



Monday, 13 May

7am **Registration and Breakfast SC 101 and 301**
Amway Grand Hallway

7am **Untitled Event**
Exhibit Hall A, B, C

8am **101a -**
SC 101- Introduction to Coal Combustion Ash
Pantlind Ballroom (gold)

SC 101- Introduction to Coal Combustion Ash
» Lisa Burris

8am **301a -**
SC 301- Introduction
Imperial Ballroom (bank)

Introduction
» PJ Nolan

8:15am **301b -**
SC 301- Geochemistry of CCP in the Subsurface
Imperial Ballroom (bank)

Geochemistry of CCP in the Subsurface
» PJ Nolan and Rens Verburg

8:35am **101b -**
SC 101- Lab Test for Ash Characterization
Pantlind Ballroom (gold)

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)

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)

SC 101- Coal Combustion Products

9:45am **101d -**
SC 101- The Nature of Poned Ash
Pantlind Ballroom (gold)

SC 101- The Nature of Poned Ash
» Michael McCarthy

10am **Coffee Break - SC 301**
Amway Grand Hallway

10:20am **Coffee Break - SC 101**
Amway Grand Hallway

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

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



Continued from Monday, 13 May	
10:40am	<p>101e - SC 101- Techniques for Harvesting Poned and Landfilled Ash <i>Pantlind Ballroom (gold)</i></p> <p>SC 101- Techniques for Harvesting Poned and Landfilled Ash » Greg Landry</p>
11:15am	<p>101f - SC 101- Coal Combustion Ash Management Practices <i>Pantlind Ballroom (gold)</i></p> <p>SC 101- Coal Combustion Ash Management Practices » Glenn Amey</p>
11:15am	<p>301e - SC 301- Modeling Attenuation and Reversibility <i>Imperial Ballroom (bank)</i></p> <p>Modeling Attenuation and Reversibility » Jim Finley, PJ Nolan, and Cole Mayer</p>
12pm	<p>Lunch - SC 101 and 301 <i>Amway Grand Hallway</i></p>
12pm	<p>Exhibit Hall Set Up <i>Exhibit Hall A, B, C</i> Chaired by: Alyssa Barto and Brooke Pirmann</p>
1pm	<p>301f - SC 301- Uncertainty, Interpretation, and Application of Geochemical Modeling Results and Data <i>Imperial Ballroom (bank)</i></p>

	<p>Uncertainty, Interpretation, and Application of Geochemical Modeling Results and Data » Jim Finley and Rens Verburg</p>
1:10pm	<p>101g - SC 101- Technology for Beneficiation and Advanced Materials <i>Pantlind Ballroom (gold)</i></p> <p>SC 101- Technology for Beneficiation and Advanced Materials » Nortey Yeboah</p>
1:45pm	<p>101h - SC 101- Use of Coal Combustion Products in Cementitious Materials <i>Pantlind Ballroom (gold)</i></p> <p>SC 101- Use of Coal Combustion Products in Cementitious Materials » Rod Jones</p>
1:45pm	<p>301g - SC 301- Tools to Strengthen ASDs: Use and Misuse of Geochemical Evidence <i>Imperial Ballroom (bank)</i></p> <p>Tools to Strengthen ASDs: Use and Misuse of Geochemical Evidence » Denise Levitan</p>
2:20pm	<p>101i - SC 101- Advanced Beneficiated Materials and Non-Cement Uses of Ash <i>Pantlind Ballroom (gold)</i></p> <p>SC 101- Advanced Beneficiated Materials and Non-Cement Uses of Ash » Ben Gallagher</p>



Continued from Monday, 13 May	
2:30pm	301h - SC 301- Geochemical Changes Observed at CCP Sites After Closure <i>Imperial Ballroom (bank)</i>
	Geochemical Changes Observed at CCP Sites After Closure » Rens Verburg and Denise Levitan
2:55pm	Coffee Break - SC 101 <i>Amway Grand Hallway</i>
3pm	Coffee Break - SC 301 <i>Amway Grand Hallway</i>
3:15pm	101j - SC 101- Utilization Trends is CCPs <i>Pantlind Ballroom (gold)</i>
	SC 101- Utilization Trends is CCPs » Thomas Adams
3:30pm	301i - SC 301- Geochemistry for Key CCP Management Decisions and Closing Remarks <i>Imperial Ballroom (bank)</i> Chaired by: Mr. Cole Mayer
	Panel Discussion - Geochemistry for Key CCP Management Decisions and Closing Remarks
5pm	Welcome Reception <i>Exhibit Hall C</i>

