

# 50

MWCC



ENVIRONMENTAL  
CONFERENCE

*years*



of providing

*excellence*

in Environmental Leadership

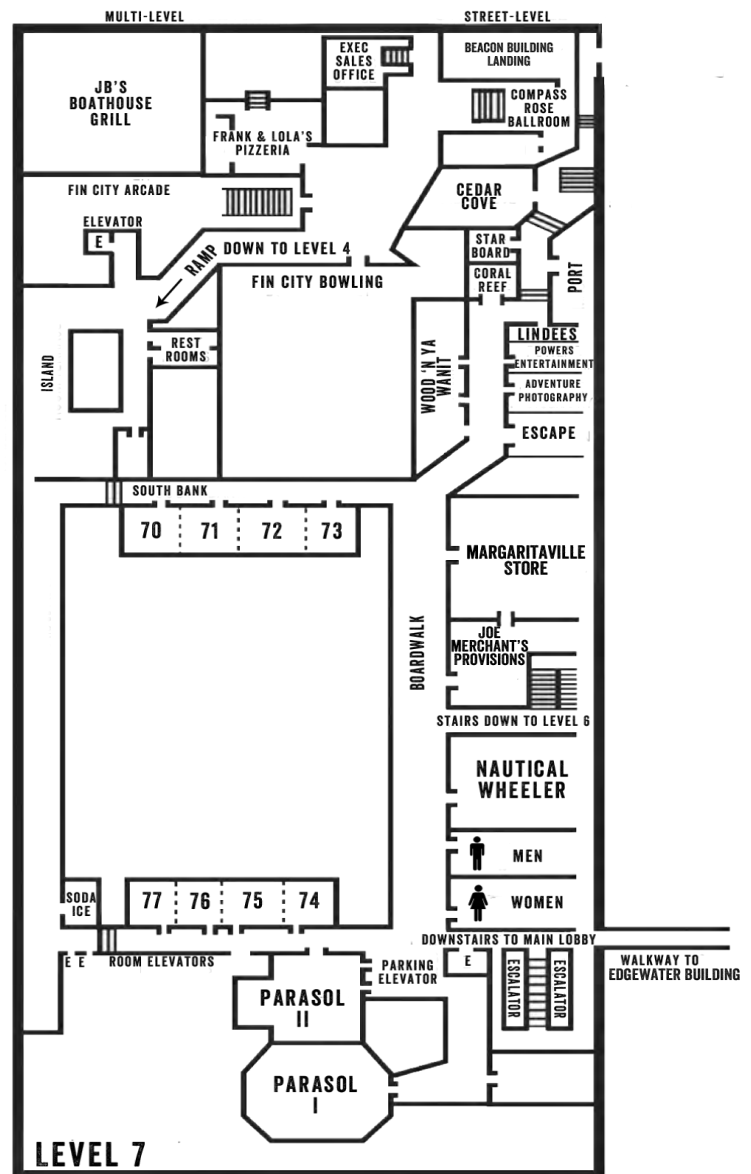
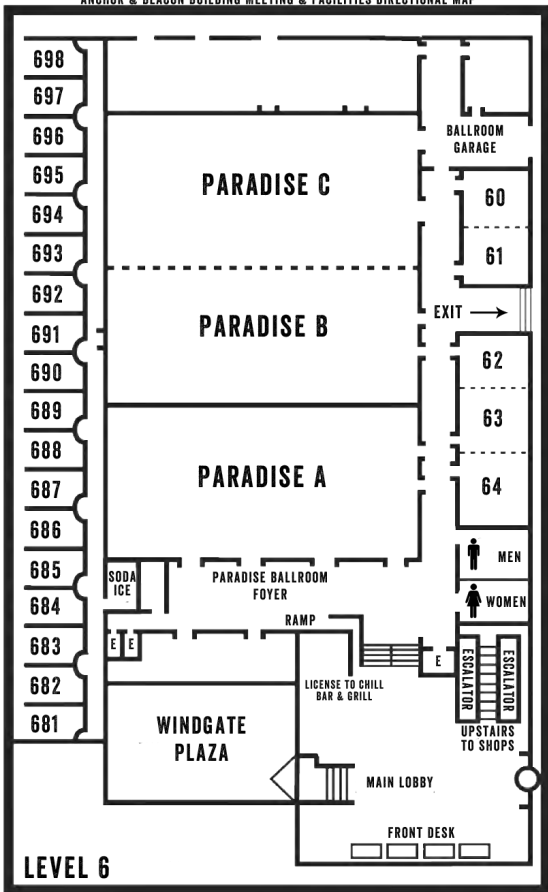
# MARGARITAVILLE

## Lake Resort

LAKE OF THE OZARKS

OSAGE BEACH, MISSOURI

ANCHOR & BEACON BUILDING MEETING & FACILITIES DIRECTIONAL MAP



Dear Conference Attendees,

I am so happy to see all of you in person again. It's always fun to get together with everyone, but it is particularly exciting to welcome you and thank you for joining the **50th Annual Missouri Waste Control Coalition Conference**. It is fantastic to see so many returning attendees, speakers, exhibitors, and quite a few new faces this year too. We hope that you take the time to meet and interact with the many vendors and sponsors for this event and learn how we are all special components of waste reduction. I would like to especially thank all our vendors and sponsors, as we wouldn't be able to have a conference without YOU. We also hope that you can take away (and provide) new information from (and to) the other conference attendees and our esteemed speakers through your interactions and meet potential customers, colleagues, and friends in the process. I hope that you find this conference enables ample opportunities to connect, socialize, and learn.



This year's conference theme is **"50 Years of Providing Excellence in Environmental Leadership"** and we are celebrating half a century of efforts to control waste and improve the environment here in Missouri. Whether you see yourself in a community, regulatory, political, industry, or other role in waste control, you are part of this coalition to improve our state, and your support matters! Thanks for working to support a better environment to leave as our legacy here in Missouri and elsewhere!

Our annual conference is intended to serve as a platform to keep industry, government officials, and private citizens informed of the latest developments in the environmental field and to serve as a forum where experience and opinions can be openly voiced. This is also a great opportunity for young professionals to connect with the many stakeholders in the environmental field. We welcome your participation and input throughout the conference.

Many volunteers spend **countless** hours preparing for this annual conference, all the while coordinating and executing other organizational activities and meeting the demands of their "paying" jobs. The conference committee has been working hard for the past year to put together this year's conference. Special thanks to Ken Koon with MDNR Tanks Program, this year's President Elect and Conference Chair, as well as the Board of Directors, the conference committee, and the advisory board. We could not do what we do without our Executive Director, Sandra Sabanske, who works diligently to keep this group on task, as well as the conference sponsors, exhibitors, and you, the coalition members who are in attendance.

Next year's conference will be at Margaritaville Lake Resort, from July 21-23, 2024. We are always on the prowl for directors and supporters. If you have any suggestions or would like to be a part of the Conference Committee, please contact Laurie Davis with the City of Springfield Environmental Services, the upcoming President Elect and Conference Chair for the 2024 Annual Conference.

Enjoy the conference and have a great summer,

**Ken Ewers,**  
**MWCC President, 2022-2023**



*\$10 per raffle ticket - Drawing during lunch on Tuesday  
Need not be present to win*

**Buy a Raffle Ticket**

## **Contribute to the MWCC Educational Scholarship Fund**

This year the MWCC is awarding scholarships to students at

- Lincoln University
- Missouri State University
- Missouri University of Science & Technology
- Southeastern Missouri University
- University of Missouri - Columbia

Be sure to meet the scholarship recipients attending the Conference

**GRAND PRIZE  
\$1,000**

**FIRST PRIZE  
\$400 CASH**

**SECOND PRIZE  
\$200 CASH**

*Special thanks to our sponsor:*





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*This program is printed on paper made of recycled fibers.*

## 2022 - 2023 Advisory Board


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	Jacob Rohter MDNR Brownfields Voluntary Cleanup Program	



### CONTINUING EDUCATION NOTICE

#### Recertification as a Missouri “Certified Solid Waste Technician”

For each specially marked breakout session, attendance counts towards education requirements for recertification as a Missouri Certified Solid Waste Technician. Please email [josephine.stoessel@dnr.mo.gov](mailto:josephine.stoessel@dnr.mo.gov) or [blaise.burmeister@dnr.mo.gov](mailto:blaise.burmeister@dnr.mo.gov) the following information:

- Which break out session(s) were attended that are eligible for credit (please note the  symbol in the agenda indicating eligible sessions), and the total hours of attended sessions.
- Please include ‘MWCC Recertification Credit’ in the email subject line.

**PDH and Missouri CLE credits are available  
Forms will be available at the Registration Desk.**

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## Missouri Waste Control Coalition 2022 - 2023 Board of Directors



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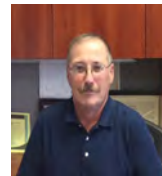
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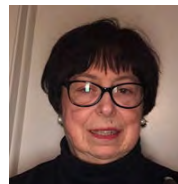
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# Missouri Waste Control Coalition

## *Celebrates its 50th Annual Conference and its 41st Anniversary as a Nonprofit Association*

Many of us come every summer for the annual Environmental Conference to showcase our products and services, to reconnect with old and new friends, and to gather cutting edge information on environmental issues. But have you ever wondered how all of this was started?

From 1972-1981 the Missouri Department of Natural Resources (MDNR) sponsored an annual “Missouri Solid Waste Conference” in Jefferson City. The purpose of the conference was to bring together citizens, government, business and industry to discuss the rapidly changing field of waste management. From these early conferences, the Missouri Waste Control Coalition (MWCC) was born, formed in 1981 through the efforts of the Missouri Department of Natural Resources, the University of Missouri-Columbia, and the Associated Industries of Missouri. The MWCC became the coordinating body for the annual conference. Over the years the conference has expanded beyond solid waste issues to encompass Brownfields, Tanks, CCR, PFAS, Land Development, Legal and other environmental issues.

In 1989 the MWCC added a teacher mini-grant program to recognize the importance of education and to increase student interest in environmental issues, and sponsored an Environmental Greeting Card Program. The Coalition replaced those programs in 2009 and now provides college students with cash scholarships that total \$93,000 through 2023 as well as scholarships to the conference.

The Coalition has offered regional seminars from time to time and, through a grant from MDNR, it offered special Appliance Demanufacturing Training Workshops. From 2013 to 2017 it partnered with the U.S. Environmental Protection Agency and presented seminars in Kansas City and St. Louis. In 2018 it developed a partnership with the Interstate Technology Regulatory Council (ITRC) and presented seminars across the state. In 2020 due to the COVID-19 pandemic, MWCC offered seven free webinars on solid waste issues rather than in-person seminars. Since 2014 it has offered the 40-Hour HAZWOPER Training annually.

Through the hard work of its members and the leadership provided by its board, the MWCC has broadened its scope from a small gathering of individuals into an established and effective organization. **You** are a part of that organization, and this conference is part of a tradition that reflects **more than 50 years** of providing information and a forum for discussion!

***For a more in-depth review of the 50 conferences and the past presidents of the organization, go to page 74.***



# CONFERENCE SCHEDULE

## SUNDAY, JULY 9

10:00 AM	<b>GOLF TOURNAMENT</b> Shotgun Start	<b>The Oaks Golf Course</b>
2:00 PM	Exhibit Set Up Opens	<b>Paradise Ballrooms A, B</b>
4:00 PM	Registration Opens	<b>Foyer, Paradise Ballrooms</b>
5:00 PM	<b>WELCOME RECEPTION</b> <i>SPONSORED BY</i> <i>GLOBAL CONTAINMENT SOLUTIONS AND</i> <i>GREDELL ENGINEERING RESOURCES, INC.</i>	<b>Paradise Ballrooms A, B</b>
6:00 PM	<b>Dueling Pianos</b> from Whorlow Entertainment <i>SPONSORED BY</i> <i>WEAVER CONSULTANTS GROUP</i>	<b>Paradise Ballrooms A, B</b>
8:00 PM	<b>Young Professionals Social Event</b> (New to the industry - less than 5 years)  <i>SPONSORED BY CITY OF SPRINGFIELD</i> <i>DEPARTMENT OF ENVIRONMENTAL SERVICES</i>	<b>Windgate 60 - 61</b>

## MONDAY, JULY 10

7:30 AM	Registration and Exhibits Open Coffee and "Meet and Greet"	<b>Paradise Ballrooms A, B</b>
8:00 AM	<b>BREAKFAST</b> <i>SPONSORED BY</i> <i>WASTE CONNECTIONS</i>  <b>PLENARY SESSION - Speakers:</b> <b>DRU BUNTIN</b> , Director, Missouri Department of Natural Resources and <b>MEG MCCOLLISTER</b> , Region 7 Administrator, U.S. Environmental Protection Agency <i>SPONSORED BY</i> <i>MDNR BROWNFIELDS VOLUNTARY CLEANUP PROGRAM</i>	<b>Paradise Ballroom C</b>
10:15 AM	Break with Exhibits	<b>Paradise Ballrooms A, B</b>

## SOLID WASTE TRACK



## Nautical Wheeler Room

Moderator: Laurie Davis, City of Springfield Department of Environmental Services

- **Leachate Reduction through Pond Cover Installation**

*Kyle Kukuk, Blackstone Environmental, Inc. and Kyle Burns, MidAmerica Liner*

This presentation will discuss the design and installation of a floating geomembrane pond cover over a leachate lagoon at a southwest Missouri municipal solid waste landfill to help reduce leachate production by minimizing rainfall over the lagoon.

- **Surface Fires in the Solid Waste Industry**

*Jeff Phillips, SCS Engineers*

Fires are occurring with increasing frequency. While fires are a serious safety risk, they also pose an administrative risk as facilities are struggling to keep or renew insurance policies. This presentation will provide an update on fires within the industry and present summary case studies. The presentation will also discuss the benefits of having a fire mitigation plan, the process of developing the plan and its components, the unique safety risks solid waste facilities pose to emergency responders, strategies to engage emergency response managers, and suggestions on how to “train the plan”.

- **Subsurface Fire Response: Slow and Steady**

*Anastasia Welch, P.E., SCS Engineers*

Subsurface fires (or smoldering events) are sneaky, and might not be spotted immediately depending on their location and site conditions. Response to a surface fire is swift and has high visibility, since the work takes place at the surface. Response to a subsurface fire is much more subtle and can take longer. Of course there are immediate actions, but much of the response is ‘do something, wait and see,’ and much of the monitoring occurs at some distance away from the actual site of the fire. In this presentation, learn the indicators of a subsurface fire, potential causes, and the response steps needed from Day 1 to multiple years out, to ensure the safety of the site and personnel.

## ENVIRONMENTAL ISSUES TRACK



## Parasol I

Moderator: Larry Lehman, MDNR Land Reclamation Program

- **Vapor Intrusion Mitigation Barriers - Concept, Design & Installation**

*Shane Tabor, EPRO Services, Inc.*

This presentation will focus on the challenges that are presented when planning and executing a passive vapor intrusion barrier system installation prior to and during new building construction. As the vapor intrusion market has matured, so have various types of vapor mitigation barrier systems. Selection of mitigation systems depend on a variety of factors. The goal of the presentation is to help identify common complexities during the design phase of a project in order to avoid common pitfalls encountered during the construction process and ensure proper installation of an effective, lasting vapor mitigation barrier system.

- **Emit Less, Earn More with Drone-based Emissions Monitoring!**

*Arthur Mohr, Sniffer Robotics*

According to the US EPA, Missouri’s 22 active MSW landfills emitted 1.4 Million Metric Tons (MMT) of GHG CO<sub>2</sub>e in 2021. These emissions, vented to the atmosphere, represent more than \$80 million in lost revenue to the industry. Capturing this revenue can make good business sense - representing an opportunity that should change how the industry detects leak sources using surface emissions monitoring. The speaker will present a drone-based method for emissions monitoring useful for study purposes helpful in assessing site emissions. The speaker will also present details of using the method for NSPS quarterly compliance as specified in the US EPA’s recently approved alternative test method (OTM-51 / ALT-150).

