussion - 'Implementing the Final CCR Legacy Rule' <i>Adams Room</i> Chaired by: Mr. Robert Glazier</p>
1pm	<p>Implementing the Final CCR Legacy Rule » Mr. Robert Glazier, Mrs. Martha Thomsen, Mr. John Seymour, Mr. Victor Modeer</p>
1pm	<p>Groundwater and Environment 2 - Groundwater and Environment 2 <i>Robl Room</i> Chaired by: Dr. Ben Amos</p>
1pm	<p>Effective Groundwater Treatment at CCR sites » Mr. Mark Bryant, Mr. Derek Ingram, Mr. Michael Marley</p>
1:30pm	<p>Arsenic Treatment from Coal Ash Pond Groundwater » Dr. Jack Ma, Mr. David Donkin, Mr. Morgan French</p>
2pm	<p>Bench-Scale Testing of Selenium Treatment using Passive, Constructed Treatment Wetlands » Ms. Katy Lindstrom, Mr. Ryan Schipper, Mr. Andrew Dykstra</p>



Continued from **Tuesday, 14 May**

2:30pm **In Situ Groundwater Treatment of Arsenic via Iron Coprecipitation with Air Sparge: Opportunities and Challenges**

» [Dr. Michael Hay](#), Mr. Britt McMillan, Ms. Whitney Sauve, Mr. Daniel Groher, Ms. Nica Klaber, Ms. Janet Mathews-Flynn

3pm **Feasibility of Concurrent Treatment of Arsenic and Molybdenum through Co-Precipitation and Adsorption with Case Study and Cost Analysis**

» [Mrs. Prachi Jain](#), [Mr. Brian Colonnese](#), Dr. Jacob Chu

1pm **Landfill and Pond Issues 2 - Landfill and Pond Issues 2**

Goss Room

Chaired by: Mr. Sean Rome

1pm **Planning and Implementation of Closure by Removal (Clean Closure) In Louisiana**

» [Ms. Angela Harrigal](#), [Ms. Denise Radaich](#)

1:30pm **CCR Facility Instrumentation for Closure Programs**

» Mr. Dale Evans, [Mr. Zachary Boucias](#)

2pm **Beyond Decommissioning: Utility Scale Zero Liquid Discharge Solutions for Landfill Leachate and FGD Wastewater Post Power Plant Closure**

» [Mr. Joseph Woodley](#), Mr. Morgan French

2:30pm **Spillway Abandonment for CCR Site Closure – Techniques and Challenges**

» [Ms. Brooke Alison](#), Mr. Shane Harris, Mr. Nicholas Golden

3pm **Comparing Landfill Post-Closure Stormwater Runoff – Vegetated Soil Cover versus Engineered Synthetic Turf Cover**

» [Mr. Mark Taylor](#), Mr. Chris Jordan, [Mr. Chris Timpson](#), Dr. Ming Zhu

1pm **Environmental Ash Management 1**

Marksberry Room (B)

Chaired by: Ms. Brittany Hebbeler

1pm **The Closure and Capping of Ash Treatment Basin 2 at Kentucky Utilities Ghent Generating Station**

» [Mr. Steven Turner](#), Mr. Jeffrey Heun

1:30pm **Effects of low-dosage lime treatment on beneficial reuse of pond ash as Secondary Cementitious Materials (SCMs)**

» Mr. Utsa Rashique, [Mrs. Karen Slade](#), Mr. Howard Fitzgerald, Mr. Ian Saratovsky

2pm **Coal Ash & the Public – Tell your story before someone else does!**

» [Mr. Tim Hancock](#), [Ms. Melissa Hedgecoth](#)

2:30pm **Designing for Operational Flexibility at CCR Groundwater Extraction and Treatment Systems**

» [Ms. Erin Diven](#), Mr. Danny Stephens, Mr. matt newhart

3pm **Chemical-free, High-volume Leachate Pond Filtration: Commercial Success**

» [Mr. Gerard Simon](#)

1pm **Impoundment and Ponds 1**

Marksberry Room (A)

Chaired by: Steve Putrich

1pm **Impoundment Closure Using Discrete In-situ Solidification – Site Update**

» [Mr. Tim Silar](#), Mr. John Magee

1:30pm **Successful Piloting of Discrete ISS at a CCR Impoundment**

» [Mr. George Little](#), Dr. Paul Lear, Mr. Tim Silar, Mr. Richard Chapman, Mr. John Magee, Mr. Ambaresh Tijare, Mr. David Miller



Continued from **Tuesday, 14 May**

2pm **Evaluating Surface Impoundment Closure Alternatives Using Relative Impact Assessment – Two Case Study Examples**

» [Mr. Andrew Bittner](#), [Dr. Qian Zhang](#)

2:30pm **PREPARING TO DEWATER A CCR POND: WAYS TO BETTER UNDERSTAND YOUR POND CHARACTERISTICS AND PLAN FOR A SUCCESSFUL DEWATERING EFFORT**

» [Mr. Ron Hager](#), [Mr. James Feild](#)

3pm **Planning and Implementation of Closure by Removal Paired with Beneficial Use**

» [Mr. Jay Mokotoff](#), [Mrs. Angela Casbon-Scheller](#)

3:30pm **Poster Session -
Poster Session/Happy Hour**

Exhibit Hall C

Chaired by: [Ms. Anne Oberlink](#)

Fly Ash-based Geopolymer: Microstructure and Compressive Strength

» [Dr. Young Hoon Kim](#), [Ms. Lujain Salem](#)

New Applications for Beneficial Reuse of Coal Combustion Ash

» [Ms. Anne Oberlink](#), [Dr. Bob Jewell](#), [Dr. Thomas Robl](#), [Mr. Curtis Wilie](#), [Mr. Jim Crenshaw](#), [Mr. Scott Hoskins](#), [Ms. Hailey Mattingly](#)

