

Data Center Insights and Innovation Conference 2026

Herndon, Virginia, USA
24-26 March 2026

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Final Program

TECHNICAL AGENDA – Tuesday, March 24

Technical Tour – Cloud HQ

9:00 am – 12:00 pm

Participants should meet in the hotel lobby at 8:45 am for a bus departure by 9:00 am.

The Cloud HQ Campus in Ashburn, VA has a planned customer critical IT load of over 1.7 GWs spread among fourteen data centers. Participants will tour the CloudHQ LC4 180MW Data Center, which spans 1.5 million square feet and is designed to accommodate a single tenant.

After an overview of the building and systems, the tour will explore the main operations through four key areas that are essential to the functioning of the facility. Each area plays a crucial role in ensuring the smooth operation of the data center as well as sustainability and environmental compliance.

Tour stops include:

- Electrical Systems and Energy Efficiency Center
- Generator Room
- Central Utility Plant
- Mechanical Yard, including cooling towers and dry coolers



The tour is SOLD OUT. Includes transportation and box lunch following the tour. All attendees must provide a government-issued ID and sign an NDA prior to the tour. Flat, closed-toe shoes required for approximately 90 minutes of walking/standing.

Opening Plenary Session

1:00 pm – 3:00 pm Rivanna Ballroom

Conference Welcome...1

Tiffany Dillow, WSP USA, Conference Chair and Moderator

Leah Blinn, Civil & Environmental Consultants, Inc., A&WMA Immediate Past President

Sponsored by:



Speakers include:



Kristen C. Umstatt
Loudon County Board of
Supervisors



**Data Centers in Maryland: An
Emerging Trend in Air Quality
Permitting...7**

Suna Sariscak
Manager, Air Quality Permits
Program, Maryland Department of
the Environment



**A Framework for Assessing
Cumulative Environmental and
Public Health Effects of Data
Centers...16**

Anna Rosofsky
Community Health and
Environmental Research Initiatives
Lead
Health Effects Institute

3:00 pm – 3:20 pm Networking Break and Exhibit Viewing

Final Program

TECHNICAL AGENDA – Tuesday, March 24, con't.

All sessions in the A track will be in the Rivanna Ballroom

Session 2A: Permitting Challenges

Session Chair: Sunhee Park, Black & Veatch

Sponsored by:



3:20 pm – 3:40pm

DC 36 **New Regulatory, Air Permitting & Compliance Challenges for Large AI Data Centers...**27

Robert Velasco, Tampa Electric Company

3:40 pm – 4:00 pm

DC 40 **The Air We Breathe vs. the Data We Need: Air Quality Management Challenges Presented by Data Centers...**36

Lori Madrid, Kim Ness, WSP USA

4:00 pm – 4:20 pm

DC 44 **Pseudo-Utility Power Plants: Air Permitting Considerations for Data Center Power Generation...**44

Kendalle Martin, WSP USA, Inc.

4:20 pm – 4:40 pm

DC 45 **Keeping Data Centers Running: Air Permitting and Compliance for Onsite Power Systems...**50

Maggie Guilfoyle, Kaitlyn Bencosme, Ramboll

4:40 pm – 5:00 pm

DC 53 **Streamline Air Permitting Site Feasibility for Data Centers...**62

Jeffrey Connors, AECOM

All sessions in the B track will be in the Luray Room

Session 2B: Public Engagement and Outreach

Session Chair: Susan S.G. Wierman, Johns Hopkins University

3:20 pm – 3:40pm

DC 35 **From Permitting to Partnership: A Playbook to Embedding Engagement in Data Center Lifecycle...**67

Vic Blackwell, AECOM

3:40 pm – 4:00 pm

DC 06 **Applying Lessons learned from Class VI UIC Permitting to Data Center Permitting...**71

Kerry McGrath, Shannon Broome, David Terry, Hunton Andrews Kurth

4:00 pm – 4:20 pm

DC 08 **Sharing the Load: Community Benefits for Data Centers...**74

Kelly Crawford; Brooke Smallwood, Ekta Alik, OASIS Energy Partners

4:20 pm – 4:40 pm

DC 37 **Environmental Justice Concerns in Relation to Data Center Growth in the U.S....**78

Anthony Bradshaw, George Mason University

4:40 pm – 5:00 pm

DC 30 **Beyond the Cloud: Monitoring and Community Engagement for Data Center Pollution Control...**85

Ryan Moffet, Josette Marerro, Ethan Emerson, Maris Densmore, Sonoma Technology

5:00 pm – 6:15 pm Networking Reception

Rivanna Foyer and Ballroom DEF

Join sponsors, speakers, and all attendees at a Networking Reception with beer, wine, and light hors d'oeuvres.