Tuesday, 14 May	
7am	Breakfast <i>Exhibit Hall C</i>
7am	Untitled Event <i>Exhibit Hall C</i>
7am	Untitled Event <i>Exhibit Hall C</i>
7am	Registration <i>Outside of Ramme</i>
7am	Exhibit Hall Open <i>Exhibit Hall A, B, C</i> Chaired by: Alyssa Barto and Brooke Pirmann
8am	Plenary Session <i>Ballrooms B, C, D</i>
10am	Coffee Break <i>Exhibit Hall C</i>
10:30am	Beneficiation and Processing 1 - Beneficiation and Processing 1 <i>Caylor Room</i>
10:30am	Path Forward to CCR Conveyor Solutions » Mr. Mike Peden , Mr. Don Fuller



Continued from Tuesday, 14 May	
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, Mr. N N Nortey Yeboah
10:30am	Emerging Technologies 1 - Emerging Technologies 1 <i>McKinley Room</i>
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 » Dr. Kelley Reynolds-Clausen , Mr. Cyril Attwell, Ms. Phenyo Mvuyana
10:30am	Regulatory Issues 1 - Regulatory Issues 1 <i>Cain Room</i>
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 <i>Manz Room</i>
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 Schuettpelez , 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
10:30am	Project Specific Cases 1 - Project Specific Cases 1 <i>Kruger Room</i>
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. qingfa su, Dr. muhcheng wu , 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>



Continued from **Tuesday, 14 May**

- 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 - 'Expert Perspectives on the US Coal Combustion Products Market - Now, Then, and the Future'**
Adams Room
- 10:30am **Beneficial Use of Harvested CCR - State of the Market**
» [Mr. Jack Moore](#)
- 10:30am **Groundwater and Environment 1 - Groundwater and Environment 1**
Robl Room
- 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. Jim 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**
Goss Room
- 10:30am **CCR Landfills - Part 1: Groundwater Considerations during Design and Construction**
» [Mr. Johnathan Ebenhack](#), Mr. Jerry Wylie
- 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)
- 10:30am **Use of Harvested Fly Ash and LandfilledFGD 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)



Continued from **Tuesday, 14 May**

10:30am **Coal Combustion Products Worldwide - On the Stretch from Suitability to Sustainability**
» Mr. Craig Heidrich, Dr. Jinder Jow, Mr. Thomas Adams, [Dr. Hans-Joachim 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

12pm **Lunch**
Exhibit Hall C

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

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](#), [Ms. Anne Oberlink](#), Ms. Sydeny Dendekker, Dr. Bob Jewell

2pm **Beneficial Use of Fly-Ash through Soil Stabilization and Portland Cement Concrete Mix**
» Dr. M. A. Karim, Dr. Youngguk Seo, [Dr. Adam Kaplan](#)

2:30pm **Collaborative utilization of fly ash and desulphurization wastewater**
» Ms. Xia Wang, Dr. Yang Dong, [Dr. Jinder Jow](#)

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

1pm **Emerging Technologies 2 - Emerging Technologies 2**
McKinley Room

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

3pm **Exploring Beneficiation Opportunities for Oil Shale Ashes from Estonia Worldwide**
» [Ms. Kadri Sirg](#)

1pm **Regulatory Issues 2 - Regulatory Issues 2**
Cain Room



Continued from Tuesday, 14 May

- 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
- 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 alkali-activated fly ash cementitious materials at room and high temperatures**
» [Dr. Hui Li](#), Dr. Huimei Zhu, Dr. Dawang Zhang, Dr. Wnbin Yuan, Dr. Kefei Zhao