**BROWNFIELDS TRACK**

**Windgate 62-64**

*Moderator: Jacob Rohter, MDNR Brownfields/Voluntary Cleanup Program*

- **Missouri Brownfields Warmup**

- **Welcome to Missouri Brownfields 2023**

- Jacob Rohter, MDNR Brownfields/Voluntary Cleanup Program*

- **BVCP Program Overview**

- Scott Huckstep, MDNR Brownfields/Voluntary Cleanup Program*

- **What is “Long Term Stewardship?”**

- Sonja McDanel, MDNR*

- **Intro to Environmental Due Diligence**

- Karen T. Rieken, P.E., Terracon Consultants, Inc.*

A Phase I Environmental Site Assessment (ESA) is important in understanding potentially hazardous conditions at a site. This introduction to environmental due diligence will cover what’s included, and the important vocabulary in a Phase I ESA, including why your site has a No Further Action (NFA) letter but now has a recognized environmental condition (REC) when 15 years ago, the NFA was not an REC.

**TANKS I TRACK**

**Parasol II**

*Moderator: Garrett Carrillo, MDNR Tanks Section*

- **Using LNAPL Transmissivity to Make Remedial Decisions**

- Andrew Kirkman, BP and Tom Fox, Colorado Division of Oil and Public Safety*

LNAPL transmissivity testing consists of 1) proper data collection (via ASTM) and 2) proper interpretation of the data (via API). This session will review both phases but focus on how to use the API worksheet to avoid pitfalls. Identification of data adequacy and leveraging soil boring/well screen data are key. Several examples will be used to illustrate interpretive principles. Finally, we’ll estimate relative recovery performance for skimming, water-enhanced, multi-phase and bioremediation technologies.

**TANKS II TRACK**

**Leeward 74-75**

*Moderator: Jeremy Webb, MDNR Tanks Section*

- **Vapor Intrusion Investigation: When Excavation is the Solution**

- Paul Wilkerson, Sunbelt Environmental Services*

In 2019, gasoline vapors were reported in private residences in an area of Seymour, MO. Over the course of 3 years various investigations, including limited exploratory excavations, sewer surveys, and collection of soil samples via soil cores, were unsuccessful in identifying the cause or source of the gasoline vapors. In 2022, a large scale excavation of the potential area was begun where gasoline vapors were likely originating from. This presentation will summarize the site activities, difficulties encountered, and the findings of the project.

- **Vapor Intrusion Investigation: The Rest of the Story**

- Ken Koon, MDNR Tanks Section*

Seymour, MO - In October 2019, residents were experiencing vapors in the city sewer and in at least one residence. The MDNR will present information about the vapor, soil and groundwater investigation that occurred from 2019 to 2023. The investigation, including doing a risk assessment and plume stability is ongoing, however, significant progress has been accomplished.

# MONDAY, JULY 10

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12:00 Noon      **LUNCH AND AWARD PRESENTATIONS**      **Paradise Ballroom C**

Speaker: **DAN MEERS**, KC Wolf, Kansas City Chiefs

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**1:30 - 3:00 PM**      **CONCURRENT BREAKOUT SESSIONS**

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**SOLID WASTE TRACK**



**Nautical Wheeler Room**

Moderator: *Doug Doerr, P.E., SCS Engineers*

- **Waste Connections Sustainability Campus**

*Brady Stewart and Benjamin Tucker, Waste Connections and Jim Carver, City of Maryland Heights*

In 2019 the City of Maryland Heights sought a grant to provide environmental education to a local high school and community residents. In 2020 Champ Landfill met with Maryland Heights to discuss a partnership with common interests, effectively an extension of that same vision. See the behind-the-scenes story of how a municipality, a publicly traded waste company, a non-for-profit interest group, a high-school, a union-apprenticeship, a landfill gas-to-energy developer, and a string of uncommon visions combine to design and construct the first post-collection educational experience in the Midwest. The goal: provide office spaces for several different companies, provide a classroom setting for recycling and waste collection/disposal education, create a launching point for an informative trail system, construct greenhouses for a high school and plant-based research, construct a second landfill gas-to-energy project, create starting point for a pollinator corridor, and much more. Were we successful? You be the judge.

- **Value of Long-Range Solid Waste Planning**

*Laura Drescher, P.E., Burns & McDonnell ; Ashley Krug, City of Springfield; and Barbara Carroll, City of Warrensburg*

Communities are faced with making many tough decisions about the management of waste and recycling including services and facilities. There is often significant financial capital as well as public and political pressures. Making the right decision on developing infrastructure, changing services, and improving the solid waste system is benefited from up-front planning. Hear from a panel of Missouri communities who have taken steps to develop solid waste master plans and their experience moving the needle on waste diversion for their communities.



**The Solid Waste Track throughout the Conference has been developed in partnership with SWANA Missouri**



**ENVIRONMENTAL ISSUES TRACK**

**Parasol I**

*Moderator: Craig Ragland, Clean Earth, Inc.*

• **Groundwater Sample Collection via SP-16 Tool**

*Neal Farrar, Sunbelt Environmental Services, Inc.*

A municipal well field in Missouri near the confluence of the Mississippi and Missouri Rivers was threatened by dissolved chlorinated compounds. The source of the dissolved chlorinated compounds was unknown. In an effort to gather chemical concentration data at different locations and depths adjacent to the municipal well field, a sampling plan to collect groundwater samples was developed by others and implemented by Sunbelt. A Geo Probe Model 6620 Track Mounted direct push drill rig was used to advance a Screen Point (SP 16) Groundwater Sampler to a total depth of 100 feet. The SP-16 tool allows for the collection of groundwater sample at discrete intervals. The collection of these groundwater samples provided data as to the horizontal and vertical distribution of chlorinated compounds at various locations adjacent to the municipal wells. The SP-16 Sampler and associated tooling was quick and simple to deploy and resulted in the rapid collection of samples from multiple depths within a single boring.

• **Solar Radiance as a Latent Heat Source in the Enhanced Evaporation Process for Leachate Volume Management**



*Robert Ballantyne and Miranda Deeths, Resource West, Inc.*

This presentation describes a two year investigation into utilizing solar thermal collectors for the enhancement of evaporation as a lower energy alternative to other latent heat sources. Follow a two-year experiment into the collection of solar radiance and its injection to Leachate drainage to help enhance the evaporation rate of the fluid. Telemetry includes the full solar radiance analysis daily and the conversion factors to heat. Capturing the BTUs injected into the fluid and then stripping the fluid with a modified PittBoss Boundary Layer Enhanced Evaporator. Flow rates and delta T of operations along with a presentation of what proved to be optimal for operating conditions. Then the condition optimization is followed through the seasons for the development of operating parameters with different direct ray actions on the earth. (Northern Hemisphere only, collecting southern hemisphere in Perth Australia summer presently) A secondary area of research is co-presented on engineering impoundments to maximized natural solar radiance capture, and looking at placement, depth, grade break of the side slopes and height of side berm freeboard. For those who followed our body of work over the past decade or so we are presenting the latest enhancement schemes for evaporation using renewable solar thermal energy, and as always contaminate drift control is presented as well.

• **“Mining Bitcoin” from Your Groundwater Database**

*Jill Dekart, Foth Infrastructure & Environment*

Over the last 40 years, the “groundwater database” has evolved from cardboard boxes filled with reams of dot-matrix printed paper, to Windows folders with Excel spreadsheets, to SQL servers with GUI interfaces now known as “data management software.” It is true that data management software eliminates many of the errors of paper and spreadsheets, but facility owners are most excited by the monetary savings data management software offers. This presentation focuses on the basic functions (routine analytics, reporting, data validation, and supporting regulatory agency correspondence), extended demonstrations (plume stability, MNA, redundancy, optimization, and sufficiency demonstrations), and benefits of data management software.

# MONDAY, JULY 10

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1:30 - 3:00 PM

CONCURRENT BREAKOUT SESSIONS (continued)

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## BROWNFIELDS TRACK

Windgate 62-64

Moderator: Jacob Rohter, MDNR Brownfields/Voluntary Cleanup Program

- **Missouri Brownfields Partners**

- **Addressing Brownfields Redevelopment for Land & Community Revitalization in Missouri**

- *David Doyle, US EPA*

- **Technical Assistance for Brownfields: Free Help, Just Ask!**

- *Maggie Belanger, KSU TAB*

- **Developer's Perspective on Brownfields**

- *Philip Hulse, Green Street Development*

## TANKS I TRACK

Parasol II

Moderator: Garrett Carrillo, MDNR Tanks Section

- **ITRC: Effective Application of Guidance Documents to Hydrocarbon Sites - Scenario 1**

## TANKS II TRACK

Leeward 74-75

Moderator: Jeremy Webb, MDNR Tanks Section

- **ITRC: Effective Application of Guidance Documents to Hydrocarbon Sites - Scenario 2**

*Speakers for Tanks I and II: Tom Fox, State of Colorado, Division of Oil and Public Safety; Richard Spiese, State of Vermont; Jeff Kuhn, State of Montana (ret.); Shannon Suggs, North Dakota Department of Environmental Quality; Andrew Kirkman, BP; Joann Dyson, GHD; Bobbilynne Koepke, R.G., Environmental Works, Inc.; Laura Trozzolo, TRC Companies*

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3:00 PM

Break with Exhibits

Paradise Ballrooms A, B

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**SOLID WASTE TRACK** 

**Nautical Wheeler Room**

*Moderator: Lindsay James, R.G., Blackstone Environmental, Inc.*

- **AN INTERACTIVE PANEL DISCUSSION -**  
**Join us with your questions and comments for an entertaining session**

**\*\* Summary of Missouri's Waste Management History \*\***

*Thomas Gredell, P.E., and Rickie Roberts, P.E., GREDELL Engineering Resources;  
Mike Duvall, recently retired from Boeing - St. Louis*

The presentations will address the transition of waste management from the Missouri Department of Health to the Missouri Department of Natural Resources, the passage and implementation of Missouri's Solid Waste Management Law (1972), and the passage and implementation of Missouri's Hazardous Waste Law (1974). Winston Churchill said "Those that fail to learn from history are doomed to repeat it." With the current exit of baby boomers from all facets of the working world, this presentation is a 'must attend' session for upcoming waste management professionals. All three presenters are past Chairs of MWCC. They will collaborate to provide the most comprehensive summary of Missouri's waste management history ever presented at the MWCC using first-hand, personal knowledge and anecdotes about key points in history. It is important for today's waste management professionals to understand where their profession started and how it progressed to where it is today!

**ENVIRONMENTAL ISSUES TRACK**



**Parasol I**

*Moderator: Gil Kauffmann, Heritage Environmental Services, Inc.*

- **Preparing for a Painless Environmental Audit**  
*Eric Emmett, P.E., Environmental Operations, Inc.*

A facility could be the subject of an environmental audit from internal sources including corporate auditors, from external sources like customers or from federal, state, or local regulators. Environmental audits often come unannounced and can be a source of anxiety. However, with proper preparation and the right state of mind, an environmental audit can be a painless and often beneficial experience. This presentation will go over the proper state of mind and steps you can take to ensure that your next audit can be a painless and beneficial experience.

- **SWPPP and SPCC Compliance with Minimum Redundancy**  
*Eric Emmett, P.E., Environmental Operations, Inc.*

Spill Prevention Control & Countermeasure (SPCC) plans are regulated directly through the federal government while most storm water programs and associated plans are regulated at the state level. While both of these programs and associated plans have the intent of protecting "waters of the state" there is often a great deal of redundancy in complying with these separate programs. This presentation will cover several hot topics in complying with these programs and show ways to comply with both programs while reducing redundancy in compliance.

## **BROWNFIELDS TRACK**

**Windgate 62-64**

*Moderator: Jacob Rohrer, MDNR Brownfields/Voluntary Cleanup Program*

- **Case Studies in Brownfields Redevelopment**

- **Multi-Agency Coordination Success Story**

- David Forseth, Geotechnology, LLC*

- This case study will discuss how a standard due diligence project quickly turned into a HUD required Brownfields/Voluntary Cleanup project overseen by the MDNR. The case study will provide a brief background on the project and the initial due diligence required, and then discuss how the project developed into a multi-agency environmental assessment and remediation project where communication and attention to small details were very important.

- **Carondelet Coke: Accelerating Brownfield Transformation Through Pre-Emptive VI Mitigation**

- Noah Streich, Land Science*

- The former Carondelet Coke site had been left abandoned for decades. The remarkable transformation from former brownfield to the new River City Business Park promises to bring jobs, innovation, and hope to a Carondelet community in need of all three. With plans for four buildings with as much as 585,000 sq. feet of space, Green Street Real Estate Ventures, working with environmental consultant ATON Environmental, needed to address multiple site challenges caused by historic steel manufacturing operations. ATON and Green Street evaluated vapor intrusion mitigation options to preemptively address potential vapor intrusion issues. Tax incentives from the Brownfield Redevelopment Act helped offset the environmental costs and the community of Carondelet welcomes the economic development and the promise of future jobs coming to the community.

- **Looking Back to Look Forward**

- Chris Cady, Ph.D., MDNR*

## **TANKS I TRACK**

**Parasol II**

*Moderator: Garrett Carrillo, MDNR Tanks Section*

- **ITRC: Effective Application of Guidance Documents to Hydrocarbon Sites - Scenario 1**

## **TANKS II TRACK**

**Leeward 74-75**

*Moderator: Jeremy Webb, MDNR Tanks Section*

- **ITRC: Effective Application of Guidance Documents to Hydrocarbon Sites - Scenario 2**

*Speakers for Tanks I and II: Tom Fox, State of Colorado, Division of Oil and Public Safety; Richard Spiese, State of Vermont; Jeff Kuhn, State of Montana (ret.); Shannon Suggs, North Dakota Department of Environmental Quality; Andrew Kirkman, BP; Joann Dyson, GHD; Bobbilynne Koepke, R.G., Environmental Works, Inc.; Laura Trozzolo, TRC Companies*



**5:00 PM**

**RECEPTION**

**Paradise Ballrooms A, B**

- Food, drink and games for the entire family
- Casino games and mouse races
- Photo ops with World Bird Sanctuary, and
- Artists for kids and bounce house

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**Don't forget to turn in your ballots and volunteer forms  
to the registration desk before Noon on Tuesday.**



For nearly 50 years, the Solid Waste Association of North America has been the leading professional association in the solid waste field. SWANA's mission is to advance the practice of environmentally and economically sound management of municipal solid waste. Becoming a national SWANA member from Missouri automatically makes you a member of our local chapter. SWANA serves more than 10,000 solid waste professionals throughout North America with:

- Industry-leading conferences
- Certifications
- Publications
- Technical training courses

Whether you work for a public or private organization, are in management or operations, have an interest in all aspects of solid waste or just one – you'll benefit in many ways by being a SWANA member.

<https://www.moswana.org/>

## TUESDAY, JULY 11

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7:00 AM	SWANA Meeting (look for the reserved tables)	<b>Paradise Ballrooms A, B</b>
7:30 AM	Registration and Exhibits Open Breakfast and “Meet and Greet” <i>SPONSORED BY</i> <i>TERRACON CONSULTANTS, INC. AND</i> <i>RWI ENHANCED EVAPORATION</i>	<b>Paradise Ballrooms A, B</b> <b>Paradise Ballrooms A, B</b>

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### 8:30 - 10:00 AM CONCURRENT BREAKOUT SESSIONS

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#### **SOLID WASTE TRACK** **Nautical Wheeler Room**

*Moderator: Rebecca Whitaker, West Central SWMD*

- **How Do We Measure Waste Diversion Success?**  
*Jeff Phillips, SCS Engineers*

Measuring integrated solid waste management program success starts with establishing goals that can be accurately measured and developing methods to obtain reliable data. This presentation will provide a summary of waste diversion metric methods used in Missouri and other states, and potential next steps for Missouri developing and using a metric to measure the impacts of waste diversion efforts within Missouri..

- **Recycle Right: Community Education for Landfill Diversion and Contamination Reduction**  
*Ashley Krug, City of Springfield*

While recycling has been part of the conversation in solid waste management since the 1970s, it continues to be a challenge! Contamination, lack of standardized resources and procedures and lack of infrastructure for utilization of materials continue to be obstacles. Landfill lifespan, however, is an essential component of encouraging ongoing recycling efforts in a community. The City of Springfield’s Sustainability Division has incorporated “Recycle Right” into community conversations. As a waste diversion tool, recycling remains an essential element of a long term strategy for extending the availability of a landfill for future generations. This session will highlight the elements of the community presentation, data used to reinforce community messaging, barriers and obstacles within the community, and lessons being learned along the way.