Separation and extraction of rare earth elements in high aluminum fly ash from a power plant in Inner Mongolia, China

» [Prof. S.J. Qin](#), [Dr. SHENYONG LI](#), [Mr. Shuai Kang](#), [Ms. Wei Pang](#), [Mr. Longlong Hao](#)

Example Application of a Holistic Decision Support Tool Used for Selecting Corrective Actions at Coal Combustion Product Sites

» [Ms. Ari Lewis](#), [Mr. John Kondziolka](#), [Mr. Matt Biega](#), [Dr. Egidio Tentori](#), [Dr. Qian Zhang](#), [Dr. Ishita Shrivastava](#), [Mr. Bruce Hensel](#)

How sampling methods affect the interpretation of groundwater microbial communities

» [Dr. Ann Ojeda](#), [Dr. Natalia Malina](#), [Ms. Elyssa Rivera](#), [Ms. Shifat Monami](#), [Dr. Laura Bilenker](#), [Dr. Ming-Kuo Lee](#)

Relationship of Energy and the Effect on Coal Combustion Residual (CCR) Behavior: A Study of Moisture-Density Relationships

» [Mr. Tyler Hitt](#), [Mr. Harvey Upchurch](#), [Mr. Will Rex](#)

Bioengineering of a Plant System to Remove Arsenic and Cadmium and Sustainably Harvest Rare Earth Elements (REEs) from Fly Ash.

» [Ms. Edmaritz Hernandez Pagan](#), [Dr. Colleen Doherty](#), [Dr. Michael Kudenov](#), [Dr. Kanjana Laosuntisuk](#)

Remote characterization of impounded ash

» [Mr. Krish Mehta](#), [Dr. Manju Murugesu](#)

Use of Unconventional Fly Ash as Sensible Particulate Thermal Energy Storage Materials for Concentrating Solar Power

» [Ms. Megan Bellusci](#), [Ms. Kiana Oos](#), [Dr. Deborah Glosser](#), [Mr. Drew Johnson](#), [Dr. Prannoy Suraneni](#)

Understanding the Impact of Fly Ash Particle Size on Reactivity and Strength Development

» [Mr. Mahmod Yahya](#), [Dr. Lisa Burris](#)

Functionality of Coal Fly Ash in Mortars After Rare Earth Element Recovery

» [Ms. Rahima Tufail](#), [Dr. Sarah Brownlee](#), [Dr. Timothy Dittrich](#), [Dr. Matthew Allen](#), [Dr. Mohammad Dardona](#), [Dr. Sai Praneeth](#), [Dr. Ahmed Sakr](#), [Mr. Dimitrios Porter](#), [Mr. Chandra Tummala](#), [Mr. Preetom Roy](#)

Fly Ash and Lime Stabilization of Sewage Sludge: Changes to Phosphorous Solubility and Bioavailability

» [Dr. Yaniv Freiberg](#), [Dr. Shahar Baram](#), [Dr. Michael Borisover](#), [Dr. Pinchas Fine](#)



Continued from **Tuesday, 14 May**

Application of carbon nanotube technology to fly-ash based geopolymer concrete for strength development and net-zeros aspect

» [Ms. Janell Prater](#), Dr. Young Hoon Kim

Agricultural Gypsum for Improved Production and Soil Carbon Capture

» [Dr. Brian Gardener](#), Dr. Roland Wilhelm

4:30pm **Invite Only - Harvested CCR Consultation Forum**

Caylor Room

Chaired by: Dr. Tarunjit Butalia

Wednesday, 15 May

7am **Breakfast**

Exhibit Hall C

7am **Registration**

Outside of Ramme

7am **Exhibit Hall Open**

Exhibit Hall A, B, C

8am **Beneficiation and Processing 3 -
Beneficiation and Processing 3**

Caylor Room

Chaired by: Mr. Gabe Lang

8am **Uniaxial Compressive Behavior of "Solidified" Synthetic
Lightweight Aggregates**

» Ms. Annika Han, [Prof. Chris Swan](#)

8:30am **A technology platform to recycle off-spec coal combustion
products into construction lightweight aggregate**

» [Dr. Mo Balapour](#)

9am **Ash recovery from legacy stock - issues to consider based on
experience in France**

» [Mr. Loic Danest](#)

9:30am **Harvested Fly Ash Beneficiation Using a Triboelectric Belt
Separator**

» [Mr. Kyle Flynn](#), Mr. Kamal Ghazi, Mr. Doug Widener, Mr. Abhishek Gupta, Mr. Frank Hrach

8am **Emerging Technologies 3 -
Emerging Technologies 3**

McKinley Room

Chaired by: Mr. Colin Plank

8am **DEMONSTRATING EQUIVALENCY OF CLOSURETURF AS A VIABLE
ALTERNATIVE TO TRADITIONAL CCR FINAL COVER SYSTEMS**

» [Mr. Tyler Schmidt](#)

8:30am **Performance of Engineered Turf Cover System Under Extreme
Weather Conditions**

» [Mr. Thomas Orzech](#), Dr. Bryan Scholl, Mr. Bradford Cooley, Dr. Ming Zhu

9am **ADVANCED SYNTHETIC AND CONCRETE REVETMENT SYSTEM FOR
CCR CLOSURE APPLICATIONS**

» [Mr. Bradford Cooley](#), Mr. Randy Thompson

9:30am **Emerging technologies for water conveyance and containment**

» [Mr. Nathan Ivy](#)

8am **Regulatory Issues 3 -
Regulatory Issues 3**

Cain Room

Chaired by: Mr. Brian Hennings



Continued from **Wednesday, 15 May**

8am **CAPPING & CLOSURE FOR TWO PENNSYLVANIA LANDFILLS SUBJECT TO U.S. EPA'S CCR RULE PROMULGATED UNDER 40 CFR 257 SUBPART D**