- 2:30pm **Performance of 5-year old concrete made with spray dryer absorber material**
» [Mr. Benjamin Gallagher](#), Mr. Sundar Chithiraputhiran, Mr. Travis Collins
- 1pm **CCP Chemistry and Classification 1 - CCP Chemistry and Classification 1**
Kruger Room
- 1pm **Coal Ash Impoundment Characterization**
» [Dr. Ross Gorman](#)
- 1:30pm **Coal Ash Constituents and Treatment Options**
» [Mrs. Christine Harris](#), Mr. Rob Orlando
- 2pm **Exploring Non-Traditional Coal Ash as a Sustainable Alternative in Concrete: Performance Analysis and Predictive Modeling**
» [Mr. BEHZAD TAHMOURESJ](#), Dr. Tyler Ley
- 2:30pm **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
- 3pm **Application of Data Science Techniques to Estimate Soluble Alkali Contribution from Fly Ashes for Determination of Concrete Pore Solution Chemistry**
» [Prof. Anol Mukhopadhyay](#)
- 1pm **Environmental Issues 1 - Environmental Issues 1**
Ramme Room
- 1pm **A Practical Approach to Manufacturing Sintered Lightweight Aggregates (LWA) from Unrecycled Coal Combustion Ash (CCA)**
» [Mr. Yousif Algenai](#), Mr. Mohammadamin Zooyousefin, Ms. Thuy Nguyen, Dr. Mo Balapour, Mr. Yaghoob (Amir) Farnam



Continued from Tuesday, 14 May

1:30pm **Ash Utilisation for The Protection and Improvement of Electrical Transmission Infrastructure**

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

2pm **Managing Ash Pond Closure Waters: Technology Selection and Design Considerations**

» [Mr. Philip Benson](#)

2:30pm **Corrective Action Sustainability: Holistic Decision Support Tool**

» [Mr. John Kondziolka](#), Ms. Ari Lewis, Mr. Bruce Hensel, Mr. Andrew Bittner

3pm **Heavy Metals Reduction and Sequestration at Coal Combustion Residuals (CCR) Sites**

» [Mr. Lowell Kessel](#)

1pm **Panel Discussion - 'Implementing the Final CCR Legacy Rule'**

Adams Room

1pm **Implementing the Final CCR Legacy Rule**

» [Mr. Robert Glazier](#), Mrs. Martha Thomsen, Mr. John Seymour, Mr. Victor Modeer

1pm **Groundwater and Environment 2 - Groundwater and Environment 2**

Robl Room

1pm **Effective Groundwater Treatment at CCR sites**

» [Mr. Mark Bryant](#), [Mr. Derek Ingram](#), Mr. Michael Marley

1:30pm **Arsenic Treatment from Coal Ash Pond Groundwater**

» [Dr. Jack Ma](#), Mr. David Donkin, Mr. Morgan French

2pm **Bench-Scale Testing of Selenium Treatment using Passive, Constructed Treatment Wetlands**

» [Ms. Katy Lindstrom](#), [Mr. Ryan Schipper](#), Mr. Andrew Dykstra

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

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



Continued from **Tuesday, 14 May**

1pm **Environmental Ash Management 1**
Marksberry Room (B)

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)

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

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. Jim 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 Omar Ibrahim 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



Continued from **Tuesday, 14 May**

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

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

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

» [Mr. Mahmud 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

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

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](#)

8am

Emerging Technologies 3 - Emerging Technologies 3

McKinley Room

8am

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

» [Mr. Tyler Schmidt](#)



Continued from **Wednesday, 15 May**

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

9:30am **Emerging technologies for water conveyance and containment**
» [Mr. Nathan Ivy](#)

8am **Regulatory Issues 3 - Regulatory Issues 3**
Cain Room

8am **CAPPING & CLOSURE FOR TWO PENNSYLVANIA LANDFILLS SUBJECT TO U.S. EPA'S CCR RULE PROMULGATED UNDER 40 CFR 257 SUBPART D**
» [Mr. Ron Harris](#), [Mr. Cory White](#), [Mr. John Klamut](#)

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](#)

9:30am **Ash Beneficiation from a Producers Point of View - the South African story**
» [Dr. Kelley Reynolds-Clausen](#), Mr. Warren Funston

8am **Geotechnical 2 - Geotechnical 2**
Manz Room

8am **TVA Shawnee – Overcoming Engineering Challenges Associated with Closure In Place of Mixed Ash**
» [Mr. Craig Lee](#), Mr. Michael Owens