- **When Engineers Do Marketing**  
*Josh Gabehart, Foth Infrastructure & Environment*

How can a couple of engineers and a scientist do public outreach and marketing for a solid waste program with just a sketch and a process? Foth will present an overview of the public outreach campaign one Illinois-based client underwent for recycling, municipal solid waste, yard waste, and other wastes, including successes and lessons learned. Previously, the waste hauler was handling education and contract management—which was minimal, at best. Great strides have been made, with the city owning more of the contract data and actively participating in education and collection issues. We are currently working to drive-up participation in the recycling program through social media tools and GIS that identify low-participation areas. The social media tools target specific areas and bring recycling to the forefront of users’ minds with minimal sponsorship. The client and Foth are currently undergoing a customer satisfaction survey and working to continue building our knowledge base for how best to serve the residents of the community.

**ENVIRONMENTAL ISSUES TRACK**



**Parasol I**

*Moderator: Craig Ragland, Clean Earth, Inc.*

• **Dam or Filter, What's the Difference When It Comes to Sediment Control?**

*Jeff King, American Excelsior Company*

Today a plethora of sediment control products exist from which to choose. How are they different and how are they the same? What really matters when it comes to sediment control products? This presentation will answer these questions about sediment control products.

• **Optimizing Investigations of Complex Co-Mingled Contaminants with Utilizing Subsurface Imaging Technologies**

*Janet Castle, R.G. and Vince Kowalick, Eagle Synergistic Optimizing Technologies, LLC*

For challenging sites with potential co-mingled plumes, there is a growing acceptance for the application of new technologies, such as High-Resolution Site Characterization (HRSC) subsurface imaging since it has been shown to increase the efficiency and accuracy of CSMs. On the majority of sites, there are not only co-mingled plumes containing non-aqueous phase liquid (NAPL) hydrocarbons and chlorinated solvents, but also PFAS concerns. Several HRSC case studies have been highly successful in distinguishing between multiple releases within the same area of interest. Additionally, case studies will highlight another upgraded and efficient method of running lab grade data in the field, along with targeted samples from the HRSC log data, to help speciate in near real time. With a more accurate and defined conceptual site model, (CSM), tax dollars are shown to be saved during the remediation phase.

**PFAS TRACK**



**Windgate 62-64**

*Moderator: Brenna McDonald, R.G., MDNR*

• **PFAS Update on Current and Future Analytical Methods for Solid Waste Professionals**

*Paul Jackson, Pace Analytical Services, LLC*

The EPA has been consistently updating regulations on PFAS in a wide array of sample matrices. Of note, the EPA announced a proposed rule to designate Perfluorooctanoic acid (PFOA) and Perfluorooctanesulfonic acid (PFOS) as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)—also known as Superfund. It is of the utmost importance to understand the most up to date PFAS methods available to utilize. We will cover both speciated PFAS methods such as EPA 1633 and Total Oxidizable Precursor Assay (TOPS) as well as non-speciated organic fluorine methods (TOF, AOF, EOF, TF). This presentation will aid in analytical decision making at PFAS impacted sights for cost efficiency and time management.

• **A State of PFAs - Welcome to Minnesota!**

*Brian Sperrazza, P.E., P.G., Foth Infrastructure & Environment*

As the home state of 3M, Minnesota was one of the first states to acknowledge PFAS' association to landfills (circa 2000). The Minnesota Pollution Control Agency (MPCA) Solid Waste Department began evaluating PFAS in leachate in 2005 and updated solid waste leachate management guidance in 2011. In 2020, Minnesota landfill owners and operators formed the PFAS Receivers' Landfill Coalition, which distinguished landfills as public servants that receive PFAS-laden consumer waste rather than the origin of PFAS contamination. In 2022, the USEPA issued NPDES draft guidance authorizing local POTWs to evaluate sources of PFAS to WWTPs. In 2023, Foth is conducting leachate management feasibility and options analyses, including bench scale and pilot scale PFAS treatment technologies. This presentation will be a walk-through of PFAS' evolution at Minnesota landfills over the last 20 years.

# TUESDAY, JULY 11

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8:30 AM - 10:00 AM

CONCURRENT BREAKOUT SESSIONS (continued)

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## TANKS I TRACK

**Parasol II**

*Moderator: Garrett Carrillo, MDNR Tanks Section*

- **ITRC: Effective Application of Guidance Documents to Hydrocarbon Sites - Scenario 1**

## TANKS II TRACK

**Leeward 74-75**

*Moderator: Jeremy Webb, MDNR Tanks Section*

- **ITRC: Effective Application of Guidance Documents to Hydrocarbon Sites - Scenario 2**

*Speakers for Tanks I and II: Tom Fox, State of Colorado, Division of Oil and Public Safety; Richard Spiese, State of Vermont; Jeff Kuhn, State of Montana (ret.); Shannon Suggs, North Dakota Department of Environmental Quality; Andrew Kirkman, BP; Joann Dyson, GHD; Bobbilynne Koepke, R.G., Environmental Works, Inc.; Laura Trozzolo, TRC Companies*

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10:00 AM

Break with Exhibits

**Paradise Ballrooms A, B**

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ELLIOTT EQUIPMENT COMPANY

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**SOLID WASTE TRACK**



**Nautical Wheeler Room**

*Moderator: Renee Trenshaw, P.E., SCS Engineers*

- **The UNLIMITED Setout Nightmare**

*Cynthia Mormile, MSW Consultants*

Solid Waste collection programs vary from community to community. Bulk collection is one component of service that can cost operations an extensive amount of time and resources depending on local guidelines and the extent each customer uses the service. Many programs that have traditionally allowed unlimited bulk waste setout have been considering the cost and operational implications to their overall services and making changes. This presentation will touch on various aspects of bulky item collection and the associated pros and cons and provide examples of programs around the country.

- **Where Are We Going with All This Plastic?**

*Dana Ripper, Missouri River Bird Observatory & Beyond Plastics*

As waste industry professionals are aware, the production of plastic and its subsequent proliferation in the environment has increased dramatically over the past two decades. From an ecological point of view, it's not just the "end of life" pollution that is problematic; there are serious environmental and human health concerns starting with the extraction of plastic's components, through manufacture, use, reuse, and waste management. This presentation will present a case for ending the production of single-use disposables and other potentially harmful plastics. Discussion will be encouraged.

**ENVIRONMENTAL ISSUES TRACK**

**Parasol I**

*Moderator: Larry Lehman, MDNR Land Reclamation Program*

- **Horizon II: A Climate-Smart Future for Corn, Soybean, Livestock, and Renewable Natural Gas Production**

*Brandon Butler, Roeslein Alternative Energy*

Led by Roeslein Alternative Energy, Horizon II is an innovative partnership united in advancing a new climate-smart system for US agriculture. The system will reduce greenhouse gas (GHG) emissions and improve carbon sequestration for corn, soybean, pork, and beef commodities while creating transformational opportunities for small and historically underserved producers. The project will verify on a large scale that prairie grasses and cover crops are economically viable, low-CO<sub>2</sub>e commodities that provide a stable income stream to farmers. It will also expand the existing supply chains to produce renewable natural gas (RNG), biofertilizer, and carbon credits through the smarter utilization and connection of resources. The proposed climate-smart system will add further value in terms of soil health, clean water, flood control, and habitat for native wildlife.

- **Agriculture Waste to RNG - Here Piggy, Piggy, Piggy**

*Bret Clements, P.E. and Marilyn Jones, SCS Engineers*

Over the past years, landfill gas to RNG has been a hot topic and lucrative market. Well, there is a new sheriff in town – Agriculture RNG. With a change in scoring for the California Low Carbon Fuel Standards (LCFS) market, AG RNG is booming. Come explore Agriculture RNG, as we walk you through a gas collection and control system design for swine gas, along with some of the atypical challenges and hurdles associated with these setups.

*See additional presentation during this session on next page.*

## ENVIRONMENTAL TRACK (continued)

- **The Role of Organics Management in Climate Action Planning**



*Dan Bacehowski, HDR Engineering*

During this session, we will review organic management strategies that align with climate action plan strategies, highlight the climate mitigation potential, and begin the discussion on how we can better align solid waste planning with climate action planning. To help learn how these organic management strategies are applied in our solid waste community, you will hear directly from the Cedar Rapids Linn County Solid Waste Agency and its multiprong approach to finding organic solutions and the greenhouse gas reduction quantification for each solution.

## PFAS TRACK



**Windgate 62-64**

*Moderator: Jacqueline Rosko, Waste Management*

- **Comparison of Adsorbents for the Removal of PFAS from Landfill Leachates**

*Marat Goldenberg, P.E., Vadose Remediation, LLC*

Traditional medias such as activated carbons and ion exchange resins have been used extensively in water and wastewater treatment systems. With recent concerns over PFAS in the discharge of wastewater post landfill leachate treatment, these medias have generally also been implemented into existing systems to remove PFAS compounds. There is less familiarity with surface modified clays (SMCs) for the removal of PFAS compounds, as they are relatively new compared to the traditional medias in the marketplace. This presentation will compare commercially available adsorbent medias for the removal of PFAS, including removal efficiencies, empty bed contact times, media longevities and general cost comparisons.

- **Colloidal Activated Carbon Used to Enhance Natural Attenuation of PFAS at Airports World-Wide: A Multiple Site Review**

*Ryan Moore, Regenesys*

The presentation will be a case study review of 7 airport sites that use an enhanced natural attenuation strategy to address PFAS impact in soil and groundwater through treatments with CAC. The size and scope of the CAC projects vary along with the injection methods and treatment configurations between grids and permeable reactive barriers. Groundwater was primarily targeted for treatment, but on a few occasions source vadose soils were also treated. Prior to the implementation of the CAC, design verification testing (DVT) and advanced mass flux and predictive competitive sorption modeling were completed to refine the site conceptual models. Also, during the application process, field placement validation steps, such as post-injection soil cores and piezometers, were used to observe and refine the CAC distribution.

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**10:30 AM - 12:00 PM**

**CONCURRENT BREAKOUT SESSIONS (continued)**

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**TANKS I TRACK**

**Parasol II**

*Moderator: Garrett Carrillo, MDNR Tanks Section*

- **ITRC: Effective Application of Guidance Documents to Hydrocarbon Sites - Scenario 1**

**TANKS II TRACK**

**Leeward 74-75**

*Moderator: Jeremy Webb, MDNR Tanks Section*

- **ITRC: Effective Application of Guidance Documents to Hydrocarbon Sites - Scenario 2**

*Speakers for Tanks I and II: Tom Fox, State of Colorado, Division of Oil and Public Safety; Richard Spiese, State of Vermont; Jeff Kuhn, State of Montana (ret.); Shannon Suggs, North Dakota Department of Environmental Quality; Andrew Kirkman, BP; Joann Dyson, GHD; Bobbilynne Koepke, R.G., Environmental Works, Inc.; Laura Trozzolo, TRC Companies*

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12:00 Noon

**NETWORKING LUNCH**

**Paradise Ballroom C**

Drawings, prizes and election results

*SPONSORED BY*

*MDNR WASTE MANAGEMENT PROGRAM AND*

*ST. LOUIS COUNTY DEPARTMENT OF PUBLIC HEALTH*

## SOLID WASTE TRACK



## Nautical Wheeler Room

Moderator: *Brian C. Weis, P.E., Burns & McDonnell*

- **Environmental Permitting and Compliance - Back to Basics**

*Marilyn Jones, SCS Engineers*

Back to Basics! Do you remember the key permit drivers for new and existing facilities? Is your facility 100% compliant today? Not so sure? Come join me and let's get down to business! With various monitoring, reporting and recordkeeping requirements that are enforced, Federal and State regulations can be a lot to handle! Within a single Landfill/facility there are numerous operations that may require multiple permits from various agencies. This presentation will provide a basic understanding of what "red flags/permit drivers" to look for with respect to permitting and compliance requirements and keeping them updated.

- **Engineered Turf Solutions for Erosion Control and Beneficial Reuse of Landfills**

*John Hermann, Watershed Geo*

This presentation will focus on an engineered revetment solution designed to provide armoring of hydraulic structures against high velocity and shear stress. This solution can be applied to landfill down chutes and perimeter channels. In addition, a new solar solution used in conjunction with engineered turf will be highlighted.

- **Leak Location Geomembrane**

*Jorge Hernandez, Solmax*

Come find out how the industry is using leak location geomembrane to detect potential leaks in liners. Different surveys can be utilized to accurately pinpoint a leak, which is absolutely essential when it comes to preserving the environment.

## ENVIRONMENTAL ISSUES TRACK



## Parasol I

Moderator: *Gil Kauffmann, Heritage Environmental Services, Inc.*

- **Missouri Product Stewardship - Paint Care**

*Kathrina Donegan, St. Louis County Department of Public Health*

The Product Stewardship of Missouri is working on a PaintCare Bill for the State. Join us for a discussion on paint stewardship and the benefits for communities, consumers, economy, haulers, and waste facilities.

- **Flexamat - Permanent Erosion Control Solutions**

*Ron Geater, Motz Enterprises, Inc.*

Flexamat is a tied concrete block mat that comes manufactured in rolls to assist construction sites by reducing their carbon footprint. One truckload of Flexamat is equal to 30 truckload of 12"-18" designed rock rip rap channel. Flexamat is made up of concrete shapes (6.5" x 6.5" with a 2.25" rise) fully embedded into a high strength polypropylene geogrid, with an erosion control underlayment. Many soils on construction sites lack structure and need engineering assistance. This system is designed to allow vegetation to grow around each block, bonding with the geogrid and erosion control underlayment to increase the soil structure within the subgrade. The product has been tested in high flows and high shear to reduce soil loss, which can provide a solution on steep slopes and channels where rock fails.

## PFAS TRACK



Windgate 62-64

Moderator: Rebecca Warnken, Burns & McDonnell

- **POET Team: Identifying Key Drivers of PFAS Breakthrough in Groundwater Wells Point of Entry Treatment (POET) Systems**

*Richard Spiese, State of Vermont*

This presentation will discuss identifying key drivers of PFAS breakthrough in groundwater wells Point of Entry Treatment (POET) Systems.

- **The Versatility of Clay-Based Adsorbents for PFAS Treatment**

*Marat Goldenberg, P.E., CETCO and Vadose Remediation*

Clay-based adsorbents, such as FLUORO-SORB® Adsorbent, are highly effective at removing perfluoroalkyl and polyfluoroalkyl substances (PFAS) from a variety of water types. Clay-based adsorbents are manufactured by modifying the surface of sodium bentonite with organic functional groups that have a high affinity for PFAS. The plate-like crystalline structure of the clay is loaded with the organic functional group, which is then attached to the mineral surface to form adsorptive inter-platelet layers or galleries. The presence of the organic functional groups displaces exchangeable cations like sodium and calcium from the clay, which eliminates swelling when hydrated. The resulting material has a large surface area available for adsorption of PFAS via electrostatic and hydrophobic mechanisms. Fluoro-sorb Adsorbent has been investigated in the laboratory and in the field, with a variety of PFAS chain lengths and concentrations, and has demonstrated the ability to remove PFAS to non-detect concentrations in a variety of matrices. The media is resistant to the detrimental effects of water constituents, like dissolved organic carbon and anions, on PFAS adsorption and provides fast adsorption kinetics. In addition to a filtration media, Fluoro-sorb Adsorbent can be used for subsurface treatment of PFAS, as well as for sediment capping. Results from treatment of PFAS in soil, groundwater, drinking water, and landfill leachate will be presented.

## TANKS I TRACK

Parasol II

Moderator: Garrett Carrillo, MDNR Tanks Section

- **Treating and Pretreating Hard to Access Hydrocarbon Contamination in Underground Storage Tank Basins and Utility Corridors with Colloidal Activated Carbon**

*Ryan Moore, Regenesis*

Colloidal activated carbon (CAC) is a liquid material that is non-hazardous and non-corrosive and is most typically applied using low-pressure injection or flooding. This easy-to-apply material has resulted in many creative applications including the use in excavation backfill amendments and inland in situ emergency response after truck rollovers. Comparable to “black ink,” the remedial fluid can be applied through a variety of forms including vertical percolation, tank basin edge injections, and inject/extract approaches. Each site evaluated was approached differently and had various levels of distribution success. Data collected from several tank basin and utility corridor floods including injection layouts, injection approaches, volumes, contaminant concentrations changes were used to evaluate the success of various flooding approaches. For hard-to-access tank basins and infrastructure, the most ideal application thus far has been direct vertical percolation with low pressure over tank basin infrastructure versus other approaches such as “push/pull” or edge injection into the tank basin. A case study of a UST basin treatment in Colorado will be reviewed in detail.