» [Mr. John Klamut](#), Mr. Ron Harris, Mr. Cory White

8:30am **LIFE AFTER COAL? OPPORTUNITIES AND CHALLENGES AT DECOMMISSIONED COAL-FIRED POWER SITES**

» [Ms. Leslie Miller](#), Mr. Brian Owens, Ms. Stacey VanBelleghem

9am **IT'S HERE NOW! SUMMARIZING KEY ELEMENTS IN THE NEW LEGACY CCR SI RULE**

» [Mr. Mark Rokoff](#)

8am **Geotechnical 2 -
Geotechnical 2**

Manz Room

Chaired by: Mr. Craig Schuettpezl

8am **TVA Shawnee - Overcoming Engineering Challenges Associated with Closure In Place of Mixed Ash**

» [Mr. Craig Lee](#), Mr. Michael Owens

8:30am **Case Study: Perimeter Barrier Wall Installation to Facilitate Closure by Removal**

» [Mr. Shawn Coughlin](#), Mr. Christopher Gee, Dr. Paul Schmall

9am **A Decade of Automated Instrumentation Data - A TVA Story**

» [Mr. Nicholas McClung](#), [Mr. Matt Bishop](#), Mrs. Nicole Walker, Mr. Chris Jones

8am **Project Specific Cases 2 -
Project Specific Cases 2**

Kruger Room

Chaired by: Mr. Dave Donahue

8am **Lessons Learned Through the Implementation of In-Situ Stabilization for the Closure of a Coal Combustion Residue Site**

» [Mr. Vincent Spillane](#), Mr. Michael Fisher, Mr. Darin Payne

8:30am **Data Collection, Assimilation and Reporting Methods to Support Pond Closure - A Case Study**

» [Ms. Katherine \(Kat\) Warwick \(Coco\)](#), Mr. Joe Keller, Dr. Kirkland Broadwell

9am **Successful Installation of a Vertical Hydraulic Barrier at a CCR Impoundment During In-Place Closure**

» [Mr. Jim Edwards](#), Mr. Sylvain Payne-Gagnon

9:30am **EPA's Value Engineering Approach for Gypsum Stack Closure**

» [Mr. Michael Ayers](#), Mr. Craig Zeller

8am **CCP Chemistry and Classification 2 -
CCP Chemistry and Classification 2**

Ramme Room

Chaired by: Ms. Tara Masterson

8am **Geospatial Resource Reserve Dataset of Coal Ash Quality at Electric Power Facilities in the United States**

» [Dr. Heileen Hsu-Kim](#), Mr. Zehao Jin, Dr. James Hower

8:30am **Risk-Based Decision Making to Guide CCR-Impacted Soil Remediation**

» [Mr. Jay Peters](#), [Ms. Courtney Murphy](#)

9am **Lessons Learned Managing Water Chemistry in High Recycle Rate Bottom Ash Transport Systems**

» [Mr. David Donkin](#), Mr. Bernie Evans

9:30am **Developing Site-Specific Background Soil Concentrations of CCR Parameters at Fossil Plants**

» [Mr. Edgar Smith](#)



Continued from **Wednesday, 15 May**

8am **Panel Discussion - Panel Discussion - Legacy Stockpiles of Coal Derived Fly Ash (CDFA) in the United Kingdom and Associated Research**
Adams Room
Chaired by: Dr. Nigel Cooke

8am **Soliciting Support from UK Government to Safeguard Legacy Stockpiles of Coal Derived Fly Ash (CDFA)**
» [Dr. Nigel Cooke](#)

8:30am **Investigating Coal Derived Fly Ash from UK Legacy Stockpiles and Beneficiation for Use in Concrete Construction**
» [Dr. Michael McCarthy](#), Dr. Thomas Hope, Dr. Laszlo Csetenyi

9am **Fly Ash Harvesting: Simultaneous Drying, Sizing, and Carbon Reduction Demonstration**
» [Mr. Scott Coley](#), [Mr. Doug Widener](#), Mr. Frank Hrach, Mr. Lewis Baker, Mr. Andrew Rigg

8am **Groundwater and Environment 3 - Groundwater and Environment 3**
Robl Room
Chaired by: Mr. Nathan Higginson

8am **Groundwater Model Workflow for CCR Sites**
» [Mr. William Gottobrio](#), Mr. Cliff Baines, Ms. Roselyne Laboso, Mr. Skyler Sorsby

8:30am **Visualization Tools to Enhance Conceptual Site Models Throughout the Project Life Cycle**
» [Mrs. Darby Litz](#), Mr. Jason House

9am **Reactive Transport Modeling of Closure-in-Place with Intersecting Groundwater and Remedial Actions: Part I, Model Creation and Execution**
» [Dr. Jason James](#), [Dr. Olivia Paradis](#), Dr. Rachel Kelly, Dr. Walter McNab, Mr. Bruce Hensel

9:30am **Reactive Transport Modeling of Closure-in-Place with Intersecting Groundwater and Remedial Actions: Part II, Results and Meaning**
» [Mr. Bruce Hensel](#), [Dr. Jason James](#), [Dr. Olivia Paradis](#), Dr. Rachel Kelly, Dr. Walter McNab

8am **Groundwater and Environment 4 - Groundwater and Environment 4**
Goss Room
Chaired by: Mr. Gregory Landry

8am **Next-Generation High-Resolution Methods for Site Characterization**
» [Dr. PJ Nolan](#), Mr. Cole Mayer, Ms. Dawn Prell, Dr. Rens Verburg

8:30am **Communicating Corrective Action Approach and Timing**
» [Mr. Paul Thomas](#), [Mr. Jim Finley](#)

9am **High Resolution Site Characterization to Increase Corrective Action Efficiency**
» [Dr. Margaret Gentile](#), Ms. Kathryn Farris, Mr. Geoff Gay

9:30am **ASSET RETIREMENT OBLIGATIONS: UPDATING YOUR AROS BASED ON THE PROPOSED LEGACY CCR SURFACE RULE**
» [Mr. Ron Hager](#)

