

Environmental Justice From Policy to Practice

Arlington, Virginia, USA
23-24 October 2023

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FINAL PROGRAM

TECHNICAL AGENDA – Monday, October 23

Opening Plenary Session

8:00 am – 10:00 am
Fitzgerald Ballroom C

Sponsored by:



Philip M. Fine, Ph.D.,
Executive Officer/
Air Pollution Control
Officer, Bay Area Air
Quality Management
District



Courtney Peterson,
Vice President, Chief
Diversity Officer,
and Chief Human
Resources Officer,
Edison Electric
Institute

Welcome and Introduction

Nancy Meilahn Fowler, A&WMA Immediate
Past President

Conference Co-chairs:

- **John Kinsman**, Senior Director, Environment,
Edison Electric Institute
- **Kelly Crawford**, Senior Advisor for Energy
Equity and Environmental Justice, US DOE



Monisha Shah,
Deputy Director
for Justice40 and
Environmental Justice
Innovation, White
House Council on
Environmental Quality



Dr. Sacoby Wilson,
Director, Community
Engagement,
Environmental Justice,
and Health;
Professor, Maryland
Institute for Applied
Environmental Health

10:00 am – 10:20 am Networking Break
Fitzgerald Foyer

Session 1A: Engagement & Collaboration – Lessons Learned and Promising Practices in Business-Community Partnerships

Fitzgerald Ballroom C

Moderator: Janet Whittick, US EPA

10:20 am – 12:00 pm

At its core, the practice of engagement is about businesses partnering with communities to take actions that reflect community priorities, provide meaningful benefits, and reduce disproportionate cumulative impacts and environmental exposures. In this panel, EPA will moderate a discussion among business leaders and their community partners to explore what steps they took – and lessons they have learned – across a range of activities, including brownfield cleanup and redevelopment, siting and design of projects, and investments in community benefits. Panelists include:

Katharine Bond, Vice President for Public Policy, State, and
Local Affairs, Dominion Energy

Roger Martella, Group Vice President and Chief Sustainability
Officer, GE and GE Vernova, Global Head of Engagement,
Government Affairs, and Policy, GE Vernova

Shawntelle Fisher, Founder and CEO, The SoulFisher Ministries

Michelle Diggs, Director of Environmental Justice, 3M

Session 1B: Cumulative Impacts – Tools

Hemingway Salon

Chairs: Andrew Dorn, Illinois Tool Works, Inc.; Chris Whitehead,
ESI

10:20 am – 10:40 am

EJ 47 **Considerations in Air Permitting: Approaches to
Evaluating Cumulative Impacts Across the Country...1** Kelley
Begin, Woodard & Curran

10:40 am – 11:00 am

EJ 59 **Leveraging Community-Gathered Air Quality Data for
Cumulative Risk Assessment: A Qualitative Exploration of
Strengths and Limitations in West Atlanta...9**
Jan-Michael Archer, University of Maryland – College Park

11:00 am – 11:20 am

EJ 64 **Addressing the Environmental Justice Issue of Diesel
Trucks in New York City Using Real-World Emissions Data...23**
Michelle Meyer, International Council on Clean Transportation

11:20 am – 11:40 am

EJ 22 **Addressing Air Quality Impacts in Environmental
Justice Communities in Massachusetts...37**
Ida Weiss, Sonja Sax, Epsilon Associates

12:00 pm – 1:00 pm — Lunch for all attendees
Fitzgerald Ballroom DE

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TECHNICAL AGENDA – Monday, October 23, con't.

Session 2A: Engagement & Collaboration – Regulators, Industry, and Communities Working Together, Part 1

Fitzgerald Ballroom C

Chairs: Hannah Ashenafi, DC DOEE; LaToria Whitehead, Abt Associates

1:00 pm – 1:20 pm

EJ 08 [On the Air Education Program...48](#)

Elizabeth Spike, Clean Air Partners

1:20 pm – 2:40 pm Panel: How Cities are Advancing EJ in their Transition to Clean Energy

This panel will cover working with communities from State/Local and Industry who are starting to focus on EJ for the first time. Presentations include:

[Building Coalitions and Working Alongside Communities to Advance EJ...55](#)

Surabhi Shah, Associate Director, Office of Community Revitalization, US EPA

[How Industry Can Create a Successful Partnership with Neighboring Communities...60](#)