## TANKS II TRACK

Leeward 74-75

*Moderator: Jeremy Webb, MDNR Tanks Section*

- **Developing Comprehensive 3D Conceptual Site Models: Insights on Delineation Data Gaps & Groundwater Plume Monitoring**

*Max Hoffman, R.G., Environmental Works, Inc.*

Environmental and engineering industries are using modeling software with ever-increasing frequency to build comprehensive 3D models of project sites for analytical data evaluation in conjunction with hydrogeologic site conditions. When used correctly, these technologies can provide a more thorough understanding of the relationship between site-specific subsurface conditions and the distribution of soil and groundwater impact, particularly as they relate to various exposure pathways such as utilities, water wells, buildings and surface water bodies. Through 3D modeling programs, comprehensive and simplified models have the potential to achieve this goal, and much more. This presentation will provide a case study of a petroleum release site in rural Missouri where the presence of light non-aqueous phase liquid (LNAPL) and a groundwater plume surrounded by residential water wells led Environmental Works (EWI) to develop a 3D regional conceptual site model (CSM) to make smarter site characterization & corrective action decisions. We will discuss site characterization efforts to date, applications of 3D modeling in environmental assessments, what features and analytics can be provided, and the steps that follow once a 3D CSM has been completed.

- **I Have RECs, Now What?**

*Melissa Dowling, Terracon Consultants, Inc.*

The next step after recognized environmental conditions (RECs) have been identified in your Phase I Environmental Site Assessment (ESA) is a Phase II ESA. This assessment can take many forms depending upon the issues identified. We will explore several typical assessment methods, how we determine where to sample, what we sample for, and what those results mean to you, as well as a discussion on this being a presence/absence study and not a delineation study.

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## KEYNOTE SPEAKERS

### Plenary Speakers Monday, July 10

#### **Dru Buntin**

**Director, Missouri Department of Natural Resources**



Dru Buntin was named Director of the Missouri Department of Natural Resources in August 2021. Dru served as Deputy Director for the department from 2009 to 2012, and again in 2017. Dru is the former Executive Director of the Upper Mississippi River Basin Association, where he served for four years. Since rejoining the department in 2017, Dru has led the agency on important river-related issues, including drought relief and flood recovery. He was also instrumental in leading the department's Red Tape Reduction efforts, which reduced the regulatory burden on Missouri businesses and citizens. Dru earned a Bachelor of Arts from the University of Missouri - Columbia.

#### **Meg McCollister**

**Region 7 Administrator, U.S. Environmental Protection Agency**



Meg McCollister has a strong advisory and advocacy background with nearly two decades of experience serving nonprofits, candidates for public office, and public policy campaigns. She received her bachelor's degree from the University of Kansas before attending the University of Missouri-Kansas City School of Law, where she earned her Juris Doctorate with an emphasis in urban, land use and environmental law. After law school, McCollister served on the Board of Directors for Sonoma County, California Conservation Action and worked on environmental campaigns and in local government. Upon her return to the Midwest, she has continued to serve as an advisor and strategic thinker in areas including environmental, health, and social improvement initiatives as well as communication strategies.

### Luncheon Speaker Monday, July 10

#### **Dan Meers, aka KC Wolf**



What makes Dan truly special is that he is as equally entertaining out of his costume. He goes to work each day like many other men, dressed in a suit. The only difference is that instead of wearing a tie with his suit, he wears a tail. Dan's work as KC Wolf and his experiences as a professional sports mascot have reinforced to him the philosophy that laughter and a cheerful heart are good medicine. He is also a firm believer that when you learn to think only of the best and work on for the best, you can start to expect the best! Join us for his inspirational talk.

## SPEAKERS and MODERATORS

### **Dan Bacehowski**

Dan is Waste Practice Lead for HDR Engineering. He brings 22 years of technical and management experience in environmental engineering consulting, including client and project management and planning, with a focus on the solid waste industry. He promotes a collaborative team approach toward meeting clients' needs by involving all stakeholders from the client, regulator, and HDR project team. Dan has served on the Iowa SWANA Board for 12 years and the Colorado SWANA Board for 2 years, chairing and leading a variety of committees.

Dan.bacehowski@hdrinc.com

### **Robert Ballantyne**

Robert served the United States of America as a U. S. Marine ('79-'85). He is an electrical engineer with his follow-on education concentrating on molecular and atomic spectroscopy. His body of science research focuses on environmental monitoring, mitigation, and remediation systems design for processing water, wastewater, leachate and drinking water sources, with an emphasis on waste stream reduction. His current role as Senior Vice President and Principal Engineer for RWI Enhanced Evaporation has allowed him to pursue the raw scientific research into ways to fundamentally change environmental mitigation and pollution control markets and methods.

engineering@resourcewest.com

### **Maggie Egbarts Belanger**

Maggie is the Assistant Program Director for the Technical Assistance to Brownfields Communities (TAB) Program at Kansas State University. She assists communities, tribes, and local governments in overcoming environmental challenges associated with reuse or redevelopment of brownfields properties and manages a suite of E-Tools, including the Brownfields Inventory Tool (BiT) and TAB EZ. Maggie has a Bachelor's in Environmental Studies and 19 years of experience in environmental assessment, cleanup, regulatory compliance and property revitalization; encompassing public speaking, community engagement, project management, technical guidance and policy development, and applying for and managing federal grants.

maggiejessie@ksu.edu

### **Kyle Burns**

Kyle is General Manager of MidAmerica Liner with vast experience in pond cover liner installation projects.

kyleb@midamericaliner.com

### **Brandon Butler**

Brandon serves as Director of Communications for Roeslein Alternative Energy (RAE). He handles public relations, marketing and government affairs. Previously, he served as the Executive Director of the Conservation Federation of Missouri, the state's largest conservation non-profit. He writes a syndicated column about conservation and the outdoors for a number of newspapers. Brandon is a past president of three outdoor media organizations, is the treasure of Mid-Missouri Trout Unlimited and is currently on the board of directors of the Missouri Energy Initiative and the Iowa Wildlife Federation. He holds a bachelor's degree from Purdue University, a master's degree from Gonzaga University and an Executive M.B.A. from the University of Missouri, where he has served as class president. Butler is a native of northwest Indiana, but has made his home in rural Howard County, Missouri since 2010. He is the proud father of two daughters, Bailee and Annabel.

bbutler@roesleinae.com

### **Chris Cady, Ph.D.**

Chris has been with the Voluntary Cleanup Section of MDNR since 1997. He oversees risk-based cleanup of brownfield and voluntary cleanup sites as a Project Manager. As an Environmental Scientist, he also works on special projects including the development of program policies and the Missouri Risk-Based Corrective Action Guidance. He received a Bachelor's degree in chemistry from the New Mexico Institute of Mining and Technology, and Masters and Doctorate degrees in Environmental Chemistry from the University of Missouri – Columbia.

chris.cady@dnr.mo.gov

### **Garrett Carrillo**

Garrett has served as a project manager with the MDNR Tanks section, since March of 2022. Prior to that he spent three years, at the University of Missouri's research reactor, working as a quality control chemist. Garrett received his bachelor's degree in biology from Lincoln University of Missouri, and is currently pursuing a Master of Business Administration at Lindenwood University.

garrett.carrillo@dnr.mo.gov

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## SPEAKERS/MODERATORS

### **Barbara Carroll**

Barbara attended the University of Kansas and received a BA in Political Science and a BA in Environmental Studies. She completed her graduate work at Michigan State University and received a Master's in Urban and Regional Planning in 1999. She began working for the City of Warrensburg as the City Planner in May of 1999 and has served as the Director of Community Development for the past 15 years. In her role for the City, she works closely with the public and elected officials, including City Council and the Planning and Zoning Commission. Her duties also include overseeing the areas of development services, building code administration, planning, zoning, nuisance code enforcement and the City's GIS program. Special projects include work in the areas of economic development, housing policy, and solid waste management, among others. Barbara served over 15 years on the West Central Missouri Solid Waste Management District Region F Board of Directors. [bcarroll@warrensburg-mo.com](mailto:bcarroll@warrensburg-mo.com)

### **Jim Carver**

Jim is the Economic Development Director for the City of Maryland Heights. Jim has served in this role for the last 5 years; he is the first Economic Development Director for the City and has created unparalleled relationships with the current business community as well as creating significant growth. Prior to his role as Economic Development Director, Jim was an elected official with the City and a Supervisor for Union Pacific Railroad. Jim has a very well rounded background and continues to serve the community at the highest of standards. [jcarver@marylandheights.com](mailto:jcarver@marylandheights.com)

### **Janet Castle, R.G.**

Janet has over 20 years of experience with utilizing geophysics, petrophysics, geology, hydrology, and geochem to optimize projects. She is a Professional Geologist and president of Eagle Synergistic Optimizing Technologies. Her primary area of focus includes managing a team of subsurface imaging specialists that complete HRSC investigation projects and 3D visualizations. Other areas of expertise include working with geochem to correlate soil and groundwater samples to HRSC subsurface imaging data, including a portable onsite lab grade GC and 3D modeling. As a geologist and petrophysicist, she has developed optimized strategies for various types of sites, including commercial, Superfund, EPA, O&G, and DOD sites. She recently helped upgrade the investigative methods for PFAS sites and is actively engaged in the rapidly evolving world of PFAS science and regulations. Her education is in geophysics and petroleum geology at University of Houston and Colorado School of Mines. [jcastle@eaglesynergistic.com](mailto:jcastle@eaglesynergistic.com)

### **Bret Clements, P.E.**

Bret is a Vice President at SCS Engineers, who for the past 15 years has been working in the environmental consulting world. His focus has been on air permitting, environmental remediation, landfill design, landfill gas design and operations, biodiesel facilities and recently Agricultural RNG. [bclements@scsengineers](mailto:bclements@scsengineers)

### **Laurie Davis**

Laurie is the Education Outreach Coordinator for the Environmental Services/Sustainability Division in the city of Springfield. She has been in the field of both formal and informal education for over 30 years. Laurie has a BA and MA in Education. She believes every day is an adventure and an opportunity to learn something new! Laurie lives in Nixa, Missouri with her husband Keith and two very spoiled cats. Walking, kayaking, fishing and sitting on the front porch swing are a few favorite activities. She is Vice President of MWCC. [laurie.davis@springfieldmo.gov](mailto:laurie.davis@springfieldmo.gov)

### **Miranda Deeths**

Miranda is a senior in High School and was accepted into the RWI Enhanced Evaporation internship program under the "over achiever" exception. Miranda has been actively involved for two years running in the test site and the telemetry as she looks forward to pursuing Chemical Engineering in college.

### **Jill Dekart**

Jill is a Project Environmental Engineer with Foth Infrastructure & Environment. She brings a variety of experiences in compliance and permitting, remediation, pilot studies, multi-media site investigations, and most importantly collaborating with clients to manage their environmental monitoring systems. She works with solid waste organizations throughout the Midwest to meet compliance requirements and make decisions that help them operate their facilities more efficiently and effectively. Jill is skilled in the use of numerous data management systems, such as EQUIS™. She is currently a student at John Hopkins University pursuing a Master of Science in Environmental Science and Engineering. Jill brings her curiosity and passion for data management and chemistry to solve the client's toughest challenges and questions. In her spare time, which is never enough, she is learning to play the ukelele. [jill.dekart@foth.com](mailto:jill.dekart@foth.com)

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## SPEAKERS/MODERATORS

### **Doug Doerr, P.E.**

Doug is a Senior Vice President of SCS Engineers and is responsible for directing operations in the Central region of the United States. He has been involved in a wide variety of environmental projects with particular emphasis on waste management. His project experience includes landfill permitting and design, environmental compliance; economic and feasibility studies, and various types of material management facility planning, permitting and design. Doug has also been instrumental in developing client strategies to address various regulatory and other complex environmental issues including facility feasibility/siting and response plans to new legislative and regulatory directives. He directs projects involving various facets of environmental engineering and consulting including air permitting and compliance, traditional civil engineering, alternative energy planning and implementation, and environmental investigation and remediation. He has a Bachelor's degree in Civil Engineering and a Master's degree in Business Administration. He is a licensed Professional Engineer in Colorado, Kansas, Illinois, Missouri, Nebraska, and New Mexico.

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### **Kathrina Donegan**

Kathrina is a long-term employee with St. Louis County Department of Public Health, her current position being Environmental Manager of Waste Management and Air Pollution Control. She manages the County's Waste Management Programs, which includes Waste Districts, Waste Diversion and Field Services. She graduated from the University of Missouri – Columbia with a BS degree in Civil Engineering and from the University of Fontbonne with a master's in business administration.

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### **Melissa Dowling**

Melissa leads the Site Investigation and Remediation Department in Terracon's Lenexa, Kansas Office. She graduated from the University of Missouri – Kansas City with a Bachelor's Degree in Geology. She has 20 years of experience in the environmental field and has provided services to municipal, commercial and industrial clients under a variety of federal and state programs in Kansas, Missouri, Arizona, and Texas. These include underground and leaking underground storage tanks (UST/LUST) evaluations, site remediation, Phase I ESA's as an environmental professional, Phase II assessments, LECA, SWPP Plans, SPCC Plans, compliance audits, and remedial excavation and groundwater plume remediation activities including contact with federal, state, and local environmental regulatory agencies and insurance funds, and applicable permitting, including working towards closure through the risk-based assessment programs in Missouri, Kansas, and Arizona.

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### **David Doyle**

David works for the U.S. Environmental Protection Agency's Region 7 Office. He has a Bachelor of Science degree in Environmental Engineering from Syracuse University and a Master of Science degree in Environmental Health Engineering from the University of Kansas. David has been with EPA for over 40 years and has worked in many of EPA's water, air, and hazardous waste programs as both a staff person and a manager. He is presently EPA Region 7's Community Revitalization Coordinator, where he assists EPA program staff, property owners, community leaders and others in applying smart growth and sustainable community principles and practices to make communities more resilient. David is also a certified mediator for the Kansas City Area Federal Employee's Shared Neutrals Mediation Program and the Kansas City, MO Police Board of Commissioners Office of Community Complaints.

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### **Laura Drescher, P.E.**

Laura offers a broad range of professional solid waste consulting services including master planning and solid waste/recycling collection, processing and disposal procurement, and operational review for local governments. She is also a Professional Engineer and has extensive experience in the permitting, design, and construction of solid waste facilities. As an Envision Sustainability Professional (ENV SP), she supports the integration of sustainability into communities and organizations long-range planning and infrastructure development. Laura has served in multiple previous leadership roles for the Missouri Chapter of the Solid Waste Association of North America and the Missouri Waste Control Coalition and is Project Manager, Section Manager, and Technical Service Leader for Burns & McDonnell.

