

# **Odour Management Conference 2024**

Embracing Global Perspectives

Toronto, Canada  
14-16 May 2024

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# Technical Program – Tuesday, May 14

**7:00 am – 5:00 pm**  
Conference Registration  
Porter Ballroom Foyer

**7:00 am – 8:00 am**  
Continental Breakfast  
Porter Ballroom AB & Foyer

**ALL TECHNICAL SESSIONS WILL BE HELD IN PORTER BALLROOM AB (SECOND FLOOR)**

## Opening Keynote

**8:00 am – 9:00 am**

### Welcome and Opening Remarks

James Walker, A&WMA President, Consumers Energy; Tony van der Vooren, Conference Co-Chair, Vooren Air Quality Management Services; Angie Wanger, Conference Co-Chair, Trinity Consultants; Ray Porter, Conference Co-Chair, Porter Odor Science

### Keynote Presentation: Ethics of Non-Violent Odour

Charles McGinley, Consulting Engineer, McGinley Associates, PA



Charles McGinley

## Session 1: Odour Science & Controls

Chair: Angie Wanger, Trinity Consultants

**9:00 am – 9:30 am**

OM-36

### Odour Threshold Determination: Assessor Selection through Multiple Reference Odorants...1

*Michael McGinley, St. Croix Sensory, Stillwater, Minnesota, USA;  
Thomas Vallarino, St. Croix Sensory, Burlington, Ontario, Canada*

**9:30 am – 10:00 am**

OM-50

### Selecting the Right Technology for Odour Abatement...18

*Derek Webb, Bill Mullin, BIOREM*

**10:00 am – 10:30 am**

### Networking Break and Display Viewing

Porter Ballroom AB & Foyer

## Technical Program – Tuesday, May 14, con't.

### Session 2: Odour Field Assessment Methods

Chair: Diane Freeman, SLR Consulting

**10:30 am – 11:00 am**

OM-08

**Wood Buffalo Environmental Association's Community Odour Monitoring Program...25**

*Shawn Jansen van Beek, Emilie Briggs, Tom Dann, Wood Buffalo Environmental Association*

**11:00 am – 11:30 am**

OM-18

**Quantifying and Characterizing Oil Sands Development Related Odours in the Métis and First Nation Community of Fort McKay, Alberta, Canada...N/A**

*Danlin Su, Denise Golden, Foluke Aina, Brandon Paquette, David Spink, Fort McKay Métis Nation*

**11:30 am – 12:00 pm**

OM-04

**Field Assessment of Odour Emissions from Municipal Landfills...34**

*Christopher Bydder, EPA Victoria*

**12:00 pm – 1:00 pm**

**Lunch**

Porter Ballroom AB & Foyer

### Session 3: Chemical Forensics & Source Identification

Chair: Gary Hunt, TRC Companies

**1:00 pm – 1:30 pm**

OM-34

**Comprehensive Chemical Fingerprinting of Odors from Gas-Phase Mobile Measurements Combined with Olfactometry in Central and Southeast Texas...36**

*Evelyn Deveraux, Daniel C. Blomdahl, Chou-Hsien Lin, Kerry Kinney, Lea Hildebrandt Ruiz, Pawel K. Misztal, The University of Texas at Austin, Austin, TX, USA*

**1:30 pm – 2:00 pm**

OM-29

**The Development of a Real-Time H<sub>2</sub>S Monitoring Network In Response To Community Complaints of Odors...50**

*Melita DeBaise, Jonathan Bowser, TRC Environmental Corporation*

**2:00 pm – 2:30 pm**

OM-24

**Coating Odour Solutions, a Case Study in Forensics and Abatement...61**

*Dale T. Raczynski, Dorothy K. Buckoski, Epsilon Associates, Inc., Maynard, MA, USA*

**2:30 pm – 3:15 pm**

OM-49

**Potentialities and Challenges for the Environmental Odour Assessment by Instrumental Odour Monitoring Systems: Examples of Case Studies...76**

*Carmen Bax, Politecnico di Milano, Milano, Italy*

**3:15 pm – 3:45 pm**

**Networking Break & Display Viewing**

Porter Ballroom AB & Foyer

### Panel: Odour Modelling

**3:45 pm – 5:15 pm**

Moderator: Ray Porter, Porter Odor Science, Reading, MA, USA

Odour modelling is a useful tool to assess off-site odour impacts. In this panel, we will pay particular focus to the newly published First International Handbook on the Assessment of Odour Exposure by Using Dispersion Modelling, which was developed collaboratively by a diverse group of over 50 international odour experts from 19 countries.