8am **Landfill and Pond Issues 3 - Landfill and Pond Issues 3**
Marksberry Room
Chaired by: Mr. John Bove

8am **Dewatering Basics - Understanding the challenges of dewatering**
» [Mrs. Christine Harris](#)



Continued from **Wednesday, 15 May**

8:30am **Systematic Dewatering for CCR Ponds**

» [Mr. Dale Evans](#), Dr. Paul Schmall

9am **An Innovative and Economical Approach To Ash Dewatering**

» [Mr. Morgan French](#)

9:30am **DESIGN AND MODELING TO DEWATER A PARTIALLY CLOSED ASH POND**

» [Mr. Michael Thornbrue](#)

10am **Coffee Break**

Exhibit Hall C

10:30am **Landfill and Pond Issues 6 -
Landfill and Pond Issues 5**

Caylor Room

Chaired by: Mr. Dale Evans

10:30am **Ash Basin Excavation Under Strict Orders – A Measured Approach**

» [Mr. Mark Taylor](#), [Mr. EVAN ANDREWS](#), Mr. Longde Jin, Mr. Naveen Ganji

11am **Stress-Related Considerations for GCL Shear Performance in Coal Ash Facilities**

» [Dr. Jeffrey Kuhn](#), Mr. Rich Lacey

11:30am **Challenges and solutions for selecting material handling equipment for excavation and disposition of CCRs in old landfills and legacy ash ponds**

» [Dr. Maria Zamiralova](#), Mr. Karl Filarowski, Mr. Peter Sehl

10:30am **Geotechnical 3 -
Geotechnical 3**

McKinley Room

Chaired by: Mr. John Klamut

10:30am **Potential Failure Mode Analysis for Groundwater Collection Trench Between a CCR Landfill Berm and a River**

» [Mr. John Seymour](#), Dr. Onur Tastan, Dr. Paul Sabatini, Mr. Victor Modeer, Mr. Isaiah Vaught

11am **Seismic Interferometry Technique for Characterization of Loose CCR Layers**

» [Dr. Seda Gokyer Erbis](#), Dr. Allen Marr, Dr. Thomas Bardainne, Mr. Renaud Tarnus, Mrs. Ellen Money, Mr. Nicholas McClung, Mr. Matt Bishop, Mr. Jonathan Petsch

10:30am **Cement and Concrete 3 -
Cement and Concrete 3**

Cain Room

Chaired by: Dr. Bob Jewell

10:30am **A Study on the Applicability of Dry Bottom Ash as a Fine Aggregate for Lightweight Aggregate Concrete**

» [Dr. Sangchul Shin](#), Dr. Jinman Kim, Dr. Hoonsik Hong

11am **Fairly Assessing Slowing Reacting Cement for Low Carbon Concrete**

» [Prof. Rod Jones](#)

11:30am **Improving Testing to Rapidly Identify High Quality Pozzolanic Supplementary Cementitious Materials**

» [Dr. Lisa Burris](#), [Dr. Prannoy Suraneni](#), [Dr. Thomas Robl](#)

10:30am **CCP Storage and Management 1 -
CCP Storage and Management 1**

Manz Room

Chaired by: Mr. Max Cange

10:30am **The Closure of the Gypsum Storage Pond (GSP) by Removal and Use as Fill in the Bottom Ash Pond (BAP) at the Louisville Gas and Electric (LG&E) Trimble Generating Station**

» [Mr. Steven Turner](#), Mr. John Williams, Mr. Jarrett Beach



Continued from **Wednesday, 15 May**

11am **Pathways to maximise stored Coal Combustion Products (CCPS): Partnership between NSW Government and Ash Development Association of Australia**

» [Mr. Craig Heidrich](#), Dr. Warren South

11:30am **Final Waste Management Options Analysis**

» [Ms. BreAnne Kahnk](#), [Mr. Todd Martin](#)

10:30am **Rare Earth Elements 1 - Rare Earth Elements 1**

Kruger Room

Chaired by: Dr. Denise Levitan

10:30am **Separation process and mechanism of lithium and gallium by microwave enhanced leaching of high-alumina coal ash**

» [Dr. SHENYONG LI](#), Ms. Qian Wang, Mr. Shuai Kang, Ms. Wei Pang, Mr. Longlong Hao, Prof. Shenjun Qin

11am **Novel Critical Metals Recovery Techniques from Coal Ash**

» [Mr. Claudio Arato](#)

11:30am **The occurrence of rare earth elements in South African coal ash: identification and characterisation**

» [Prof. Nicola Wagner](#), Ms. Vhonani Rerani, Prof. Christopher Baiyegunhi, Dr. Sanki Biswas, Ms. Happy Mabowa

10:30am **Disposal and Waste 1 - Disposal and Waste 1**

Ramme Room

Chaired by: Mr. Harold Register

10:30am **CCR Closure: Best Practices in Project Management that Provide Asset Protection Throughout Each Stage of the Construction Life Cycle by Reducing Liabilities, Ensuring Quality and Expediting Regulatory Acceptance.**

» [Mr. Glen Toepfer](#)

11am **Design and commissioning of coal fly ash filter plant**
» [Mr. James Keat](#), Mr. Jason Hamelehle, Mr. Casey Schmitt

11:30am **Demolition of the Navajo Generating Station**
» [Ms. Sunshine Pryor](#), Mr. Pete Everds, Mr. Michael O'Hare

10:30am **Panel Discussion - 'Expert Perspectives on the U.S. Coal Combustion Products Market - Now, Then, and the Future'**

Adams Room

Chaired by: Mr. David Cox

10:30am **Expert Perspectives on the U.S. Coal Combustion Products Market - Now, Then, and the Future**

» [Mr. David Cox](#), [Mr. John Ward](#), [Mr. Mark Rokoff](#), [Mr. Danny Gray](#)