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## SPEAKERS/MODERATORS

### **Mike Duvall**

Mike has an impressive career in the environmental/waste management profession. He began with a decade as a field inspector for MDNR/DEQ covering St. Louis area and Northeast Missouri region. He conducted inspections of landfills and numerous systems inherent in proper waste management including leachate collection, liners (composite and synthetic), landfill gas collection, methane treatment, and the first-round compliance inspection of Subtitle D certified sanitary landfills. Mike then served a decade as Director of Environmental Services with St. Charles Co. where he again worked with waste control by regulating solid waste hauling and transfer stations and managed the design, construction, and operation of public recycling, household hazardous waste and E-SCRAP collection centers. Mike then worked with Waste Management and BFI/Republic for a decade managing landfills and permitting of new facilities and expansions of existing facilities. He also worked in Hazardous Waste/Remediation/Emergency Response Contracting where he dealt with decontamination work for transport systems (rail, barge, and trucks), high hazard chemical transfer, PCB decontamination, and a variety of spill cleanups. He is a past president of MWCC. [duvall.mike@hotmail.com](mailto:duvall.mike@hotmail.com)

### **Joann Dyson, Ph.D.**

Joann is an Environmental Specialist with GHD, based in Durham, North Carolina. In addition to a Bachelor of Science degree and a Ph.D. in physics, she has over 20 years of experience working on LNAPL-contaminated sites. As a member of GHD's North American LNAPL group, she provides technical support on LNAPL projects assisting with needs such as LNAPL conceptual site model (LCSM) development, high-resolution site characterization, LNAPL plume stability assessments, natural source zone depletion (NSZD) assessments, LNAPL recoverability studies, LNAPL transmissivity testing, etc. Joann has been involved in six ITRC teams since 2016 including LNAPL Update, Advanced Site Characterization Tools, Application of Guidance to Hydrocarbon Sites, and Passive Sampling Technology. [joann.dyson@ghd.com](mailto:joann.dyson@ghd.com)

### **Eric Emmett, P.E.**

Eric is a Senior Director and Senior Engineer at Environmental Operations, Inc. (EOI) with over 23 years of professional experience in industry, consulting, and regulatory compliance. He has helped clients with complying with applicable regulations associated with the Clean Air Act, Clean Water Act; storm water and NPDES permitting; SPCC plan development; solid and hazardous waste management under RCRA; TSCA registration; international regulations and registration; and EPCRA reporting. Eric specializes in developing and implementing compliance programs for industry that are both regulatory compliant and efficient in implementation. He is a registered professional engineer in over 16 states. [erice@environmentalops.com](mailto:erice@environmentalops.com)

### **Neal Farrar**

Neal is a geologist with over 35 years of experience and is registered in the States of Missouri, Arkansas and Illinois. He has managed environmental investigations and remedial actions at sites impacted with metals, volatile organics and petroleum. Mr. Farrar has led and participated in Emergency Response Activities for public and private clients. Neal has managed the installation of Ground Source Heat Pump systems for commercial and residential clients. He manages the drilling operations at Sunbelt Environmental Services including the installation of monitoring wells, water wells, and ground source geothermal. Mr. Farrar also manages the installation of steel piles for Geotechnical Investigations of utility scale solar farms. Mr. Farrar has a Bachelor of Science in Geology from Southeast Missouri State University and has completed graduate coursework in hydrogeology and contaminant hydrogeology at Emporia State University. [nfarrar@sunbelternv.com](mailto:nfarrar@sunbelternv.com)

### **David Forseth**

David is a Senior Scientist with Geotechnology, LLC and has been in the environmental field since 2013 working on due diligence projects, underground storage tanks, brownfields and various other environmental consulting projects in multiple states. [dforseth@geotechnology.com](mailto:dforseth@geotechnology.com)

### **Tom Fox**

Tom has an M.S. in Geology from Michigan State University. He was a petroleum geologist with Atlantic Richfield (ARCO) for 4 years, and then worked as an environmental consultant for 20 years, mainly in the western U.S. Tom joined the Colorado Division of Oil & Public Safety in 2007 as an Environmental Protection Specialist. He has presented on various petroleum topics at national conferences and has been active in ITRC since 2015, including internationally. [Tom.fox@state.co.us](mailto:Tom.fox@state.co.us)

### **Josh Gabehart**

Josh has over 15 years of professional experience in project management, personnel management, stormwater design and construction, regulatory agency permitting, landfill design, construction operations, gas collection and control systems, and strategic planning. His past experience has been very broad in dealing with multiple public and private entities on large and small projects and ventures. Currently he serves as the Client Team Leader and Project Manager at Foth Infrastructure and Environment for a number of municipal clients in the Midwest for solid waste and stormwater related efforts. [josh@gabehart@foth.com](mailto:josh@gabehart@foth.com)



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## SPEAKERS/MODERATORS

### **Ron Geater**

Ron joined Motz Enterprises, Inc. in 2016 as the Regional Manager for the Midwest. He covers a 9 state territory promoting the use of permanent vegetated hard armor mats. He spends his time doing presentations with civil engineers, working closely with DOT's, and going to job sites to provide technical assistance for installs. Ron's career in the erosion control industry began working with American Excelsior Company for 8 years. The experience he gained from selling erosion control blankets provided him with the insight of specification work. He also spent time educating municipalities, transportation departments, and environmental agencies. Ron received his bachelor's degree from the University of Iowa in 1991. He also earned a full ride scholarship to play football. After his senior year he was named First Team All-Big Ten. In 1992 he was drafted in the 7th round by the Denver Broncos. ron@flexamat.com

### **Marat Goldenberg, P.E.**

Marat is the Midwest representative for CETCO. Marat is a licensed Professional Engineer with over 10 years of experience in the environmental remediation industry. Prior to this role, Marat worked as a Senior Environmental Engineer consultant on remediation projects and has extensive experience with evaluating remedial alternatives, design, and construction oversight. Additionally, Marat is a certified wastewater treatment plant operator in Illinois with extensive experience in operating and maintaining wastewater treatment system at industrial sites. marat@vadosert.com

### **Thomas R. Gredell, P.E.**

Tom has a B.S. and M.S. degree in Civil Engineering from MS&T and is a registered Professional Engineer in Missouri and Kansas. He has over 40 years regulatory and consulting experience in the areas of solid waste, hazardous waste, wastewater treatment and general civil engineering. Tom began his career at MDNR gaining an understanding of state and federal environmental laws, rules and regulatory processes. He has been an environmental consultant for over 30 years, and started GREDELL Engineering Resources, Inc. in January 2001. He enjoys working on challenging and unique projects involving: CCR, solid and hazardous wastes; landfill and transfer station permitting; groundwater monitoring; wastewater treatment; stormwater management; and large grading projects. He is a past president of MWCC. tomg@ger-inc.biz

### **John Hermann**

John is the North Central Region Director for Watershed Geo. He is responsible for managing the firm's civil and environmental projects. He has actively worked on innovative solutions for multi-disciplinary projects within the heavy infrastructure space since 2008. He has successfully worked in the areas of sales, engineering and construction of these systems with owners, municipalities, engineers, contractors and government agencies in the residential, industrial, commercial, federal, environmental and energy markets. John earned a B.S. in Engineering Management from Missouri S&T and is a member of ASCE, APWA and the Engineers Club of St. Louis. jhermann@watershedgeo.com

### **Jorge Hernandez**

Jorge is a graduated Civil Engineer from Purdue University who has been in business development and sales for nine years. He is in Technical Business Development for Solmax. He is passionate about working with sustainable solutions. jhernandez@solmax.com

### **Max Hoffman, R.G.**

Max has been employed at Environmental Works Inc., for over 6 years working as an environmental geologist, AutoCAD/GIS technician, and field team lead. Over the years Max has also become a self-taught GPS surveyor and 3D modeling analyst. He graduated from Ozarks Technical Community College with an Associates in Drafting & Design Technology and Missouri State University with a Bachelors in Geology followed by a Masters in Geospatial Information Science. Outside of work Max enjoys spending time with his daughter and wife exploring the outdoors, venturing off into mountainous regions, gardening, and tackling wood working projects at home. mhoffman@environmentalworks.com

### **Scott Huckstep**

Scott is a Section Chief with the MDNR. He has a Bachelor of Science degree in Biological Sciences from Quincy University (IL) and a Master's of Science degree in Fisheries & Wildlife Science from the University of Missouri-Columbia. Scott has been with the MDNR since 1997 and is currently the Section Chief of the Brownfields/Voluntary Cleanup Program. scott.huckstep@dnr.mo.gov

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## SPEAKERS/MODERATORS

### **Philip Hulse**

Since founding Green Street in 2008, Phil has taken a hands-on approach to lead the team and clients alike. He remains an active force in leading development and construction management, coordinating lender and investor relations, overseeing property management and selecting assets for acquisition. For more than 30 years, Phil has been a leading visionary in building up St. Louis' urban core, and paving the way for business activity and commerce in our area. After starting his career as a broker and working his way up through the real estate field, Phil co-founded two successful real estate firms, Summit Development Corporation and Gateway Commercial. During his years of experience, Phil has raised more than \$75 million in private equity, and has leveraged more than \$250 million in private and public financing to support local real estate projects. As he works to leave a lasting legacy in St. Louis, he started Green Street to challenge the way the real estate industry works. Phil's commitment to sustainable development, redeveloping underutilized property, and building strong businesses is shared across all of Green Street, who follows his lead for transforming locations that have been overlooked or underestimated into thriving centers for business in St. Louis.  
phil@greenstreetstl.com

### **Paul Jackson**

Paul is Pace's national Program Manager for Compliance Monitoring and Emerging Contaminants, which includes PFAS and the SDWA Unregulated Contaminant Monitoring Rule (UCMR). He has been with Pace® since 2009. In this role he provides technical support, contract development and program management for water and wastewater utilities, solid waste facilities, environmental consultants, and stormwater monitoring programs. Paul is a U.S Army veteran where he got his start in laboratory testing and has over forty years of experience in the environmental testing industry. Paul attended Towson University for Business and Chemistry.  
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### **Lindsay James. R.G.**

Lindsay is a Senior Project Manager and licensed professional geologist at Blackstone Environmental, Inc. She has broad experience providing environmental consulting services and focuses primarily on solid waste, hydrogeological evaluation, groundwater compliance, and wetland delineation and management services. She is currently the Chairman of the City of Overland Park Environmental Advisory Council, and serves on the MARC Solid Waste Grant Review Committee and previously the Board of Directors for the Missouri Waste Control Coalition. She has a bachelor's and master's degree in Geoscience from the University of Iowa.  
james@blackstone-env.com

### **Marilyn Jones**

Marilyn is an environmental professional at SCS Engineers with over five years of experience. Her focus has been in air permitting, compliance and reporting under NSPS and NESHAP, AG RNG, groundwater monitoring, and landfill gas compliance and design. She has supported numerous private and public clients throughout the Midwest. Marilyn holds a B.S. in Atmospheric Science from the University of Missouri-Columbia and a M.S. in Atmospheric Chemistry from Georgia Institute of Technology.  
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### **Gil Kauffmann**

Gil is employed with Heritage Environmental Services, Inc. Prior to that, he worked for several different companies typically covering Missouri and Southern Illinois. He has a degree in Biology with a background in Chemistry from the University of Missouri – St Louis. He has 27 years of experience in the field of hazardous waste clean up and disposal. Gil started out as a field analyst performing lab packs, drum disposal, tank cleaning, and small remediation projects. The past 20 years Gil has been in sales/marketing positions. He is past president of MWCC.  
gilkauffmann@gmail.com

### **Jeff King**

Jeff is employed by American Excelsior Company - Earth Science Division - Arlington, TX, as a Territory Manager since 2008. He has been involved in the planning and execution of numerous construction projects through the years. These projects include Pipeline Right of Way, Frack Tank Builds, Oil Rig Drill Pads, Residential, Commercial, Highway, and Linear Utility projects. Mr. King is CPESC Certified. Jeff is currently the President of the South Central Chapter of the International Erosion Control Association.  
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### **Andrew Kirkman**

Andrew is a hydrocarbon and hydrogeology subject matter expert for BP. His experience includes LNAPL at hydrocarbon sites and DNAPL related to coal tar and creosote. Andrew's career started doing field work including groundwater sampling, well installation, and hydrocarbon field investigations at railroad, pipeline, manufactured gas plant, and tie treatment plant sites. Continual technical development resulted in Andrew leading the AECOM's LNAPL technical practice, leading to the development of the ASTM LNAPL Transmissivity standard prior to joining BP. Andrew has publications in peer reviewed journals and technical guidance documents including a recent one on NAPL drawdown in fractured settings published in Groundwater Monitoring and Remediation in 2020.  
andrew.kirkman@bp.com

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## SPEAKERS/MODERATORS

### **Bobbilynne Koepke, R.G.**

Bobbilynne is a Missouri native with 17 years of experience in the environmental field. She has been with Environmental Works, Inc. for the past 13 years and is a licensed geologist in Missouri and Arkansas. She graduated from Missouri State University with her bachelor's degree in 2003 and obtained her master's degree from the University of New Orleans in 2006. Her areas of expertise include investigation and remediation of petroleum, chlorinated solvent, and lead impacted sites; vapor intrusion mitigation; ecological assessments; and karst environments.  
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### **Ken Koon**

Ken began with the MDNR in 1999 as a Remediation Project Manager in the Tanks Section. He then worked in the department's Brownfields Voluntary Cleanup Program (BVCP). He became the Tanks Section Chief in 2005. He received his B.S. and M.S. in Biology from Pittsburg State University. Ken is former Vice-Chair of the UST Task Force for the Association of State and Territorial Solid Waste Management Officials (ASTSWMO) and has participated on the National Tanks Conference Planning Team. He also participates on the Advisory Board for the Petroleum Storage Tank Insurance Fund and is President-Elect and conference chair of the MWCC.  
ken.koon@dnr.mo.gov

### **Vince Kowalick**

Vince is an environmental scientist with several years experience completing HRSC sites. He has numerous years of experience in 3D modeling and leading the 3D visualization team for Eagle Synergistic. Vince currently leads Technical Sales but also specializes in creating 3D visual models of contamination plumes, subsurface lithology and permeability below ground surface. Through his studies, he focused on Geographic Information Systems, water resources and sustainability.  
vkowalick@eaglesynergistic.com

### **Ashley Krug**

Ashley is the City of Springfield's Market Development Coordinator for the Sustainability Division of the Department of Environmental Services. Ashley is responsible for integrating strategies towards waste reduction and diversion from the landfill, community outreach, and related waste reduction and sustainability programming and operations to advance a more sustainable future for Springfield. Ashley earned her Bachelor's degree in Environmental Science from Drury University and her Masters in City Planning from Boston University. Ashley lives in Springfield MO with her husband, tiny toddler tornado and 2 dogs. In her spare time, Ashley enjoys reading, gardening and generally being "indoorsy."  
akrug@springfieldmo.gov

### **Jeff Kuhn**

Jeff Kuhn has 35 years of experience designing and applying innovative remediation approaches at petroleum and hazardous substance release sites, using science, best management practices, and problem-solving skills to reach equitable and cost-effective cleanup strategies. He has led and supported numerous collaborative workgroups and teamwork efforts with state, EPA, and industry representatives promoting innovative remediation approaches and long-term solutions for environmentally contaminated sites. He has given numerous presentations on contaminant topics at national and international conferences. During his tenure with the State of Montana he implemented and managed the Leaking Underground Storage Tank Program, the Brownfields Program, and the DSMOA and FUDS programs responsible for Department of Defense (DOD) Sites located within the state. He has worked in a variety of roles at ITRC; as an active team member, a technical workshop trainer, an ITRC Board Member, and most recently as the Program Advisor (PA) for ITRC's Effective Use of Guidance Documents for Hydrocarbon Sites Team ("Hydrocarbon Team")  
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### **Kyle Kukuk**

Kyle is a senior project manager for Blackstone Environmental with 10+ years experience as a solid waste engineer in Missouri.  
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### **Larry Lehman**

Larry is the Program Director of the MDNR Land Reclamation Program and Staff Director of the Missouri Mining Commission. He also serves as the state's delegate with the Interstate Mining Compact Commission. He has been with the department since 1993 and has served in a variety of positions in the department's Solid Waste Management Program Compliance/Enforcement Section; Environmental Services Program Environmental Emergency Response and Water Quality Monitoring Sections; and the Hazardous Waste Program Compliance/Enforcement Section. Larry graduated with a Bachelor's of Science degree in Fisheries and Wildlife from the University of Missouri-Columbia.  
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## SPEAKERS/MODERATORS

### **Sonja McDanel**

Sonja is a new addition to MDNR and just celebrated her 1st anniversary. In that time she has moved from being an Environmental Analyst for the Long Term Stewardship section to become the Unit Chief of the same section. She came to MDNR with an expansive background which utilized her Bachelors of Science in Geology for the United States Geologic Survey as a Hydrological Technician. She has also passed the Kansas Board to become an Intern Geologist, and worked in the oilfields as a Wellsite Geologist. As the Unit Chief of LTS, she is always looking for new ways to expand the team's prospect, create awareness among other branches of DNR and public about the necessity of a LTS Unit. [sonya.mcdanel@dnr.mo.gov](mailto:sonya.mcdanel@dnr.mo.gov)

### **Brenna McDonald. R.G.**

Brenna is a Missouri Registered Geologist with a B.S. in Geology. She has worked in the environmental field for approximately 21 years and currently works for the Missouri Geological Survey as Chief of the Subsurface Investigations and Waste Management Unit. [brenna.mcdonald@dnr.mo.gov](mailto:brenna.mcdonald@dnr.mo.gov)