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Learn more at these exhibitor information sessions:

- | | |
|-----------------|------------------------------------|
| 5:10 – 5:20 pm: | Montrose Environmental Group, Inc. |
| 5:25 – 5:35 pm: | HGC Noise Vibration Acoustics |
| 5:40 – 5:50 pm: | Met One Instruments |
| 5:55 – 6:05 pm: | Encamp |

Final Program

TECHNICAL AGENDA – Wednesday, March 25

Plenary Session

8:00 am – 10:00 am Rivanna Ballroom

Moderated by: John Kinsman, Edison Electric Institute (retired),
and A&WMA President-elect

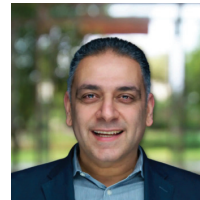
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Aaron Szabo
Assistant Administrator, US EPA
Office of Air and Radiation



Julie Bolthouse
Director of Land Use
Piedmont Environmental Council



Ali Farnoud
Chief Strategy Officer
ALL4, Inc.

10:00 am – 10:20 am Networking Break and Exhibit Viewing

Session 4A: Permitting, Modeling, and Compliance Rivanna Ballroom

Session Chair: Sunhee Park, Black & Veatch

Sponsored by:



10:20 am – 10:40 am

**Earning the Right to Operate: Building
Regulatory and Community Trust in the Data Center Era...94**
Stephanie Sparkman, QTS; Luke Jacobs, Encamp

10:40 am – 11:00 am

**DC 03 Air Permits and Dispersion Modeling Through a Data
Center Lens...98**
*Robynn Andracssek, Providence Engineering and Environmental
Group, LLC*

11:00 am – 11:20 am

**DC 23 Navigating Environmental Permitting Challenges for
Data Center Development...105**
John Tsun, David Greene, Dean Gordon, SCS Engineers

11:20 am – 11:40 am

**DC 27 Data Center Insights and Innovation – General
Compliance and EHS...113**
Chris Noone, Langan Engineering and Environmental Services

11:40 am – 12:00 pm

**DC 33 So You Want to Move a 30-year Old Power Plant and Need
Modeling Data for a Permit Application...122**
Dale Raczynski, Epsilon Associates, Inc.

12:00 pm – 12:20 pm

**DC 42 Clearing the Air: Permitting, Modeling, and Compliance
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Kristen Aune, Langan Engineering and Environmental Services

Session 4B: Health and Socioeconomic Impacts Luray Conference Room

Session Chair: Susan S.G. Wierman, Johns Hopkins University

10:20 am – 10:40 am

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Virginia: An Exploratory Assessment...138**
Neha Gour, Luis Ortiz, Edward Maibach, George Mason University

10:40 am – 11:00 am

**DC 07 Integrated Impact Analysis associated with AI and Data
Center-driven Energy Demand Growth...145**
*Gyungwon Joyce Kim, Office of Research and Development, U.S.
EPA; Mengqi Zhao, Tom Wild, Stephanie Morris, Pacific Northwest
National Laboratory, Joint Global Change Research Institute*

11:00 am – 11:20 am

**DC 61 The Socioeconomic Tradeoffs of Data Centers: Who Wins
and Who Bears the Burdens...155**
*Christopher Dixon, Holly Bender, Lisa McDonald, Pinyon
Environmental*

11:20 am – 11:40 am

DC 51 The Data Center and Its Critical Role for Sustainability...163
Doug Latulippe, David Greene, SCS Engineers