10:30am **Groundwater and Environment 5 - Groundwater and Environment 5**

Robl Room

Chaired by: Jeremy Gasser

10:30am **Effective Remedial Measure: Evaluating Monitored Natural Attenuation Paired with Source Control**

» [Mrs. Kelly Ferri](#), Mr. Craig Eady, Mrs. Kathy Webb

11am **Natural Attenuation of Metals and Inorganics: Insights from Laboratory Testing Approaches**

» [Ms. Larissa Smith](#), Mr. Michael Healey, Ms. Kela Ashworth, Mr. Jacques Smith, Mr. Jeff Roberts

11:30am **When is MNA Not Enough? Avoiding Unwarranted Contingency Actions**

» [Mr. Geoff Gay](#), [Dr. Margaret Gentile](#), Mr. Mark Lupo

10:30am **Groundwater and Environment 6 - Groundwater and Environment 6**

Goss Room

Chaired by: Ms. Shannon Zahuranec



Continued from **Wednesday, 15 May**

- 10:30am **Implementation Issues, Groundwater Corrective Action, Laramie River Station, Basin Electric Power Cooperative**
» [Mr. Jeremy Hurshman](#), Mr. Dennis Connair
- 11am **Cutoff Walls for Groundwater Containment and Corrective Action**
» [Dr. Paul Schmall](#), Mr. Jeff Bean
- 11:30am **Successful Laboratory Treatability Studies for In Situ Remediation of Multiple Coal Combustion Product (CCP) Constituents at Multiple Sites**
» [Dr. Dimitri Vlassopoulos](#), Dr. Masa Kanematsu, Dr. Jason Stuckey, Ms. Grace Weatherford, Ms. Minna Carey

10:30am **Landfill and Pond Issues 4 - Landfill and Pond Issues 4**
Marksberry Room
Chaired by: Mr. Andrew Rodzianko

- 10:30am **Lessons Learned from Landfill Construction Inside Former Ash Ponds**
» [Mr. John Bove](#)
- 11am **Coal ash engineering: A look back at the past and peak into the future**
» [Dr. Ramachandran Kulasingam](#)
- 11:30am **Focused Constructability Review Process for Ash Pond Closures**
» [Mr. Sean Rome](#)

12pm **Lunch**
Exhibit Hall C

12pm **Student Lunch - Invitation Only - Student Lunch**
Atrium Room

1pm **Regulatory Issues 4 - Regulatory Issues 4**
Caylor Room
Chaired by: Mr. Greg Tieman

1pm **Fix or Fight: EPA's Part A and Part B groundwater monitoring deficiency findings**
» [Mr. Kevin Solie](#), Ms. Kaela Nerhus, Mr. Jim Aiken

1:30pm **New Directions in Bottom Ash Transport Water – Managing Limited or No Discharge Requirements**
» [Ms. Lindy Johnson](#), Mr. William Kennedy

2pm **CCR Regulations Drive Uncertainty for Beneficial Use Projects Past and Present**
» [Ms. Susan Jackson](#), [Mrs. Martha Thomsen](#), [Ms. Dawn Santoianni](#)

2:30pm **Coal Combustion Residuals Rule: Utility Perspective Looking at 2024 and Beyond**
» [Mr. Harold Register](#), Mr. Daniel Chartier

3pm **Emerging Regulations and Operational Preparedness – Key Areas to Ensure Future Success for 2023 ELGs**
» [Mr. Joseph Woodley](#), Mr. Morgan French

1pm **Beneficiation and Processing 4 - Beneficiation and Processing 4**
McKinley Room
Chaired by: Mr. Ethan Bond

1pm **Assessing CCR Beneficiation Options for CCR Pond Closures**
» [Mr. Kelly Babichuk](#), [Mr. Dale Evans](#)

1:30pm **Successful Beneficiation Strategies for Harvested Coal Ash Residuals (CCR)**
» [Mr. Bill Fedorka, P.E.](#)



Continued from **Wednesday, 15 May**

2pm **Successful practices to accelerate pond closure with beneficial reuse of CCR**

» [Mr. Dearl Tate](#), Mr. John Gartin, Mr. Tom Kierspe

2:30pm **Ponded Ash Beneficial Use Investigation and Bid Solicitation**

» [Mr. Adam Poffenberger](#)

3pm **Ash Beneficiation in Road Construction Materials.**

» [Mr. Cyril Attwell](#), Dr. Kelley Reynolds-Clausen

1pm **Emerging Technologies 4 -
Emerging Technologies 4**

Cain Room

Chaired by: Mr. James Feild

1pm **Remediation of Li, Mo, As and other metals at CCR Landfills and Ponds**

» [Mr. Lowell Kessel](#)

1:30pm **TVA Solar Installation on a Closed CCR Unit**

» [Mr. Steve Mayes](#), Mr. Kenneth Hughes, Mr. Shane Harris

2pm **HORIZONTAL VIBRATING WIRE PIEZOMETER INSTALLATION - A NEW DIRECTION IN GEOTECHNICAL EVALUATION**

» [Mr. Dan Ombalski](#), Mr. Brian Shinall, Mr. Michael Lubrecht, Mr. David Bardsley, Mr. Dave Rugh

2:30pm **Producing a High-Performance Low Carbon ASCM using Carbon Utilization Technology**

» [Mr. Dhwanil Trivedi](#), [Mr. Dante Luu](#)

1pm **CCP's and Sustainable Construction 1 -
CCP's and Sustainable Construction 1**

Manz Room

Chaired by: Mr. Mark Taylor

1pm **Sustainable construction with CCPs - an update for Europe -**

» [Dr. Hans-Joachim Feuerborn](#), Mr. Fabrice FAYOLA

1:30pm **Construction and Mining applications of 60% - 100 % Portland cement replaced ASH-based concrete in South Africa**

» [Mr. Cyril Attwell](#)