### **Arthur Mohr**

Arthur is the founder and CEO of Sniffer Robotics – a leading technology that enables services company focused on emissions management and related services. Arthur has senior level sales, development, and operational leadership experience in the waste, solar photovoltaic, and automotive industries. He has a B.A. from Michigan State University. [amohr@snifferrobotics.com](mailto:amohr@snifferrobotics.com)

### **Ryan Moore**

Ryan is Senior Technical Manager for Regensis. He has more than 19 years of experience as an environmental project manager and laboratory account executive relating to multimedia contamination sites throughout the U.S. His experience focused on in situ groundwater and soil treatment, site investigations, corrective action evaluations, operation & maintenance of remediation systems, large soil removal remedial projects, vapor intrusion assessments, and environmental laboratory operations such as QA/QC evaluations, data interpretations, and business development. He has also presented at multiple conferences on in-situ remediation including events hosted by Battelle, AIPG, and other environmental associations. Ryan holds a B.S. in Environmental Studies from Manchester College, North Manchester, IN. [rmoores@regensis.com](mailto:rmoores@regensis.com)

### **Cynthia Mormile**

Cynthia joined MSW Consultants after spending over 20 years working in the solid waste industry for public sector and non-profit organizations. Prior to working with MSW Consultants, she served as the Solid Waste Utility Manager for the City of Columbia (Missouri), where she managed the operational and financial aspects of residential and commercial trash and recoverables collection, a Class I bioreactor landfill, a compost facility and material recovery facility (MRF). Her expertise encompasses all aspects of a full-service collection, disposal, and recovery solid waste utility, including planning and budgeting; personnel management; procurement/contracts; capital projects; rolling fleet and routing; heavy equipment; subtitle D and bioreactor landfill; waste analysis, minimization, and sustainability programs; facility operation and regulatory compliance. She has assisted numerous clients in identifying and addressing operational inefficiencies and program challenges, managing various operations optimization, cost of service and rate studies. She also supports the firm in material characterization work. She has served on multiple industry association boards, presented at numerous state and national conferences and is currently an active member of SWANA (Solid Waste Association of North America) and MORA (Missouri Recycling Association), having served on the board and committees for all three as well as APWA (American Public Works Association) during her career. [cmormile@mswconsultants.com](mailto:cmormile@mswconsultants.com)

### **Jeff Phillips**

Jeff is a Project Manager with SCS Engineers and has more than 20 years of experience overseeing solid waste management projects for municipalities, solid waste agencies, and both private and public entities. Jeff manages and performs project work primarily related to Sustainable Materials Management (SMM) such as program, services, and facility assessments, community engagement and outreach, training, and strategic planning. Specific to training, Jeff develops and presents professional training events for more than 100 solid waste operators and agency board members across the Midwest each year. [jdphillips@scsengineers.com](mailto:jdphillips@scsengineers.com)

### **Craig Ragland**

Craig Ragland is currently a National Account Manager with Clean Earth, Inc. based out of St Louis MO. He has over 30 years experience as a Sales and Marketing Professional with RCRA, Recycling and Industrial Services emphasis. He has also worked for Veolia, Univar and SET Environmental Services in those sales and marketing roles. [craig839@yahoo.com](mailto:craig839@yahoo.com)



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## SPEAKERS/MODERATORS

### **Karen T. Rieken, P.E.**

Karen has her Bachelor of Science in Civil Engineering from Washington University/University of Missouri-St. Louis and is a Professional Engineer in Missouri, Illinois, and Kansas. She is the Site Investigation Group Manager in Terracon's St. Louis, Missouri Office. She has over 25 years of experience in the environmental field as well as experience in both geotechnical and construction consulting. She has managed projects in the Missouri LUST program, Brownfields, and Voluntary Cleanup, in the Illinois LUST and Site Remediation Program, the Kansas LUST and Voluntary Cleanup Programs, as well as EPA Brownfield Assessment Grants.  
Karen.rieken@terracon.com

### **Dana Ripper**

Dana is a wildlife ecologist who focuses on conservation via ecosystem health. She has an MS in ecology from Arkansas State University (2002) and worked on wildlife research projects across the U.S. before making Missouri home in 2008. In 2010, Dana co-founded the Missouri River Bird Observatory (MRBO), a nonprofit organization dedicated to conservation via science, education, and advocacy. Since plastic production and waste mismanagement pose significant threats to climate stability, biotic and abiotic natural resources, and human health and quality of life, one of Dana's major emphases in her conservation work is systemic reduction in single-use plastics. MRBO is an affiliate organization of Break Free From Plastic and Beyond Plastics. Dana is a certified presenter with the Beyond Plastics Speakers Bureau.  
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### **Rickie Roberts, P.E.**

Rickie is a Senior Civil Engineer at GREDELL Engineering Resources, Inc. with 50 years of diverse experience in civil engineering and project management, including solid waste facility design and management for a variety of private clients and federal, state and local government agencies. He worked for MDNR for 20 years as chief landfill permits engineer, where he developed guidance for environmental protection, regulatory standards, specifications, and design of solid waste and hazardous waste facilities. Rickie has a Bachelor of Science in Agricultural Engineering and completed Graduate Studies in Environmental Engineering. He has vast experience with landfill design and operation, detail design guidance related to hydrology and hydraulics, site evaluations, stormwater retention and detention, hydraulic modeling and permitting. Rickie has been instrumental in working with resource agencies and in-house permitting experts in designing and implementing effective solutions for waste assets management and disposal.  
rickr@ger-inc.biz

### **Jacob Rohter**

Jacob joined the MDNR in 2013, where he now works as an Outreach Coordinator for the Brownfields Voluntary Cleanup Program. He helps Missouri communities redevelop underutilized or potentially contaminated properties by connecting needs to available resources. Jacob moved to Rolla in 2011 after receiving a degree in Environmental Science from Washington University in St. Louis. When not on the job, you might find him tinkering in his workshop, paddling on the river, or daydreaming of buying a dusty old warehouse full of ancient bicycles.  
jacob.rohter@dnr.mo.gov

### **Jacqueline Rosko**

Jackie is currently a Senior Industrial Account Executive at Waste Management. She has 25+ years of working in the solid waste industry and has a Bachelor of Science degree from the University of Missouri-St. Louis. Her territory covers the WM landfills and WM transfer stations in Southern IL and Eastern MO.  
jrosko@wm.com

### **Brian Sperrazza, P.E., P.G.**

Brian is a professional engineer and professional geologist at Foth Infrastructure and Environment. He has worked in the environmental consulting industry for over 20 years, including municipal solid waste landfills, construction and demolition landfills, ash monofills, CCR, mine tailings and waste rock facilities in Minnesota, Iowa, Wisconsin, Illinois, Michigan, and Arizona. Brian's key areas of expertise in landfills are Environmental Compliance, Hydrogeologic Engineering, and Geotechnical Engineering. Brian's landfill team manages technical project elements including; routine reporting and correspondence with agency solid waste permitting engineers and hydrogeologists; field investigations of groundwater, surface water, storm water, sediment, and soil; conceptual site model development; database management and data validation; predictive empirical and numerical modeling; long-term monitoring network statistical analysis for optimization; and evaluation of potential impacts from legacy unlined closed MSW landfills.  
Brian.sperrazza@foth.com

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## SPEAKERS/MODERATORS

### **Richard Spiese**

Richard has a B.S. from The Pennsylvania State University in Geological Sciences. He has been with the Vermont Department of Environmental Conservation, Waste Management Division since 1987. He has taken numerous Master's level environmental engineering courses at the University of Vermont. His job duties include overseeing the cleanup of hazardous waste sites in the Sites Management Section, responding to spills on the Waste Management Division's Spill Team, and responding to hazardous materials emergencies as part of the Public Safety Division's Vermont Hazardous Materials Response Team. He has been in the EPA Region I Regional Response Team as the governor's designee since 1992 and on the State Emergency Response Commission from 1994 to 2015. He has been on the ASTSWMO Leaking Underground Storage Tank (LUST) Task Force 1994 to 2010, and was the co-chair from 1996-2010. He rejoined this Task Force in 2014 and in 2016 stepped down from this position. He joined the Interstate Technology Regulatory Commission Board in 2016 as the State At-Large Member. In 2017, he was asked to become the Team Leader Liaison to the Board, which he accepted. At the 2018 Annual Meeting he was elected to be co-chair of ITRC for 3 years, a position he currently has. He is also the writing section lead for aqueous film forming foam (AFFF) for the ITRC per and polyfluoroalkyl substances (PFAS) Technical Document Team. In February of 2016 he began the investigation into PFAS contamination in Bennington Vermont, which continues today. In 2020 he became the Team Leader at ITRC for the Hydrocarbons Training Team. This training began in 2022.  
richard.spiese@vermont.gov

### **Brady Stewart**

Brady has 16 years of experience in the solid waste industry, between consulting and working for the industry. He is currently support for landfill managers, transfer stations, and hauling companies in Missouri, New Mexico, Illinois, and Iowa. He is employed with Waste Connections.  
Brady.stewart@wasteconnections.com

### **Noah Streich**

Noah is the Great Lakes District Manager for Land Science, a division of REGENESIS, Inc., and is based out of Milwaukee, WI. Before joining Land Science, he worked for an architectural and engineering firm focused on wastewater infrastructure projects, including wastewater treatment plant upgrades/rehabilitation, sanitary sewer, and stormwater design. As a student intern, Noah gained valuable experience at Terracon, serving as an intern in their materials testing/environmental consulting office in Milwaukee. In addition, he interned with the Wisconsin Department of Transportation. Noah graduated from the University of Wisconsin- Milwaukee with a degree in Civil Engineering with an emphasis in Structural Engineering. One of his college highlights was a research position focused on developing new cementitious materials to support novel new construction methods using cellular-lightweight concrete masonry blocks. In Noah's free time he enjoys spending time outdoors, golfing and boating on Wisconsin's inland lakes.  
nstreich@landsciencetech.com

### **Shannon Suggs**

Shannon has an BS in Environmental Geoscience, BS in Geology and MS in Geology. She has worked in the environmental remediation field for 15 years and currently works for the North Dakota Department of Environmental Quality. Her current job duties include risk assessment and regulatory oversight of contaminated sites with a focus on groundwater impacts.  
ssuggs@nd.gov

### **Shane Tabor**

As the Project Account Manager at EPRO, Shane specializes in managing projects requiring vapor intrusion mitigation systems (VIMS). After starting his career in environmental compliance, Shane now enjoys bridging the gap between environmental consultants who design VIMS and the construction teams responsible for implementing them in the field. His experience with projects across the country and stakeholders at each level of the real estate development process provide him a holistic view of the design process. Shane currently works to ensure developments utilizing EPRO's Geo-Seal barrier and venting systems are successfully implemented into VIMS from the design phase to construction. He is passionate about staying up to date on the latest VI regulatory trends and mitigation products and practices. Outside of work, Shane loves spending time outdoors, cooking, and traveling with his wife and daughter.  
shane@eproinc.com



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## SPEAKERS/MODERATORS

### **Renee Trenshaw, P.E.**

Renee is a licensed professional engineer who has happily been working with clients and solid waste management facilities for over 12 years. She attended the Missouri University of Science and Technology where she earned a B.S. degree in Civil Engineering. Since she joined SCS Engineers in 2011, she's had the privilege to work for long-standing clients in a range of projects including compliance support and permitting, design and construction, facility planning, and storm water management. She loves helping clients with planning and finding common sense ways to comply with regulations.  
rtrenshaw@scsengineers.com

### **Laura Trozzolo**

Laura leads TRC's **Risk-Based Modeling / Risk Assessment Practice** for TRC. In this role, Laura provides technical and regulatory oversight for a multitude of TRC projects and leads the company's Risk Assessment Center of Research and Expertise (CORE) team, while supporting professional development of TRC's risk assessment staff. Laura has been with TRC for 9 years as a senior risk assessor in TRC's Fort Collins, Colorado office. She has 27 years of experience in human health risk assessment and risk management services (project management, data management, and regulatory compliance) for a multitude of sites, including US military installments, active/former refineries, and rail yards. She also serves as a technical specialist on fate and transport issues for TRC, including vapor intrusion, soil migration to groundwater.  
ltrozzolo@trccompanies.com

### **Ben Tucker**

Ben was the landfill manager of Champ Landfill in Missouri. Since 2015 Ben has progressed through the Waste Connections family quickly, beginning at and running three of the four largest landfills that Waste Connections owns in the Midwest. Ben's approach to landfill aesthetics and operations are unmatched, and he is still one of the younger landfill managers in the company. Ben has now accepted the role of District Manager for the St. Louis Hauling Company, still in the Waste Connections family but in another line of business. It should come as no surprise that morale, productivity, customer service, and financials have already improved.  
benjamin.tucker@wasteconnections.com

### **Rebecca Warnken**

Rebecca joined Burns & McDonnell as a staff environmental engineer in 2018. She attended Kansas State University before spending time as a Drilling & Measurements Engineer in Malaysia and Louisiana. She then began working in the consulting industry as an environmental engineer in 2012. Rebecca currently provides professional engineering services on solid waste projects, remediation sites, oil and gas industry sites and construction sites where stormwater design is required. She is a member of the MWCC advisory board.  
rcwarnken@burnsmcd.com

### **Jeremy Webb**

Jeremy-Louis works for the Tanks Section for the MDNR. He is originally from Florstadt, Germany but has been living in America for several years. He graduated from the University of Lynchburg with a degree in Environmental Science in 2020. He then attended the University of Missouri-Columbia, graduating with a Masters of Geosciences in 2022. He has been with MDNR since June 2022.  
jeremy.webb@dnr.mo.gov

### **Brian C. Weis, P.E.**

Brian is a civil engineer and project manager in the Environmental Services group at Burns & McDonnell with over 23 years of industry experience. His early experience as a resident engineer on heavy construction projects provided him the background to evaluate practical solutions. Brian has provided clients comprehensive landfill design, solid waste, and permitting services for over 11 years. He has led major and minor permit modifications through MDNR and other state agencies, cell and final cover designs, and CQA activities and reporting. Brian has developed landfill master plans & performed solid waste studies and solid waste program evaluations.  
bweis@burnsmcd.com

### **Anastasia Welch, P.E.**

Anastasia is a Solid Waste Services Practice Area Leader with SCS Engineers in Overland Park, Kansas. She has over 21 years of experience focused almost entirely on the solid waste industry. She completes work for both private and municipally owned landfill facilities, including such things as groundwater monitoring and evaluation, landfill design and permitting, CQA oversight, air compliance issues, volume calculations, and alternative cover design. She holds a B.S. in Civil and Environmental Engineering from the University of Missouri-Columbia. She is a Past President of the MWCC and a member of the Advisory Board.  
awelch@scsengineers.com

### **Rebecca Whitaker**

Rebecca is Director of District Service Management (DSM), and a graduate of the University of Central Missouri, where she received a Bachelors of Business Administration, Masters of Science in College Student Personnel Administration, Masters in Business Administration with dual focus on Marketing and Healthcare Administration and two Graduate Certificates in Academic Advising and Diversity. Throughout her career Rebecca has demonstrated skills in Operation Management, Strategic Planning, Advising, Database Creation, Administration, Finance, Budget Analysis, Google Analytics and Leadership. Rebecca is presently the Director for both the West Central Solid Waste Management District F and the Lake of the Ozarks Solid Waste Management District T. She currently serves as the District F Solid Waste Advisory Board alternate and is on the MWCC advisory board.  
moswmd.f@gmail.com

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## SPEAKERS/MODERATORS

### **Paul Wilkerson**

Paul is a project manager and environmental consultant with Sunbelt Environmental Services in Springfield, Missouri. Paul received his Bachelor of Science in Geology with a Minor in Geospatial Information Systems in 2019. Prior to returning to college as a non-traditional student, Paul worked in the construction field and worked six years on an air-rotary drill rig installing drinking water

wells across southern Missouri. While working at Sunbelt, Paul has taken on complex and varied project across the state including UST closures, dioxin cleanups, soil and groundwater remediation, and emergency response. When not in the office he can be found reading a book, on a hike, or enjoying a good craft brewery.  
pwilkerson@sunbeltenv.com