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**DC 69 Social Impacts of Data Centers: A Baseline to Inform
Policymakers...172**
Chris Whitehead, Chris Whitehead Associates

12:00 pm – 12:20 pm

**DC 43 Power System Costs and Emissions from Data Center and
Cryptocurrency Mining in the United States...181**
*Jeremiah Johnson, Cameron Wade, Michael Blackhurst, Paulina
Jaramillo, Anderson R. de Queiroz, Joseph F. DeCarolis, North Carolina
State University*

Final Program

TECHNICAL AGENDA – Wednesday, March 25

12:20 pm – 1:20 pm

Lunch and Networking Opportunities

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ENCAMP



TELEDYNE | API

All sessions in the A track will be in the Rivanna Ballroom

Session 5A: Water/Wastewater Use and Impacts

Session Chair: Marc Cone, MARAMA

1:20 pm – 1:40 pm

DC 19 **Considerations for Water Source and Discharge Permitting in Data Center Applications...191**

Aislen Kelly, Jamie Sobonya, Langan Engineering & Environmental Services, LLC

1:40 pm – 2:00 pm

DC 21 **BWUs in the Balance: Water Supply Pressures and Air Quality Risks in Data Centers...202**

Dave Beauchamp, Sarah Patterson, Environmental Science Associates

2:00 pm – 2:20 pm

DC 48 **Data Centers & UOSA: A Stronger Pretreatment Partnership - Enhancing Environmental Compliance and Industrial Wastewater Management...213**

Mishelle Noble-Blair, Upper Occoquan Service Authority, Gary Hunter, Black & Veatch Corp.

2:20 pm – 2:40 pm

DC 66 **Back to the Future: Navigating Canada's Evolving Regulatory Environment for Data Centers...221**

Selina Lee-Andersen, McCarthy Tetraault LLP

All sessions in the B track will be in the Luray Room

Session 5B: Sustainability and Environmental Planning

Session Chair: Kuo Tian, George Mason University

1:20 pm – 1:40 pm

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Benjamin Toby, FuelCell Energy Inc.

1:40 pm – 2:00 pm

DC 29 **Enhancing Biodiversity in Data Center Developments with Biodiversity Metrics...241**

Daniel Rockefeller, Lis Nelis, Sara Copp Franz, Rodolfo Jaffe, Molly McDermott, Ramboll

2:00 pm – 2:20 pm

DC 31 **There's No Such Thing as a Free Ride: The Real Costs of Free Cooling...252**

Christopher Muller, Brian Maltese, Hanjong Yoo, AAF International

2:20 pm – 2:40 pm

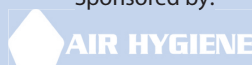
DC 32 **Beyond the Bottom Line: Sustainability Metrics for Smarter Decisions in Data Center Development...261**

Kara Wright, Jennifer Hale, Pinyon Environmental, Inc.

3:00 pm – 3:20 pm

Networking Break and Exhibit Viewing

Sponsored by:



Final Program

TECHNICAL AGENDA – Wednesday, March 25, con't.

All sessions in the A track will be in the Rivanna Ballroom

Session 6A: Noise Mitigation and Acoustic Planning I

Session Chair: Chris Geraghty, CG Consulting Services

3:20 pm – 3:40 pm

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Andrew Truitt, Black & Veatch

3:40 pm – 4:00 pm

DC 59 **Noise in the Environment from Data Centers: Challenges and Practical Solutions...285**

Jeremy Schmitt, Geosyntec Consultants Inc.

4:00 pm – 4:20 pm

DC 63 **Acoustic Harmony with the Community...290**

Clinton Cyr, Epsilon Associates

4:20 pm – 4:40 pm

DC 67 **Navigating a Changing Noise Regulation Landscape Aimed at Data Centers...295**

Kristen Wallace, Landau Associates

4:40 pm – 5:00 pm

DC 25 **Data Center Noise Mitigation and Acoustic Planning: Practical Strategies Informed by Real-World Monitoring...306**

John Tsun, Sean Gordon, David Greene, SCS Engineers

All sessions in the B track will be in the Luray Room

Session 6B: Air Quality Impacts and Emissions

Session Chair: Mark Gibson, KCI Technologies, Inc.