**Panelists include:**

- Carlos Diaz, Ambiente et Odora, Biscay, ESP
- Ray Porter, Porter Odor Science, Reading, MA, USA
- Angie Wanger, Trinity Consultants, Minneapolis, MN, USA

# FINAL PROGRAM

## Technical Program – Wednesday, May 15

**7:30 am – 4:30 pm**  
Conference Registration  
Porter Ballroom Foyer

**7:30 am – 8:30 am**  
Continental Breakfast  
Porter Ballroom AB & Foyer

### Plenary: International Regulations & Policy

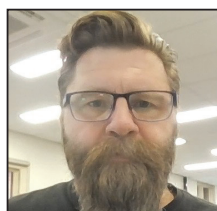
**8:30 am – 10:00 am**

Chair: Angie Wanger, Trinity Consultants

**Odour Regulations & Policy in Australia...94**  
*Christopher Bydder, EPA Victoria*

**Odour Regulations & Policy in Europe: Where Odour Meets Sense...120**  
*Carlos Nietzsche Diaz, Ambiente et Odora*

**10:00 am – 10:30 am**  
**Networking Break and Display Viewing**  
Porter Ballroom AB & Foyer



Christopher Bydder



Carlos Nietzsche Diaz

### Session 4: Odour Regulation & Policy

Chair: Anna Bokowa, EOC Environmental Odour Consulting Corporation

**10:30 am – 11:00 am**  
OM-02

**E&T&C Certification: A Fresh Way to Grade Engagement, Transparency, and Communication in Industry – When Just the Odour Unit Won't Cut It!...146**  
*Carlos Diaz, Cynthia Izquierdo, Ainhoa Antón, Ambiente et Odora, Bilbao, Spain*

**11:00 am – 12:00 pm**  
OM-15

**A Regulators Perspective - Addressing Persistent Odor Complaints in a Community...158**  
*Brad Newland, North Carolina Division of Air Quality, Wilmington, NC*

**12:00 pm – 1:00 pm**  
**Lunch**

Porter Ballroom AB & Foyer

### Session 5: Community Management & Citizen Science

Chair: Ted Bowie, Ramboll

**1:00 pm – 1:30 pm**  
OM-37

**First Standard UNE 77270 "Building Collaborative Odour Maps through Citizen Science"...179**  
*C. Izquierdo, C. Diaz, Ambiente et Odora, Bilbao, Spain; A. Antón, F. Andrés, Global Omnium Medioambiente, Valencia, Spain; J. M. Felisi, Mesura, Alicante, Spain; G. Sánchez, Area Metropolitana de Barcelona, Barcelona, Spain*

**1:30 pm – 2:00 pm**  
OM-17

**Lessons Learned and Best Practices for Addressing Odors in Environmental Justice Communities...195**  
*Bill Obermann, Mark McMillan, City and County of Denver*

**2:00 pm – 2:30 pm**  
OM-38

**The Revolution of Citizen Science for Real-time Odour Monitoring in Affected Communities...202**  
*Rosa Arias, Science for Change; Carlos Diaz, Ambiente et Odora, Bilbao, Spain*

**2:30 pm – 3:00 pm**

**Networking Break and Display Viewing**  
Porter Ballroom AB & Foyer

## Technical Program – Wednesday, May 15, con't.

### Panel: Odour Regulation, Policy, & Community Management

#### 3:00 pm – 4:30 pm

Moderators: Angie Wanger, Trinity Consultants, Minneapolis, MN, USA; Steve Babaris, Trinity Consultants, Toronto, ON, CAN

Odours are not consistently regulated on a federal level, so local jurisdictions (states/provinces, municipalities) are often tasked with developing odour nuisance criteria and odour management policies. In this panel, we will discuss how odours are regulated and managed in select jurisdictions in the United States, Canada, Europe, and Australia. We will compare and contrast different approaches to managing community odour concerns and discuss what has and has not worked from a regulator, industrial, and community perspective.