2pm **Coal Combustion Product Utilization in Thailand**

» [Ms. Chattrawadee Netwong](#), Ms. Nawamonwan Sirima, Mr. Chalermphol Bunsong, Ms. Umaporn Thong-Eiam

2:30pm **Life Cycle Impacts of Using Harvested Coal Ash as a Cement Replacement in Concrete**

» [Ms. Sabrina Bradshaw](#), Dr. Craig Benson, Dr. Tuncer Edil

3pm **Water Management and Construction Impacts**

» [Mrs. Christine Harris](#)

1pm **Mining and Reclamation 2 -
Mining and Reclamation 2**

Kruger Room

Chaired by: Mr. Randall Stremmel

1pm **Application of Portable Dewatering Systems in CCP Storage and Landfill Recovery**

» [Mr. John Glasscock](#)

1:30pm **Nature-based Solutions for CCR Closure**

» [Mr. John Watrous](#), Mr. Josh Running, Ms. Amanda Ludlow

2pm **CCR Landfill Reclamation for Beneficial Reuse - Lessons Learned and Practical Considerations**

» [Mr. Brian Owens](#)

1pm **Hydrology and Leaching 1 -
Hydrology and Leaching 1**

Ramme Room

Chaired by: Lea Millet



Continued from **Wednesday, 15 May**

- 1pm **Tricky Constituents – Issues with Leachate and Groundwater Constituents of Concern**
» [Mr. William Kennedy](#)
- 1:30pm **Pilot Testing Pore Water Extraction Using Positive Pressure Pumping Systems**
» [Mr. Patrick Dunne](#), [Mr. Chris Daly](#), [Mr. Paul Thomas](#)
- 2pm **Ash Pond Closure in Place Using In-Situ Soil Stabilization**
» [Mr. Jeffery Miller](#), Mr. Marc Okin, Mr. Jeff Loewe, Mr. William Haswell
- 2:30pm **Leaching Behaviors of Constituents from Coal Combustion Residuals**
» [Dr. Charles Hostetler](#), [Ms. Kacey Garber](#), [Ms. Lindsey Hawksworth](#)
- 3pm **CCR Landfill Leachate Treatment Considerations**
» [Mr. William Kennedy](#)

1pm **Panel Discussion - 'Leachate Ponds, To Treat or Not to Treat, From Proposed Effluent Limitation Guidelines to Technologies That Can Meet Them'**
Adams Room
Chaired by: Mr. Gerard Simon

1pm **Leachate Ponds, To Treat Or Not To Treat. From Proposed Effluent Limitation Guidelines To Technologies That Can Meet Them.**
» [Mr. Gerard Simon](#), [Ms. AnnieLu Dewitt](#), [Ms. Jenni Henthorn](#), [Mr. Joseph Woodley](#)

1pm **Groundwater and Environment 7 - Groundwater and Environment 7**
Robl Room
Chaired by: Ms. Katy Lindstrom

1pm **What the pHudge is Going On: Statistical and Geochemical Techniques for pH Alternative Source Demonstrations**
» [Dr. Alison O'Connor](#), [Dr. Allie Wyman-Feravich](#), [Ms. Shannon Zahuranec](#)

1:30pm **Navigating the Complexities of Coal Combustion Residual (CCR) Groundwater Assessment and Monitoring in Coastal Environments: A Technical Exploration**
» [Mr. Stephen Wilson](#), [Mr. Trenton Godwin](#), [Mr. Kevin Stephenson](#)

2pm **Aquifer Characterization Techniques to Evaluate Coal Combustion Residuals Sources**
» [Mr. Vincent Buening](#), [Mr. Wenbo Xie](#)

2:30pm **Hydrogeologic Considerations for Measuring Background Concentrations of CCR Constituents in Groundwater**
» [Mr. Jeffrey Frazier](#), Mr. Nathan Pavlick

3pm **Reevaluation of the Groundwater Monitoring Paradigm - Proof of Concept Study**
» [Mr. Jacob Gruzalski](#), Mr. Benjamin Adams, Mr. Bruce Hensel

1pm **Groundwater and Environment 8 - Groundwater and Environment 8**
Goss Room
Chaired by: Dr. Rong Yu

1pm **Effectiveness of Various CCP Unit Closure Strategies**
» [Mr. Cole Mayer](#), [Dr. PJ Nolan](#), Mr. Mark Haney, Mr. Marc Okin

1:30pm **Post-closure - Responses in Groundwater Quality and Chemistry**
» [Mr. Chris Lalonde](#), Mr. Jim Finley, Mr. Paul Thomas

2pm **Supply Chain Challenges Impacting CCR Groundwater Monitoring**
» [Ms. Jennifer Gable](#), Mr. Rock Vitale, Ms. Amanda Cover



Continued from **Wednesday, 15 May**

2:30pm **Understanding The Stratigraphy of Fluvial Systems and Why it is Essential to Compliance With The Legacy Rule Revisions to CCR Regulations.**

» [Mr. Colin Plank](#), Dr. Mike Shultz, Mr. James Feild, Mr. Wayne Weber

3pm **Approaches for Low-Impact Groundwater Remediation**

» [Mr. Tim Grant](#), [Mrs. Kathy Webb](#), Mrs. Tammy Jett, Mr. Bill Miller, Mr. Bruce Hensel

1pm **Landfill and Pond Issues 5 -
Landfill and Pond Issues 6**

Marksberry Room

Chaired by: Mr. Andrew Colby

1pm **How Sustainable is Your Coal Ash Cover System?**

» [Mr. Marc Theisen](#)

1:30pm **The Overall Process of Beneficially Using Bottom Ash as Landfill Protective Cover, an Engineer's Perspective**

» [Mr. Ryan Doyle](#)

2pm **INTERIM PROTECTION OF CCR LANDFILL BOTTOM LINER SYSTEM - CASE STUDY**

» Mr. Jarrett Beach, [Mr. Kevin Resnik](#), Mr. Steven Turner

2:30pm **Alternate Liner Demonstration (ALD) for CCR Surface Impoundment**

» [Mr. John Seymour](#), Mr. Mike Coram, Dr. Clinton Carlson, Mr. Isaiah Vaught, Mr. Jesse Varsho