Tim Fields, Senior VP, MDB

[Lessons from the CARE Program: Creating a Culture that Supports Work with Communities...67](#)

Larry Weinstock, Principal Associate, Abt Associates

2:40 pm – 3:00 pm Networking break for all sessions
Fitzgerald Foyer

Session 3A: Engagement & Collaboration – Regulators, Industry, and Communities Working Together, Part 2

Fitzgerald Ballroom C

Chair: Tom Morahan, egroup

3:00 pm – 3:20 pm

EJ 49 [The Industry Guide to Engaging Better: Community Engagement Best Practices with EJ Populations...121](#)

Khrystle Bullock, AECOM

3:20 pm – 3:40 pm

EJ 20 [Collaborative and Voluntary EJ Projects in Minnesota...130](#)

Chris Nelson, 3M, Bill Droessler, Environmental Initiative

3:40 pm – 4:00 pm

[Environmental Justice from the Perspective of an Impacted Community...137](#)

Sebrena Rhodes, Empower DC

4:00 pm – 4:20 pm

EJ 37 [California Assembly Bill 617 Implementation Update...141](#)

Robert Dalbeck, South Coast Air Quality Management District

Session 2B: Cumulative Impacts – Assessment

Hemingway Salon

Chair: John Kinsman, Edison Electric Institute

1:00 pm – 1:20 pm

EJ 19 [Cumulative Impact Assessment Considerations for EJ Evaluation...73](#)

Chloe Chung, Electric Power Research Institute

1:20 pm – 1:40 pm

EJ 11 [A Comprehensive Review and Appraisal of Frameworks, Methods, Metrics, and Data Used in Assessments of Communities with Environmental Justice Concerns...80](#)

William Rish, Ann Verwiel, ToxStrategies, LLC

1:40 pm – 2:00 pm

EJ 23 [Cumulative Impact Analyses to Address Environmental Justice in Massachusetts...90](#)

Sonja Sax, Ida Weiss, Epsilon Associates

2:00 pm – 2:20 pm

EJ 05 [EJ Screening as Analogous to Public Health Screening...97](#)

Sandra Sulsky, Ramboll

2:20 pm – 2:40 pm

EJ 62 [An EJ Modeling Bellwether? Exploring a Case Study Using MassDEPs Proposed Cumulative Impact Analysis...107](#)

Patrick Wright, Woodard & Curran

Session 3B: Cumulative Impacts – Implementation

Hemingway Salon

Chair: John Kinsman, Edison Electric Institute

3:00 pm – 3:20 pm

[It Adds Up: Considerations in Addressing Cumulative Impacts...154](#)

Surabhi Shah, US EPA

3:20 pm – 3:40 pm

EJ 32 [EPA's Community Action Roadmap: A Tool for Addressing Cumulative Impacts...161](#)

Saphique Thomas, US EPA Region 5

3:40 pm – 4:00 pm

EJ 25 [Improving Air Quality in Overburdened Communities: Integrating Science and Environmental Justice in a Statewide Air Quality Initiative...168](#)

Rylie Ellison, Washington State Department of Ecology

4:00 pm – 4:20 pm

[Assessing and Mitigating Air Pollution Exposure Inequities in the San Francisco Bay Area...178](#)

Stephen Reid, Bay Area Air Quality Management District AB 617 Team

FINAL PROGRAM

TECHNICAL AGENDA – Monday, October 23, con't.

Network with fellow attendees and sponsors!

4:30 pm – 6:00 pm Combined Poster Session and Networking Reception
Fitzgerald Ballroom DE and Foyer

Sponsored by:



Technical Posters

Poster session chair: Tom Morahan, egroup

Dedicated poster presentation time from 4:30 pm to 5:00 pm in Fitzgerald DE

EJ 09 **Science and Engineering Practices for Online Air Quality Education...187**

Elizabeth Spike, Georges Bou-Saab, Kevin Black, A&WMA K-12 Committee

EJ 16 **Environmental Injustices of Hydraulic Fracturing...188**

Nathaniel Kromkowski, Alexander McVicker, Naveen Joseph, Radford University

EJ 65 **ERG-DART Mobile VOC Monitoring...189**

Scott Sholar, ERG

EJ 18 **Addressing Cumulative Impacts for Underserved Communities to Advance Environmental Justice...190**