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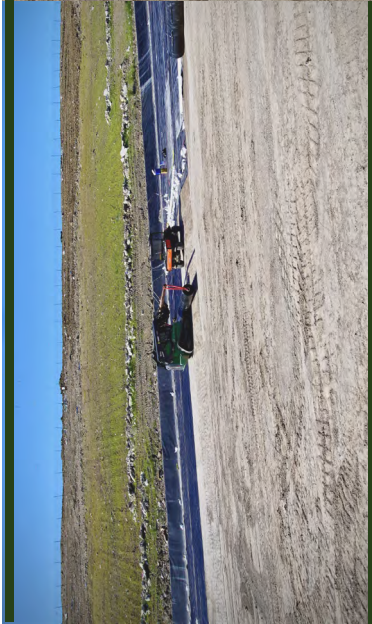
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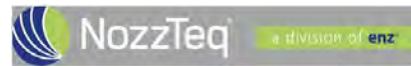
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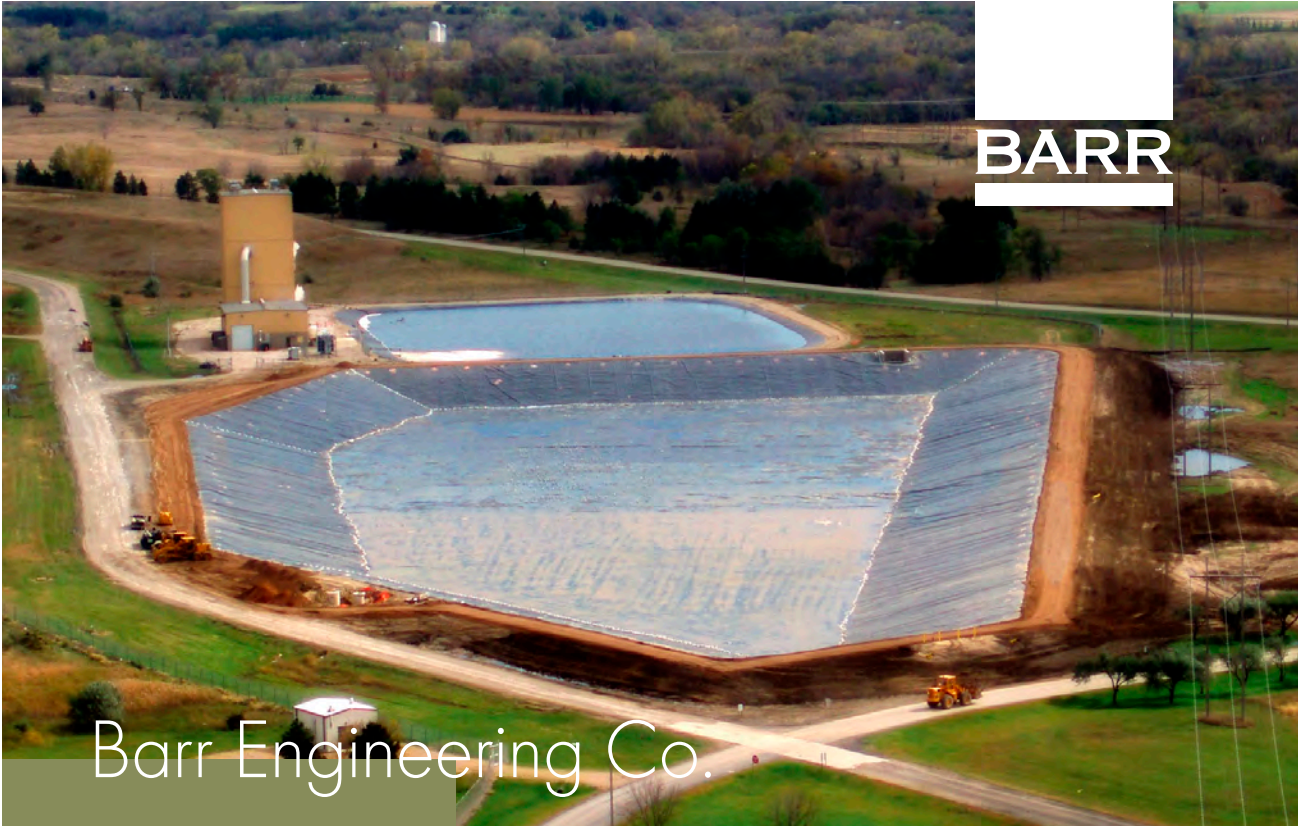
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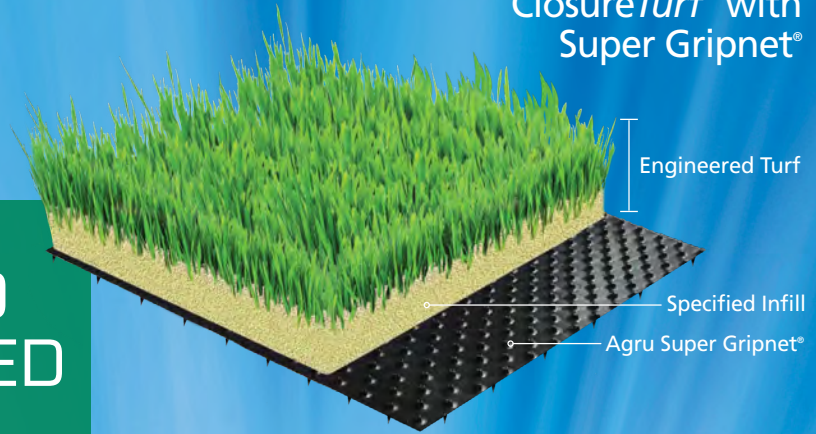


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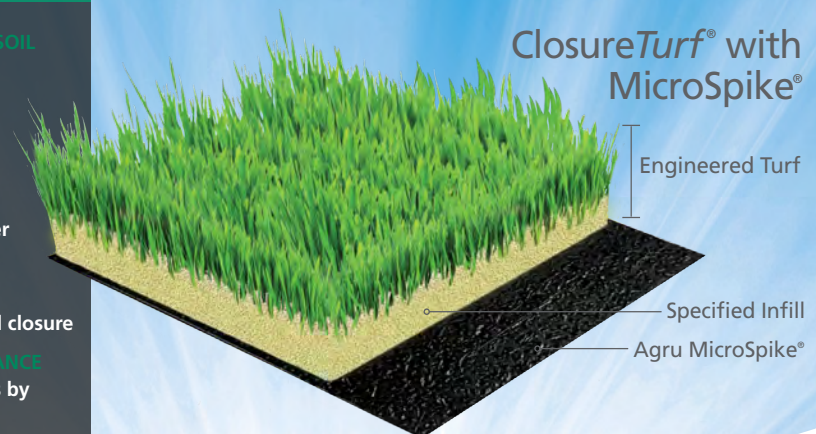
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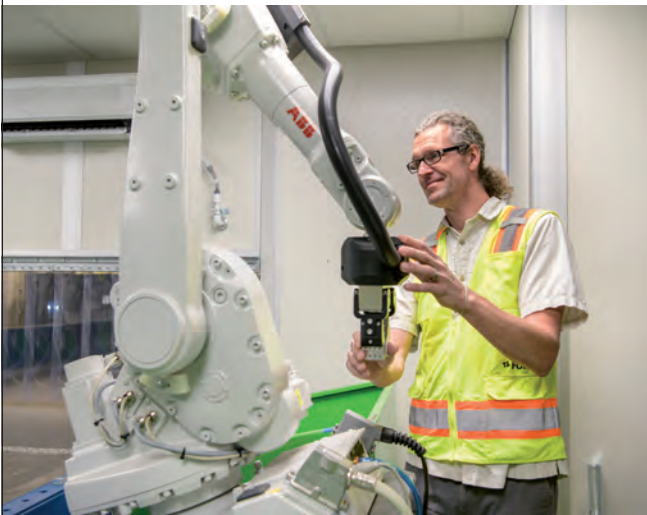
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<p><b>FTN Associates, Ltd.</b> 3 Innwood Circle, Suite 220 Little Rock AR 72211 (501) 225-7779</p>	5 years	<p><b>MDNR/Brownfields Voluntary Cleanup Program</b> P.O. Box 176 Jefferson City MO 65102 (573) 522-8139</p>	15 years
<p><b>GFL</b> 1150 East 700 Avenue Arcadia KS 66711 (620) 230-0976</p>	3 years	<p><b>MDNR Tanks Section</b> P.O. Box 176 Jefferson City MO 651012 (573) 526-0971</p>	6 years
<p><b>Global Containment Solutions</b> 405 E. Forest Street, Suite 110 Oconomowoc WI 53066 (614) 594-1309</p>	5 years	<p><b>MDNR Waste Management Program</b> P.O. Box 176 Jefferson City MO 65102 (573) 526-3905</p>	30 years
<p><b>GPRS</b> 5217 Monroe Street Toledo OH 43623 (949) 324-7791</p>	4 years	<p><b>Missouri Dept. of Health &amp; Senior Services</b> 930 Wildwood Jefferson City MO 65109 (573) 751-6102</p>	6 years
<p><b>GREDELL Engineering Resources</b> 1505 E. High Street Jefferson City MO 65101 (573) 659-9078</p>	20 years	<p><b>Missouri Geological Survey</b> P.O. Box 250 Rolla MO 65402 (573) 368-2143</p>	8 years
<p><b>GSI, a Babcock Power Company</b> 2401 Pewaukee Road Waukesha WI 53188 (262) 366-5570</p>	2 years	<p><b>Motz Enterprises, Inc.</b> 3153 Madison Road Cincinnati OH 45209 (815) 354-1129</p>	1 year
<p><b>Haz-Mat Response, Inc.</b> 1203C South Parker Olathe KS 66061 (913) 620-2249</p>	6 years	<p><b>Mustang Extreme Environmental</b> 5049 Edwards Ranch Road Fort Worth TX 76109 (410) 598-7771</p>	1 year

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## EXHIBITORS and SPONSORS

<b>PACE Analytical Services, Inc.</b> 9608 Loiret Blvd. Lenexa KS 66219 (913) 307-6958	21 years	<b>St. Louis County Public Health</b> 6121 N. Hanley Berkeley MO 63134 (314) 615-8936	12 years
<b>QED Environmental Systems Inc.</b> 2355 Bishop Circle West Dexter MI 48130 (785) 764-1674	14 years	<b>SWANA Missouri Chapter</b> c/o Scott Martin Burns & McDonnell 9400 Ward Parkway Kansas City MO 64114	11 years
<b>Reich Landfill Equipment</b> 8714 Kinzie Joe Way Manhattan KS 66502 (480) 703-1250	5 years	<b>Teklab, Inc.</b> 5445 Horseshoe Lake Road Collinsville IL 62234 (618) 344-1004	17 years
<b>Republic Services</b> 1701 N Missouri Hwy 291 Sugar Creek MO 64058 (816) 897-4515	13 years	<b>Terracon</b> 15620 W. 113th Street Lenexa KS 66219 (913) 998-7476	25 years
<b>RWI Enhanced Evaporation</b> 2245 Colex Drive Grand Junction CO 81505 (970) 245-7104	2 years	<b>Texas Molecular LP</b> 2525 Independence Parkway South Deer Park TX 77536 (817) 304-0423	11 years
<b>SCS Engineers</b> 8575 W. 110th Street, Suite 100 Overland Park KS 66210 (913) 681-0030	32 years	<b>Waste Connections</b> 2305 Creve Coeur Mill Road Maryland Heights MO 63043 (314) 575-1302	13 years
<b>Sniffer Robotics, LLC</b> 330 E. Liberty Street Ann Arbor MI 48104 (248) 835-0386	1 year	<b>Weaver Consultants Group</b> 6301 East Highway AB Columbia MO 65201 (573) 289-3379	14 years
<b>Solmax</b> 4019 Industry Drive Chattanooga TN 37416	16 years		
<b>SS Schaefer Plastics</b> 10301 Westlake Drive Charlotte NC 282773 (980) 346-4796	5 years		



# SCHOLARSHIPS

The Missouri Waste Control Coalition (MWCC) provides scholarships each year to college students at select educational institutions. Currently, MWCC provides two \$1,000 scholarships through five schools in Missouri. They are:

Lincoln University

Missouri University of Science & Technology

University of Missouri - Columbia

Missouri State University

Southeastern Missouri University

In addition to the monetary award, the recipients are invited to the upcoming annual environmental conference at Margaritaville Lake Resort in July. MWCC provides them with a free registration and hotel room. The scholarships are administered by the educational institutions and must be made to students who meet the following criteria: A Missouri resident, student in good standing with the University, and a student majoring in environmental studies. MWCC also awards free conference registrations and hotel rooms to two additional students from each educational institution. The recipients are also determined by the school.

MWCC is proud to have been providing scholarships to college students since 2009 as part of its mission to encourage environmental education. Below are comments from this year's scholarship recipients:

## **Kelton Back (MS&T)**

I am majoring in Environmental Engineering. For a career, I plan to be involved with natural resource management. I like doing practical work, where I can see the impact I am making on a community. Possible jobs to pursue include remediating contaminated soils and water sources, managing the health of national parks, or evaluating a construction project's impact on the local ecosystem and coming up with solutions to mitigate those impacts. Top employers I am looking at include the Missouri Department of Natural Resources and the EPA. I have been a member of Missouri S&T's Engineers Without Borders program for three years. Our project is to install a pipeline system that connects a majority of houses in our team's community to the two nearby river sources. The pipeline also includes a slow-sand-filter, a sedimentation tank, and a Mariotte bottle chlorination system to treat the water and make it potable. We are also planning a maintenance trip for a previous project in the community in which the team installed a rainwater catchment system on the community's school.

## **Bryce Batliner (MU)**

I am about to begin my senior year of Chemical Engineering education at Mizzou. As I delve deeper into my studies, I have developed a keen interest in areas of chemical engineering that directly impact the environment and address essential societal needs. Water treatment, waste management, and energy-related processes are particularly intriguing to me due to their potential to make a tangible difference in the world. I am excited to apply my skills and knowledge to contribute towards innovative solutions that address pressing challenges and promote sustainability. Post-graduation, my goal is to secure a position at a consulting firm or a similar organization. I aspire to apply my expertise and collaborate with like-minded professionals to devise effective strategies and technologies that tackle pressing issues. With a strong drive for making a positive impact, I am determined to leverage my chemical engineering education to contribute towards creating a better, greener future for our planet.

## **Jovita Desha (LU)**

I am a Sophomore at Lincoln University, and an undergraduate research assistant in the Water Resources Observatory. This award will help meet my needs, while I continue my education in Agricultural and Environmental Sciences at Lincoln University. I hope to work in the Environmental field once I am finished with my education. Thank you so much for your support.

## **Logan Harper (MSU)**

I am pursuing a bachelor's in civil engineering at Missouri State University. I have been an intern at Crawford, Murphy, and Tilly Inc. for the past three years and have worked on projects that have incorporated the construction, transportation, environmental, and water resource fields. I love sports, reading, movies, and building PCs. I have a strong passion for the Surface Transportation industry but have been opened to what the Environmental Field has to offer. My environmental experience consists of conducting quiet zone and noise pollution surveys for a couple of projects we have had at our firm.

# SCHOLARSHIPS

## **Amy Haslag (LU)**

I am an undergraduate student at Lincoln University studying Agriculture Science, emphasizing Natural Resource Management. My career goal is to work towards preserving and promoting native ecosystems. I have a special interest in grasslands and their relationship with carbon sequestration and aquifer recharge.

## **Lexi Hunsucker (MSU)**

I am a student at Missouri State University, studying Civil Engineering with a focus on Water and Wastewater. I got into this degree field because I know I wanted to help communities have access to clean water and reduction of waste. One of my goals is to work on creating a complete recycling water system. I am an avid plant collector with a fascination with pothos and carnivorous plants. I also enjoy MASH, the Addams Family and my dog, Driver. Thank you for this opportunity, I am excited to participate!

## **Rob McKnight (MU)**

I'm a junior attending the University of Missouri. I'm majoring in chemical engineering with an environmental emphasis, along with minors in engineering, sustainability and nuclear engineering. I'm open to many different paths in the environmental field, but carbon capture and repurposing waste especially interest me. I love most sports (go Cardinals!), lots of music, and hiking.