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3:20 pm – 3:40 pm

DC 05 **Data Center and Diesel PM Concerns Case Study...313**

Bharathi Bhattu, Bruce Wattle, WSP

3:40 pm – 4:00 pm

DC 09 **Advances in NOx Emissions...322**

Matt Haber, Elizabeth Gorman, ERG

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DC 58 **Ambient Air Quality Data Can Strengthen Community Trust and Data Center Performance...332**

Robert Ford, Aeroqual

4:20 pm – 4:40 pm

DC 64 **Cold Climates, Hot Loads: Air and Noise Permitting for Canada's Next Wave of Data Centers...341**

Amin Engarnevvis, WSP Canada

Evening Social

6:00 pm – 9:00 pm

Breaker's Sky Lounge

Village Center at Dulles, 2445 Centreville Rd., 4th Floor, Herndon, VA 20171

Join local A&WMA members and conference attendees at Breaker's where you can order your own food and drinks, play pool, watch sports, and more!

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Breaker's is 1.3 miles from the hotel and the hotel shuttle leaves at 45 minutes after the hour, and can be arranged for return trips. Rideshare services are also another option.

Final Program

TECHNICAL AGENDA – Thursday, March 26

All sessions in the A track will be in the Rivanna Ballroom

Session 7A: Permitting and Regulatory Compliance

Session Chair: Mark Gibson, KCI Technologies, Inc.

8:00 am – 8:20 am

DC 18 [Air Permitting Data Centers for Future Growth...348](#)

Kimberly Ness, Lori Madrid, WSP Earth & Environment

8:20 am – 8:40 am

DC 04 [New Source Review —Hot Topics for Data Center Projects...356](#)

Adam Driscoll, Barr Engineering Co.

8:40 am – 9:00 am

DC 14 [Regulatory Aspects of Data Centers Growth in Georgia...367](#)

Cynthia Dorrough, Air Protection Branch, Georgia Environmental Protection Division (EPD), James Boyland, Steve Allison, Byeong-Uk Kim, Ruben Gijon-Felix, Georgia EPD

9:00 am – 9:20 am

DC 39 [Just Engines, Right? The Hidden Complexity of Air Quality Permitting for Data Centers...380](#)

Nicole Saniti, Farshid Kiani, Trinity Consultants

9:20 am – 9:40 am

[The Importance of Flexible Permits for Data Centers in the PJM Regional Electric Grid...386](#)

Gary Helm, PJM Interconnection

All sessions in the B track will be in the Luray Room

Session 7B: Responsible Facility Siting

Session Chair: Mark Heinrich, KCI Technologies, Inc.

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Phil Reidy, Brian Petty, Geosyntec Consultants Inc.

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Noemi Wyss, Heidi Rous, Sophia La Herran, Ciara Anderson, Kimley-Horn and Associates

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Susan Cathey, Geosyntec Consultants Inc.

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Lori Madrid, Richard Greig, Rob Rebel, WSP USA

9:20 am – 9:40 am

DC 49 [Assessing Corrosivity for Data Center Site Selection: Air Testing in Due Diligence Evaluations...417](#)

Scott Adamson, Trinity Consultants Applied Monitoring Services

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Session Chair: Andrew Truitt, Black & Veatch

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Derek Flake, Aercoustics

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Henrik Olsen, Wood Vibration, Dynamic, and Noise

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Samuel Pendyala, WSP USA Inc.

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Josh Cassarino, Trinity Consultants

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Ryan Chiene, Heidi Rous, Ace Malisos, Noemi Wyss, Kimley-Horn and Associates

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Session Chair: Tiffany Dillow, WSP USA

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Ino Tsichrintzi, Ryan Janoch, Mapistry

10:30 am – 10:50 am

DC 54 [When AI and the Cloud Meet the Clean Air Act: Navigating Air Compliance and Sustainability Reporting...477](#)

Kate Howe, Archana Nagaraj, Andy Perdue, Grayson Uhler, Weaver Consultants Group

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Sunhee Park, Black & Veatch

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<i>Ali Farnoud</i>	