LaToria Whitehead, Abt Associates

EJ 30 **Environmental Insecurity Regarding Race, Income, and Water Scarcity...191**

Emily Spingarn, Naveen Joseph, Radford University

EJ 51 **Building Environmental Literacy Among Youth Through the Prince George's County, Maryland Air Quality Monitoring Initiative...192**

Vivek Ravichandran, Karen Moe, Donald Belle, Josephine Mesina, Sacoby Wilson, Univ. of Maryland School of Public Health

A&WMA Chesapeake Chapter Social Event

All conference attendees are invited to join local A&WMA members at **Punch Bowl Social**, 4238 Wilson Blvd. from 7:00 pm – 9:00 pm. Food and beverage costs will be the responsibility of the individual attendee.

TECHNICAL AGENDA – Tuesday, October 24

Plenary Panel: Advancing Environmental Justice through a Whole-of-government Approach

8:00 am – 10:00 am

Fitzgerald Ballroom C

Moderator: Janet Whittick, US EPA



Matthew Tejada,
Deputy Assistant
Administrator for
Environmental
Justice, Office of
Environmental Justice
and External Civil
Rights, US EPA



Kelly Crawford,
Senior Advisor
for Energy and
Environmental
Justice, US DOE



Ana Mascareñas,
Senior Advisor for
Environmental Justice,
Office of the Assistant
Secretary for Health, U.S.
Department of Health
and Human Services

This high level Plenary Panel will begin with a brief overview of Presidential Executive Orders that are driving actions across the federal administration to advance environmental justice and equity, including the recent EO 14096, which directs each agency to develop an Environmental Justice Strategic Plan, and EO 14008, which established the Justice40 Initiative and set a goal of directing 40 percent of certain Federal investments to the benefit of disadvantaged communities. Panelists will be given the opportunity to highlight activities at their respective agencies to implement the Executive Orders and develop strategic plans, followed by a moderated discussion to explore alignment across agencies to coordinate actions, as well as what this could mean for underserved, overburdened communities, local businesses, and energy, climate, and transportation project developers.

10:00 am – 10:20 am Networking Break
Fitzgerald Foyer

FINAL PROGRAM

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

Session 4A: Cumulative Impacts – Case Studies

Fitzgerald Ballroom C

Chair and Panel Moderator: Chris Whitehead, ESI

10:20 am – 10:40 am

EJ 27 **Air Quality and Inequalities in the UK...193**

Jo Barnes, University of the West of England

10:40 am – 12:20 pm

Defining Environmental Externalities in a Changing Energy Landscape...203

This panel will present the findings of a recent energy justice project taking place in Southern New Jersey and Philadelphia using the Philadelphia metro area aggregate defined OBCs and emissions impact modeling (InMap and GasCap) and the EPA's recent Social Vulnerability report for the health impacts.

Speakers include:

- **Chris Whitehead**, Air Practice Leader, ESI
- **McKenna Dunbar**, Community Engagement Coordinator, Sierra Club
- **Christine Appah**, Assistant Professor of Climate, Columbia Climate School
- **Jo Barnes**, Director, Air Quality Management Resource Centre, University of the West of England

Session 4B: Screening and Measurement – Tools and Techniques

Hemingway Salon

Chair: Maud Walsh, Louisiana State University

10:20 am – 10:40 am

EJ 21 **All the Screening Tools and Their Stories...211**

Renee Hoyos, Annika Liger, ERM

10:40 am – 11:00 am

EJ 14 **Recent Advancements in Environmental Justice Screening for Fossil Fuel-Fired Power Plants...217**

Erich Eschmann, US EPA

11:00 am – 11:20 am

EJ 04 **PM_{2.5} Data Inputs Alter Identification of Disadvantaged Communities...225**

Tess Carter, Congressional Joint Economic Committee

11:20 am – 11:40 am

EJ 53 **Environmental Justice Tools: Beyond EPA's EJScreen...230**

Diane Reilly, TRC Companies

11:40 am – 12:00 pm

EJ 48 **Shair Real-time Air Quality Visualization and Source Apportionment: A Novel Approach for Informed Community Engagement...237**

Farzan Oroumiyeh, Shari Beth Libicki, Ali Akherati, Greg Yarwood, Ramboll

12:00 pm – 12:20 pm

EJ 58 **The Brave New World of Citizen Monitoring and Air Permitting and Enforcement...246**