## **Donovan Moore (MU)**

I am a rising senior enrolled in an accelerated BS/MS in Environmental Engineering. My plan is to get minors in Sustainability and German as well. For hobbies, I like to hike, play pickleball and soccer, and lose miserably at Rocket League. During this summer I am working for Weaver Consultants Group as a Landfill Quality Assurance Intern and I hope to continue my research into fluid mechanics when the Fall term begins. My plans for after graduation are fairly up in the air so I am very grateful for opportunities such as this conference to allow me to explore potential ways for me to find my place in the field.

## **Lilian Mix (MU)**

I am from Independence, MO and am currently attending the University of Missouri. I am in my third year studying chemical engineering along with my two minors of math and engineering sustainability. I also work as a lab assistant at our university's research reactor, MURR. When I'm not working on my degree, my favorite things to do include hiking, running, hanging out with my roommates (and my cat Gouda), cooking, crocheting, and reading. My goal is to one day have hiked in every U.S. National Park and so far I've made it to 33 of the 63! My love for nature has inspired my work in sustainability and this summer I will be interning for the Missouri Department of Natural Resources Water Protection Group as an environmental engineering intern. For now though, I am a member of Sustain Mizzou which is one of the many sustainability clubs on campus, as well as Women in Natural Resources. I am also in charge of the environmental impact analysis and sustainability team in our university's branch of Engineers without Borders.

## **Meara Perkins (LU)**

I am currently finishing my third year of college at Lincoln University Missouri. I will be moving into my fourth year, continuing to work towards my bachelor's degree in Agriculture, with an emphasis in Natural Resource Management. After graduation in May of 2024, I plan to be working with DNR (Department of Natural Resources) on natural parks and campgrounds, acting as an informative individual for those visiting, and how they can help care for the environment and wildlife they will encounter. My dream job is to help care for nature, and encourage others to do the same.

## **Elizabeth Tiedt (MS&T)**

I am a rising junior at Missouri S&T majoring in environmental engineering and minoring in music and sustainability. I have always found water fascinating and enjoy the outdoors and staying active. I am active in several student organizations such as being an instructor for the Aerial Swing Dance Club and a member of Kappa Kappa Psi while somehow managing to fit video games in my busy schedule. After graduation I hope to work in water treatment.

# OUTSTANDING ACHIEVEMENT AWARDS

This year the Missouri Waste Control Coalition (MWCC) received numerous nominations for the OUTSTANDING ACHIEVEMENT AWARDS. After a thorough review of the nominations, the following awards are being presented:

## LIFETIME ACHIEVEMENT AWARD

*This award recognizes an individual whom the MWCC Board of Directors identifies as having served the Missouri Waste Control Coalition, the environmental industry, a community, a government agency or state of Missouri in a significant way.*

### **Robert M. “Robbie” Robinson**



Robert M. Robinson, or ‘Robbie’ as most in the Missouri’s Solid Waste Management world in the 1970s, 1980s and 1990s. He was born in 1937 and grew up on a farm south of Kansas City. He earned his Engineering degree in 1960 and went on to earn his MS in Engineering in 1963 from UMC. Robbie started his career with the Missouri Department of Health in 1968. In 1974, when the MDNR was formed Robbie moved over to staff Missouri’s new environmental programs. Soon after joining MDNR, he became the Director of the Solid Waste Management Program, whose objective was to implement the 1973 Missouri Solid Waste Management Law and rules.

Robbie and a hand-full of others (including Rick Roberts) set out to close or transform all private and City dumps in Missouri, into well operated sanitary landfills. This was no easy task and required a person who projected regulatory authority, was confident and stubborn, but also commanded the respect of at least MOST of the regulated community. Robbie and his peers also were tasked in 1976 with the initial stages of regulating Hazardous Waste in Missouri. In 1973, Robbie convened an annual 2-day meeting in Columbia that brought together regulators, consultants, industry and the public to discuss the ‘hot topics’ of the day. The goal of these meetings was to resolve some controversies and ‘agree to disagree’ on others. But the social networking associated with these annual meetings generally helped opposing views to respect one another as people, which led to more civil discussions. Robbie loved a heart-felt discussion (some call it an argument), but he would listen, and he did not hold grudges. The annual meetings were ripe with intensity and passion, as well as fun and camaraderie that grew year by year! Robbie’s successful annual meeting grew and eventually took on a life of its own, at some point being organized by a ‘coalition’ of solid waste industry representatives and being named ‘the Missouri Waste Control Coalition conference’!

In 1981, Robbie left MDNR to work at Burns & McDonnell, where he continued spreading his knowledge and wisdom of waste management. As a consultant, Robbie was responsible for some of the most innovative waste management solutions of that time. For example, he pioneered lining deep quarry walls and was involved in designing the first landfill gas systems for Missouri’s larger landfills.

When Robbie retired, his peers joked that ‘Now he only works 40-hours per week!’. In his retirement, Robbie continued to dabble in solid waste management projects for old clients, peers and friends that he had previously worked with, providing advice that only someone who has ‘seen it all’ could provide. If Robbie Robinson is not the ‘Godfather of Solid Waste’, he is inarguably the ‘Father of Solid Waste Management’ in Missouri, and a true legend in the industry.

# OUTSTANDING ACHIEVEMENT AWARDS

## JAN DILLOW COALITION CONTRIBUTION

*This special award recognizes an individual whose efforts have contributed significantly to the development and growth of the Missouri Waste Control Coalition. The award honors former president, Jan Dillow, one of the founders and key leader in the development and success of the Coalition. This year we honor 2 individuals, one posthumously. They are:*

### Scott Martin



Scott Martin was president from 2018-2019. The theme of the 2018 conference for which Scott was chair, was “Back to the Future.” It was memorable for the DeLorean that was brought to the conference and great attendance. Scott’s involvement and dedication to both SWANA and MWCC has helped to build a stronger relationship between the two organizations resulting in the Missouri Chapter of SWANA sponsoring the Solid Waste Track for the past several years. He continues to serve on the advisory board for the Missouri Waste Control Coalition. Scott is a design engineer and project manager at Burns & McDonnell and has been instrumental in helping to increase the private company involvement and support of MWCC and our Annual Environmental Conference.

### In Memory of Anna Custer



Anna Custer served as president from 2021-2022. She had the distinction of being conference chair for not one, but two conferences: the 2020 conference, which was canceled due to COVID-19, and the 2021 conference, post COVID. She put all her energies into making it one of the best conferences as demonstrated by the attendance, helping both MWCC and the industry recover from COVID disruptions. Anna was a Senior Account Executive for Pace Analytical and brought her unique perspective from working in the labs to the Missouri Waste Control Coalition. She was instrumental in bringing special topics to the conferences over the years such as CCR and PFAs. She unexpectedly passed away in November 2022 and her humor, work ethic and knowledge of the environmental industry will be sorely missed.



## *In Memory of Jan Dillow*

It is my sincere privilege to reflect on memories of our dear friend and coalition partner, Jan Dillow. My first encounter with Jan happened while in my “formative” early years with Missouri DNR, at the beginning of the Coalition coming together as an organization and hosting the annual Waste Management Conference. As I recall, I had been nominated for an award in my DNR capacity for involvement in the dioxin episode. This attractive, personable, dedicated and energetic lady named Jan congratulated me. She encouraged my further involvement in this newly emerging group. I remember being intrigued and flattered by this episode and became involved with MWCC ever since.

As I soon discovered, Jan was a cornerstone of the organization and a central part of the fabric of MWCC. She embodied an enthusiastic and wholehearted interest in the business of progressive waste management. She also had a commitment to engaging constructive dialogue with all interests, which was the core and essence of the Coalition. I was also privileged to work for a period in the same corporation with Jan in the early days of the Heritage organization. I found Jan to be the same dedicated professional as the company, the industry and the cause of progressive environmental movement was at large.

Jan was an integral fixture at all the conferences until her illness took her from us. My memories include her actual delivery of the Kansas City strip steaks procured and hauled to the legendary picnic events. She even attended to those of us ‘pit slaves’ in the early years of hand grilling by cooling us down with wet towels. That was Jan — involved with all aspects from big picture to the details — and always putting people first.

It is with sincere fondness and respect that I am proud to call Jan now what I proclaimed her then, the “Godmother” of the MWCC. I believe she is smiling now on us as she did then upon hearing this term of endearment. Thank you again, Jan for everything.

Your friends at the Missouri Waste Control Coalition

Submitted by Mike Duvall - June 20, 2001

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# 50 Years of Environmental Conferences

As we celebrate the 50th Environmental Conference, it is worth noting how we arrived at this point.

## **The 70's – The Beginning . . .**

Solid waste legislation created an invisible wall between citizen groups, regulated industry, and government. To relieve the tension, state officials decided to develop a forum where interested individuals could meet and openly discuss the impact of the legislation. This meeting occurred in 1972 when MDNR Solid Waste Program, sponsored the first Missouri Solid Waste Conference in Jefferson City. John Doyle, senior engineer at Environmental Concepts, Inc. in Jefferson City, explained, "This conference and the nine that followed, provided a vehicle where the various interest groups could come together in a non-adversarial setting to discuss solid waste management and landfill issues." Between 1977 and 1980, new waste laws and regulations were developed and implemented which further increased the need for the growing membership to share ideas and information.

## **The 80's - MWCC takes control of the conference**

Various interest groups wanted a forum where they could meet in a comfortable, non-political arena and discuss difficult issues in an open and honest manner. This encouraged the Associated Industries of Missouri, MDNR, and the University of Missouri-Columbia to form a coalition in 1981. The first annual conference sponsored by MWCC was held in July 1982 in Columbia, Missouri. People would gather days before conference, share pizza and sodas, while they assembled all the materials for the upcoming conference. These years also saw the infamous Monday evening picnic in the park with members grilling steaks. In 1985 250 people attended the conference.

## **The 90's – Senate Bill 530**

When Senate Bill 530 was passed in 1990, it was one of the most comprehensive solid waste management laws in the nation. It provided an impetus for a growing attendance at the conference and membership for MWCC. Attendance reached over 700 in 1990 when Mike Duvall brought in William Ruckelhaus, the former U.S. EPA Administrator as the keynote speaker. Early 1990's also saw the hiring of a management company to coordinate the conference. Jim Hull, 1999 conference chair, and 1999-2000 President, sought to expand the conference to encourage attendance from state agencies throughout Region 7.

## **The 2000's – Move to the Lake – Lodge of Four Seasons**

One of the more memorable conferences was "2001 – Waste Odyssey," patterned after 2001: The Space Odyssey. Who doesn't remember Tom Gredell coming out in a haz-mat suit with smoke rising all around him?! After peaking in the early 90s, MWCC saw attendance dwindle. In 2003 it made the decision to move the conference from Columbia and go to the Lake of the Ozarks. We began at the Lodge of Four Seasons. This included foregoing the picnic and replacing it with a family reception on Monday with activities for family members. We saw our attendance grow as well as our number of exhibitors/sponsors. Cliff Metcalf, 2004 conference chair and 2004-2005 President, worked diligently to expand the conference to include more than just solid waste issues.

## **The 2010's – Move to Tan-Tar-A Resort (now Margaritaville Lake Resort)**

In 2013, due to the size of the conference and increased needs, MWCC moved the conference to the Tan-Tar-A Resort (now Margaritaville Lake Resort), where it remains today. This decade saw the expansion of the sessions being offered at the conference to include Tanks and Brownfields. 2018's theme was "Back to the Future" with a DeLorean in residence during the reception.

## **The 2020's – A Challenge and 50th Year of the Environmental Conference**

The 2020's have been a challenge with the COVID causing the cancellation of the conference for the first time ever in 2020. It bounced back with 400 in attendance in 2021. We continue to offer a wide variety of the latest topics in addition to solid waste and landfills – CCR, PFAs, Tanks, Brownfields, Remediation, Groundwater, and Legal Issues.

In addition to attendance growing, expenses for the conference also continue to increase. In 1988 the conference and hotel expenses were \$8,000. In 1994 it had increased to over \$20,000. The conference now costs more than \$170,000. The MWCC continues to be a forum for individuals to meet and openly discuss varying viewpoints on environmental issues – ***the largest environmental conference in the Midwest.***

# Missouri Waste Control Coalition

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## Parade of Presidents



L. Joe Sell  
1981-82  
AT & T



Robert Schreiber  
1984-85  
Schreiber, Grana  
and Yonley, Inc.



John T. O'Connor  
1982-83  
University of Missouri  
Columbia



Jan Dillow  
1985-86  
Heritage Environmental  
Services



Joe Eigner  
1983-84  
Eigner & Associates



Jim Garvin  
1986-87  
Confidential Mobile  
Paper Shredders



# Missouri Waste Control Coalition

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## Parade of Presidents



Judy Gibbs  
1987-88  
Avila College



Mike Duvall  
1990-91  
SCI Environmental



David Bedan  
1988-89  
Department of  
Natural Resources



Jane Bishop  
1991-92  
Missouri  
Recycling  
Association



Jack Frauenhoffer  
1989-90  
Mallinckrodt Specialty  
Chemicals Co.



Stephen Mahfood  
1992-93  
Missouri  
Environmental  
Improvement and  
Energy Resources  
Authority

# Missouri Waste Control Coalition

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## Parade of Presidents



Dolores Vermont  
1993-94  
Monsanto Company



Carla McDowell  
1994-95  
Allied Waste



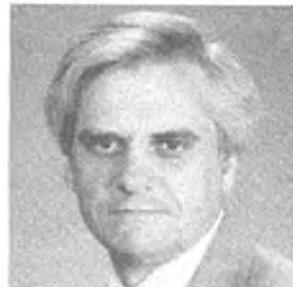
Kenneth Seeney  
1995-96  
Mo Environmental  
Improvement  
and Energy Resources  
Authority



Ron Darling  
1996-97  
City of St. Peters



Keith Connor  
1997-98  
SCS Engineers



Rickie L. Roberts  
1998-99  
Burns & McDonnell  
Waste Consultants

# Missouri Waste Control Coalition

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## Parade of Presidents



Jim Hull  
1999-2000  
Mo Department of  
Natural Resources  
Solid Waste Manage-  
ment Program



Marie Steinwachs  
2000-2001  
University  
Outreach and  
Extension



Thomas R. Gredell  
2001-2002  
Gredell Engineering  
Resources, Inc.



Dennis Hansen  
2002-2003  
Missouri Department  
of Natural Resources



Dale Behnen  
2003-2004  
Peerless Landfill &  
Resource Recovery;  
and Throw and Go  
Trash Co.



Cliff Metcalf  
2004-2005  
Tri-Rinse, Inc.



# Missouri Waste Control Coalition

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## Parade of Presidents



Kristin Allan Tipton  
2005-2006  
EIERA Market  
Development Program



Erick Roberts  
2006-2007  
City of Springfield



Michael Sieczkowski  
2007-2008  
JRW Bioremediation



Kathy MacBeth  
2008-2009  
Barker Lemar  
Engineering Consultants  
(now Peoria Disposal)



Gil Kauffmann  
2009-2010  
PSC Environmental  
(now Armor Equipment)



Mark Russell  
2010-2011  
Aquaterra Environmental  
Solutions, Inc.



Brandy Kean  
2011-2012  
Burns and McDonnell  
Engineering Co.



Steve Meyer  
2012-2013  
City of Springfield

# Missouri Waste Control Coalition

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## Parade of Presidents



Larry "Boot" Pierce  
2013-2014  
MO Department of  
Natural Resources,  
Division of  
Geology and Land  
Survey



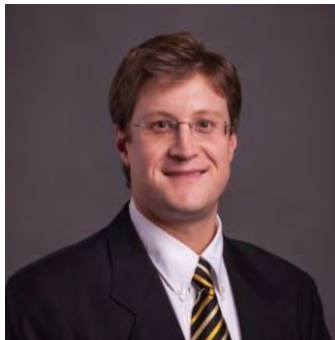
John Haasis  
2014-2016  
St. Louis County  
Department of  
Public Health



Lisa McDaniel  
2016-2017  
Mid-America Regional  
Council



Anastasia Welch  
2017-18  
SCS Engineers



Scott Martin  
2018-19  
Burns & McDonnell



Larry Lehman  
2019-21  
MDNR Land  
Reclamation  
Program



Anna Custer  
2021-22  
Pace Analytical



Ken Ewers  
2022-23  
GREDELL  
Engineering  
Resources, Inc.

# NOTES

# NOTES



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NATURAL RESOURCES**

Waste Management Program



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this year's conference.**

**MWCC**



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*See you next year!*

**July 21 - 23, 2024**