3pm **Evaluating Surface Impoundments Closure by Removal and Closure in Place Options**

» [Mr. Rick Buffalini](#)

2:30pm **Panel Discussion - 'Water Removal and Treatment Technology'**

Adams Room

2:30pm **Water Removal and Treatment Technology Panel Discussion.**

» [Mr. Wayne Weber](#), [Mr. Mark Rokoff](#), [Mr. Max Swoboda](#), [Mr. Gregory Landry](#), [Mr. Andy Scherff](#)

3:30pm **Refresher Break**

Exhibit Hall C

3:45pm **Exhibit Hall Breakdown**

Exhibit Hall A, B, C

6pm **WOCA 2024 Off-Site Reception**

Grand Rapids Public Museum

Chaired by: Alyssa Barto and Brooke Pirmann and Dave Melanson

Thursday, 16 May

7am **Breakfast and Registration**

Outside of Ramme

8am **Landfill and Pond Issues 7 -
Landfill and Pond Issues 7**

Caylor Room

Chaired by: Dr. Jeffrey Kuhn

8am **Electrical Leak Location (ELL) - Case Study**

» [Mr. Andrew Colby](#)

8:30am **Chimney Drain Construction Lessons Learned**

» [Mr. Jason Thaxton](#)

9am **Comparative Analysis of Predicted vs. Observed Leachate Generation Rates in Three Coal Combustion Residual Landfills**

» [Mr. John Trast](#), Mr. Andrew Schwoerer, Mr. Eric Kovatch



Continued from **Thursday, 16 May**

9:30am **Conventional or Bentonite-Polymer GCLs for Coal Combustion Product Leachates?**

» [Mr. Yu Tan](#), Dr. Craig Benson, Mr. Jimmy Youngblood

8am **Geotechnical 4 - Geotechnical 4**

McKinley Room

Chaired by: Mr. John Seymour

8am **Variable Rate Cone Penetration Testing in Hydraulically Placed Fly Ash Deposits**

» [Mr. Andrew Fuggle](#), Mr. Longde Jin, Mr. Mark Taylor

8:30am **Modifying of expansive clay soils using alkali activated ESKOM legacy ash**

» [Ms. Phenyo Mvuyana](#), Dr. Kelley Reynolds-Clausen, Mr. Cyril Attwell

9am **Dewatering Pilot Tests for Geotechnical Investigation**

» [Mr. Gregory Landry](#)

9:30am **Navigating through Geochemical Modeling Uncertainties Related to Site Management and Cleanup Decisions**

» [Mr. Scott Hensel](#)

8am **Project Specific Cases 3 - Project Specific Cases 3**

Cain Room

Chaired by: Ms. Cassie Dumoulin

8am **Multi-faceted approach for CCR Pond dewatering and depressurization-A Case Study**

» [Mr. Cleveland Tarp](#), Mr. Christopher Jones, Mr. Shawn Coughlin, Mr. Tom Holden

8:30am **Allen Fossil Restoration Project Update**

» [Mr. Tim Moore](#), [Ms. Angela Austin](#), [Ms. Kim Kesler-Arnold](#)

9am **Design, CQA, and Legacy Rule Considerations for a Multi-phased CCP Unit Closure**

» [Mr. Brendan Purcell](#), Ms. Brittany Bradley, Mr. Jason Obermeyer

9:30am **Coal Clinker Ash Transforming Influence on Carbon Content of Sandy Soil**

» [Ms. Agnes Dube](#), Mr. Mutsa Muhambi, Dr. Mitsuru Tsubo, Dr. Tsugiyuki Masunaga, Dr. Eiji Nishihara

8am **Cement and Concrete 4 - Cement and Concrete 4**

Manz Room

Chaired by: Mr. Russell Stapp

8am **Compressive Behavior of Various Mortar Mixes Containing Synthetic Lightweight Aggregate**

» [Prof. Chris Swan](#)

8:30am **Pore Solution-Based Innovative Approach for Evaluating the Effectiveness of Conventional and Alternative SCMs to Mitigate ASR**

» [Prof. Anol Mukhopadhyay](#)

9am **Long-Term Conductivity Studies of Low Permeability Concrete containing Fly Ash**

» [Dr. Kyle Stanish](#), Dr. Neal Berke, Mr. Ali Inceefe

9:30am **Nano-Modified Fly Ash-Based Geopolymer Concrete Filled CFRP Tube Composite: Mechanical Model and Life Cycle Assessment**

» [Dr. Zhipeng Li](#), Dr. Xianming Shi

8am **CCP Storage and Management 2 - CCP Storage and Management 2**

Kruger Room

Chaired by: Mr. Kory Anstead



Continued from **Thursday, 16 May**

- 8am **Cost-effectively Storing Bulk CCPs in Concrete Domes**
» [Mr. Zac Fillmore](#), Mr. Ted Parkinson
- 8:30am **Beneficial Reuse of Fly Ash Harvested from Historic Onsite Sources**
» [Mr. Todd Stong](#), Mr. Craig Schuettepelz, Mr. Ryan Frank, Mr. Shane Stockdill
- 9am **CCR Unit Closure 2024 – Engineering and Construction Management Straight Talk**
» [Mr. Don Fuller II](#), [Mr. Alan Casaday](#)
- 9:30am **Survey Techniques Used to Monitor Closed CCR Storage Facilities**
» [Mr. Max Cange](#), Mrs. Rachel Combs, Mr. Steve Shamblin, Mr. Jamey Dotson