Gary Steinbauer, Babst Calland

12:20 pm – 1:20 pm
Lunch for all attendees
Fitzgerald Ballroom DE

About the Air & Waste Management Association

A&WMA is a not-for-profit, nonpartisan professional organization that enhances knowledge and expertise by providing a neutral forum for technology exchange, professional development, networking opportunities, public education, and outreach to more than 5,000 environmental professionals in 65 countries. A&WMA also promotes global environmental responsibility and increases the effectiveness of organizations to make critical decisions that benefit society. For more information, please visit www.awma.org.

FINAL PROGRAM

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

Session 5A: Screening & Measurement – Case Studies

Fitzgerald Ballroom C

Chair Maud Walsh, Louisiana State University; Pleasant McNeel, USDA Forest Service

1:20 pm – 1:40 pm

EJ 28 **CleanAIRE NC's Purple Air Network Assessment...250**
Regi Oommen, Daisha Wall, Brian Magi, Eastern Research Group, Inc.

1:40 pm – 2:00 pm

EJ 46 **Partnerships in Low-cost Air Quality Monitoring and Outreach in North Carolina...264**
Brian Magi, Daisha Wall, Amanda Strawderman, Regi Oommen, University of North Carolina, Charlotte

2:00 pm – 2:20 pm

EJ 06 **How Love My Air is Working for Denver's Diverse EJ Communities...276**
Ephraim Milton, Denver Public Health & Environment

2:20 pm – 2:40 pm

EJ 13 **Air Quality Monitoring in New York State Disadvantaged Communities...N/A**
Marilyn Wurth, New York DEC Division of Air Resources

2:40 pm – 3:00 pm

EJ 03 **NOAA's ARC Mobile Laboratory for Air Quality and Greenhouse Gas Measurements...283**
Russell Dickerson, UMD

3:00 pm – 3:20 pm

EJ 60 **Comparative Analysis of Key Environmental Justice Screening Tools: A Case Study Analyzing Disparities in Two Neighboring Towns with Diverse Demographics...295**
Kun Zhao, Ramboll

Session 5B: Permitting and Compliance – Case Study Examples in Practice

Hemingway Salon

Chair: Nicholas Dummer, Colorado DPHE

1:20 pm – 1:40 pm

EJ 50 **The Use of Environmental Justice Screening Tools to Guide Permitting Applications...305**
Vic Blackwell, Claire Still, AECOM

1:40 pm – 2:00 pm

EJ 41 **EJ Law Impacts & Air Permitting Considerations – New Jersey-Centric Case Study...319**
Micky Shetty, Ramboll

2:00 pm – 2:20 pm

EJ 54 **Compliance and Implications of the New Jersey Environmental Justice Law on the Solid Waste and Recycling Industry...327**
Tiffany Medley, Tetra Tech, Inc.

2:20 pm – 2:40 pm

EJ 33 **The New Jersey Environmental Justice Rule – Meaningful Public Participation...338**
Tony Bianchini, ERM

2:40 pm – 3:00 pm

EJ 12 **Environmental Justice in Air Permitting – Case Study...345**
Kathy Beckett, Steptoe & Johnson Attorneys

3:20 pm – 3:30 pm Networking Break
Fitzgerald Foyer

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

Session 6A: Screening and Measurement – Site Remediation

Fitzgerald Ballroom C

Chairs: Harish Rao, Rao Consulting Services; Andrew Dorn, Illinois Tool Works, Inc.

3:30 pm – 3:50 pm

EJ 66 **Lead with Respect: Effective Outreach in Environmental Justice Communities...351**

Patricia Spitzley, Grant Trigger, RACER Trust

3:50 pm – 4:10 pm

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Tom Morahan, egroup

4:10 pm – 4:30 pm

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Stacey Durley, Tetra Tech, Inc.

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Nicholas Targ, Holland & Knight

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Hemingway Salon

Chair: Nicholas Dummer, Colorado DPHE

3:30 pm – 3:50 pm

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Qi Zhang, GHD

3:50 pm – 4:10 pm

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David Rockman, Eckert Seamans Cherin & Mellott, LLC

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Eric Hiser, Hiser Joy

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Daniel Robertson, Jenner & Block

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