#### Panelists include:

- Christopher Bydder, EPA Victoria, Victoria, AUS...213
- Carlos Diaz, Ambiente et Odora, Biscay, ESP...N/A
- Brad Newland, North Carolina Division of Air Quality, North Carolina, USA...218
- Bill Obermann, City and County of Denver, Colorado, USA...226
- Kathy Preston, Metro Vancouver, British Columbia, CAN...229

#### 4:30 pm - 5:30 pm

#### Networking Reception

Porter Ballroom AB & Foyer

Join our exhibitors, sponsors, presenters, and colleagues for an informal reception to build relationships in the industry.

## About the Air & Waste Management Association



The Air & Waste Management Association 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](http://www.awma.org).

# FINAL PROGRAM

## Technical Program – Thursday, May 16

**7:00 am – 3:00 pm**  
Conference Registration  
Porter Ballroom Foyer

**7:00 am – 8:00 am**  
Continental Breakfast  
Porter Ballroom AB & Foyer

### Session 6: Local Odour Issues

Chair: Brian Bobbie, A&WMA Ontario Section

**8:00 am – 8:15 am**

**Welcome and Opening Remarks**

*Brian Bobbie, A&WMA Ontario Section President*

**8:15 am – 9:00 am**

**OM-10 Law & Odour: Special Odour Unit...235**

*John Georgakopoulos, Joanna Vince, Willms & Shier Environmental Lawyers LLP*

**9:00 am – 9:30 am**

**OM-32 Case Study: Implementing Real-time Odour Monitoring at the G.E. Booth WRRF to Predict Community Impacts and Integrate Mitigative Measures...252**

*Taryn Davis, Jacobs, British Columbia, Canada; Bart Kraakman, Jacobs, Bristol, United Kingdom; Cindy Kambeitz, Region of Peel, Ontario, Canada*

**9:30 am – 10:00 am**

**OM-46 An Approach to Preventive Odour Management in a Sanitary Sewer Upgrade or Expansion Project...262**

*Justin Tayles, Daniel Akhtar, Linda Lattner, WSP; Thomas Card, Environmental Management Consulting; Matthew Ward, The Wats Guys*

**10:00 am – 10:30 am**

**Networking Break and Display Viewing**

Porter Ballroom AB & Foyer

### Session 7: Noise Nuisance Issues

Chair: Derek Flake, Aercoustics Engineering Limited

**10:30 am – 11:00 am**

**OM-12 How Not to Create a Noise Emission Problem when Fixing an Odour/Chemical/Particulate Emission Problem...271**

*Rob Stevens, HGC Engineering*

**11:00 am – 11:30 am**

**OM-21 Tune out the Trucks: Exploring Innovative and Practical Noise Reduction...286**

*Derek Flake, Aercoustics Engineering Limited*

**11:30 am – 12:00 pm**

**OM-26 Identifying the Right Culprit Behind a Noise Problem (Tools of the Trade)...297**

*Corey Kinart, Ian Bonsma, HGC Engineering*

**12:00 pm – 12:30 pm**

**OM-48 Balancing Design Excellence and Responsive Planning in Addressing Residential Noise and Vibration Nuisances - Insights from a British Columbia Case Study...312**

*Dan Clayton, SLR Consulting (Canada) Ltd.*

**12:30 pm – 1:30 pm**

**Lunch**

Porter Ballroom AB & Foyer

### Session 8: Land Use Issues

Chair: Tony van der Vooren, Vooren Air Quality Management Services

**1:30 pm – 2:15 pm**

**OM-06 Land Use Compatibility and Fugitive Odours...327**

*Diane Freeman, SLR Consulting*

**2:15 pm – 2:45 pm**

**OM-47 How Do You Deal with Odour Complaints from Only One Resident? - A Case Study for an Industrial Area with Multiple Odour Sources...338**

*Anna Bokowa, EOC Environmental Odour Consulting Corporation*

**2:45 pm – 3:15 pm**

**OM-42 Special Considerations in Land Use Compatibility Assessments...352**

*Stephanie Seebach, Lucas Arnold, Dillon Consulting*

**3:15 pm – 3:45 pm**

**OM-41 Collaborative Approaches to Compatibility: A Case Study in Compatibility Done Right...362**

*Hamish Corbett-Hains, Geosyntec Consultants*

**3:45 pm – 4:00 pm**

**Closing Remarks**