8am **Rare Earth Elements 2**
Ramme Room
Chaired by: Mr. Claudio Arato

- 8am **Critical Mineral Relationships in Global Coal Ash**
» [Dr. Denise Levitan](#)
- 8:30am **COMPARISON OF THE CONCENTRATION OF REE & LITHIUM IN COAL ASH COLLECTED FROM IMPOUNDMENTS IN THE SOUTHEASTERN UNITED STATES**
» [Mrs. Kalyn Tew](#), Dr. Rona Donahoe
- 9am **Ionic liquid-based extraction and separation for recovery of rare-earth elements from coal fly ash**
» [Ms. Ting Liu](#), Prof. Ching-Hua Huang

8am **Groundwater and Environment 9 - Groundwater and Environment 9**
Adams Room
Chaired by: Mr. Johnathan Ebenhack

8am **Integrating the Geochemical Conceptual Site Model and Advanced Statistics to Evaluate Remedy Response and Position for Adaptive Management**
» [Ms. Shannon Zahuranec](#), Dr. Allie Wyman-Feravich, Mr. James Jonas, Dr. Tom Meuzelaar

8:30am **Managing Unexpected Outcomes from Remediation in Fractured Bedrock Geological Settings – How a Revision in the Conceptual Site Model Helped Resolve Unforeseen Conditions**
» [Dr. Rong Yu](#)

9am **Subsurface Hydraulic Studies and Modeling to Support Injection Treatment and Hydraulic Containment at Impacted Coal Combustion Product (CCP) Sites**
» [Mr. Alexander Macbeth](#), Mr. Mike Gefell, Dr. Ali Meyal, Mr. Chuck Pippin

9:30am **Geochemical Assessment to Support Evaluation of Remedy Options at CCR Units**
» [Mr. Jim Finley](#), Mr. Paul Thomas, Mr. John Griggs

10am **Coffee Break**
Outside of Ramme

10:30am **Groundwater & Environment 11 - Groundwater & Environment 11**
Caylor Room
Chaired by: Dr. Dimitri Vlassopoulos

10:30am **Subtle Geochemical Adjustments in Native Aquifer Soils – In Situ Groundwater Treatment Strategies for Cobalt at Coal Combustion Residual Sites**
» [Mr. David Collins](#), Mr. Jim Finley

11am **From Farm to Ash: Deploying an Existing Economical Boron Solution to CCR Groundwater**
» [Dr. Ben Amos](#), Dr. Hariprasad Parthasarathy, Mr. Paul Wegner, Mr. Peter Schratz



Continued from **Thursday, 16 May**

11:30am **EPRI Research on Innovative Techniques for Alternative Source Demonstrations**
 » [Mr. Bruce Hensel](#), Dr. Charles Cravotta III, Mr. Michael Pribil, Dr. Christopher Bagwell, Mr. R. Jeffrey Davis, Mr. Jared Carte, Mr. Danny Rutherford, Dr. Frederick Day-Lewis, Ms. Melanie Edwards

10:30am **Landfill and Pond Issues 8 - Landfill and Pond Issues 8**
McKinley Room
 Chaired by: Mr. McKhenzy Welch

10:30am **Coal Ash Landfill Leachate Systems – Design and Treatment**
 » [Mrs. Christine Harris](#), Mr. Rob Orlando

11am **SINGLE-ENDED (BLIND) DIRECTIONAL WELLS FOR ASH BASIN DEWATERING**
 » [Mr. David Bardsley](#), Mr. Dan Ombalski, Mr. Brian Shinall, Mr. Michael Thornbrue

10:30am **Beneficiation and Processing 5 - Beneficiation and Processing 5**
Cain Room
 Chaired by: Ms. Sheryl Smith

10:30am **Harvesting and Beneficial Use: Voluntary, Consensus Standard Developed by ASTM E50.03**
 » [Mr. Benjamin Gallagher](#), Ms. Abigail Calmes, Mr. William Petruzzi

11am **Using Interim Storage to Better Align Harvesting and Beneficiation Timelines**
 » [Mr. Ethan Bond](#)

10:30am **Emerging Technologies 5 - Emerging Technologies 5**
Manz Room
 Chaired by: Mr. Travis Clark

10:30am **Evolution in Geosynthetics Starts with Utilizing Data Technology**
 » [Mr. Greg Pignataro](#), [Mr. Evan Bao](#)

11am **Exploring Non-invasive High-Resolution Geophysical Site Characterization Methods for Delineation of Coal Ash**
 » [Mr. Colin Plank](#), Dr. Mike Shultz, Mr. James Feild

11:30am **Total Ash and Brine Water Waste Utilisation**
 » [Mr. Maroun Rahme](#)

10:30am **Project Specific Cases 4 - Project Specific Cases 4**
Kruger Room
 Chaired by: Mr. Cleveland Tarp

10:30am **Leveraging Data to Build an Effective Quality Assurance Program**
 » [Ms. DEANNA AUNGST](#), Ms. Danielle Coles

11am **EPA's Updated Toxicity Criteria for Arsenic: Implications on Coal Ash Sites**
 » [Mr. Todd Bernhardt](#), Mr. Jay Peters

11:30am **"Strategic Workforce Solutions in the Coal Ash Industry: Navigating Talent Challenges for Consultants, Civil Companies, and Utilities"**
 » [Mr. Stuart Keeter](#)

10:30am **Groundwater and Environment 10**
Ramme Room
 Chaired by: Mrs. Arica DiTullio



Continued from **Thursday, 16 May**

- 10:30am **Data Quality Assessment of a Long Running QA Program – The Domino Effect of a Pandemic**
» [Ms. Amanda Cover](#), Mr. Rock Vitale, Ms. Jennifer Gable, Ms. Veronica Barredo
- 11am **High Dimensional Data Analysis and Visualization to Demonstrate Compliance**
» [Mr. Alex Eklund](#)
- 11:30am **Unlocking Insights: Advanced Statistical Methods for Groundwater Geochemical Fingerprinting at Coal Combustion Residuals Sites**
» [Dr. Ali Akbari](#), Ms. Allison Kreinberg