8:30am **Unsaturated Shear Strength Behaviour of Tennessee Valley Authority (TVA) Ash: Matric and Osmotic Suction Effects**
» [Dr. MICHEAL UDUEBOR](#), Prof. John Daniels, Dr. Yunesh Saulick

9am **Case Study: Perimeter Barrier Wall Installation to Facilitate Closure by Removal**
» [Mr. Shawn Coughlin](#), Mr. Christopher Gee, Dr. Paul Schmall

9:30am **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

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**
» [Mr. Christopher Jones](#), Dr. KIRKLAND BROADWELL, Ms. Katherine (Kat) Warwick (Coco)

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



Continued from **Wednesday, 15 May**

8am	CCP Chemistry and Classification 2 - CCP Chemistry and Classification 2 <i>Ramme Room</i>
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
8am	Panel Discussion - Panel Discussion - Legacy Stockpiles of Coal Derived Fly Ash (CDFA) in the United Kingdom and Associated Research <i>Adams Room</i>
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. Frank Hrach, Mr. Lewis Baker , Mr. Scott Coley, Mr. Andrew Rigg

8am	Groundwater and Environment 3 - Groundwater and Environment 3 <i>Robl Room</i>
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 <i>Goss Room</i>
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



Continued from Wednesday, 15 May	
8am	Landfill and Pond Issues 3 - Landfill and Pond Issues 3 <i>Marksberry Room</i>
8am	Dewatering Basics – Understanding the challenges of dewatering » Mrs. Christine Harris
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 <i>Exhibit Hall C</i>
10:30am	Landfill and Pond Issues 6 - Landfill and Pond Issues 6 <i>Caylor Room</i>
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 <i>McKinley Room</i>
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
11:30am	Qualitative Assessment of Impounded CCR Subgrade Performance Under Earthwork Equipment Loads » Mr. Jeff Heyman , Dr. Austin Olaiz , Dr. Elizabeth Stallings Young
10:30am	Cement and Concrete 3 - Cement and Concrete 3 <i>Cain Room</i>
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 Pozzolan Supplementary Cementitious Materials » Dr. Lisa Burris , Dr. Prannoy Suraneni , Dr. Thomas Robl



Continued from **Wednesday, 15 May**

- 10:30am **CCP Storage and Management 1 - CCP Storage and Management 1**
Manz Room
- 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
- 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
- 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
- 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. Jason Hamelehle](#), Mr. Casey Schmitt, Mr. James Keat
- 11:30am **Demolition of the Navajo Generating Station**
» [Mr. Pete Everds](#), Ms. Sunshine Pryor, Mr. Michael O'Hare
- 10:30am **Panel Discussion - 'Beneficial Use of Harvested CCR - State of the Market'**
Adams Room
- 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
- 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



Continued from **Wednesday, 15 May**

- 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
- 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
- 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 - Student Lunch - by invitation**
Atrium Room
- 1pm **Regulatory Issues 4 - Regulatory Issues 4**
Caylor Room
- 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. Dan Chartier
- 1pm **Beneficiation and Processing 4 - Beneficiation and Processing 4**
McKinley Room
- 1pm **Assessing CCR Beneficiation Options for CCR Pond Closures**
» [Dr. Saiprasad Vaidya](#), [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.**

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

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

Cain Room

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 **Automated Instrumentation for Coal Combustion Residual (CCR) Ash Pond Closures**

» [Mr. Zachary Boucias](#), Mr. Pierre Gouvin

2:30pm **Water Management and Construction Impacts**

» [Mrs. Christine Harris](#)

3pm **HORIZONTAL VIBRATING WIRE PIEZOMETER INSTALLATION – A NEW DIRECTION IN GEOTECHNICAL EVALUATION**

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

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

Manz Room

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

» [Dr. Hans-loachim 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

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

Kruger Room

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, Ms. Ginny King

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

» [Mr. Ken Daly](#)

2:30pm **Maryland Coal Ash Activities**

» [Mr. Paul Petzrick](#)



Continued from **Wednesday, 15 May**

1pm **Hydrology and Leaching 1 - Hydrology and Leaching 1**
Ramme Room

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 - 'Water Removal and Treatment Technology'**
Adams Room

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

1pm **Groundwater and Environment 7 - Groundwater and Environment 7**
Robl Room

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

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

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. Jim Feild, Mr. Wayne Weber



Continued from **Wednesday, 15 May**

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 5**
Marksberry Room

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 - 'Leachate Ponds, to Treat or Not to Treat. From
 Proposed Effluent Limitation Guidelines to Technologies that can
 meet them'**
Adams Room

2:30pm **Water Removal and Treatment Technology Panel Discussion.**
 » [Mr. Wayne Weber](#), Mr. Mark Rokoff

3:30pm **Refresher Break**
Exhibit Hall A, B, 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 **Registration**
Outside of Ramme

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

8am **Electrical Leak Location (ELL) - Case Study**
 » [Mr. Andrew Colby](#)

8:30am **Chimney Drain Construction Lessons Learned**
 » [Mr. David Edwards](#)

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

9:30am **Conventional or Bentonite-Polymer GCLs for Coal Combustion
 Product Leachates?**
 » [Mr. Yu Tan](#), Dr. Craig Benson, Mr. Jimmy Youngblood



Continued from Thursday, 16 May	
8am	Geotechnical 4 - Geotechnical 4 <i>McKinley Room</i>
8am	Variable Rate Cone Penetration Testing in Hydraulically Placed Fly Ash Deposits » Mr. Longde Jin , Mr. Andrew Fuggle , Mr. Mark Taylor
8:30am	Modifying of expansive clay soils using alkali activated ESKOM legacy ash » Mrs. Pheny 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 <i>Cain Room</i>
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 <i>Manz Room</i>
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. Neal Berke , Mr. Ali Inceefe , Dr. Kyle Stanish
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 <i>Kruger Room</i>
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 Schuettpelez , Mr. Ryan Frank , Mr. Shane Stockdill



Continued from **Thursday, 16 May**

9am **CCR Unit Closure 2024 – Engineering and Construction Management Straight Talk**

» [Mr. Don Fuller](#), [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

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

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, 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. Alec 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

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

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. Jeffrey Davis, Mr. Jared Carte, Mr. Danny Rutherford, Dr. Frederick Day-Lewis, Ms. Melanie Edwards



Continued from **Thursday, 16 May**

10:30am	Landfill and Pond Issues 8 - Landfill and Pond Issues 8 <i>McKinley Room</i>
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 <i>Cain Room</i>
10:30am	Harvesting and Beneficial Use: Voluntary, Consensus Standard Developed by ASTM E50.03 » Mr. Benjamin Gallagher , Ms. Abigail Calmes, Mr. William Petruzzi
11am	Coal Ash Beneficiation Optimization Using Machine Learning And Industrial Data » Dr. Ross Gorman
11:30am	Using Interim Storage to Better Align Harvesting and Beneficiation Timelines » Mr. Ethan Bond
10:30am	Emerging Technologies 5 - Emerging Technologies 5 <i>Manz Room</i>
10:30am	Producing a High-Performance Low Carbon ASCM using Carbon Utilization Technology » Mrs. Tiffany Duffy , Mr. Alex Thomas, Ms. Natalie Giglio

11am	Evolution in Geosynthetics Starts with Utilizing Data Technology » Mr. Greg Pignataro , Mr. Evan Bao
11:30am	Exploring Non-invasive High-Resolution Geophysical Site Characterization Methods for Delineation of Coal Ash » Mr. Colin Plank , Dr. Mike Shultz, Mr. Jim Feild
10:30am	Regulatory Issues 5 - Regulatory Issues 5 <i>Kruger Room</i>
10:30am	ASSET RETIREMENT OBLIGATIONS: UPDATING YOUR AROS BASED ON THE PROPOSED LEGACY CCR SURFACE RULE » Mr. Ron Hager
11am	Emerging Regulations and Operational Preparedness – Key Areas to Ensure Future Success for 2023 ELGs » Mr. Joseph Woodley , Mr. Morgan French
11:30am	Total Ash and Brine Water Waste Utilisation » Mr. Maroun Rahme
10:30am	Project Specific Cases 4 - Project Specific Cases 4 <i>Ramme Room</i>
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



Continued from **Thursday, 16 May**

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|---------|---|
| 10:30am | Groundwater and Environment 10
<i>Adams Room</i> |
| 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 |