

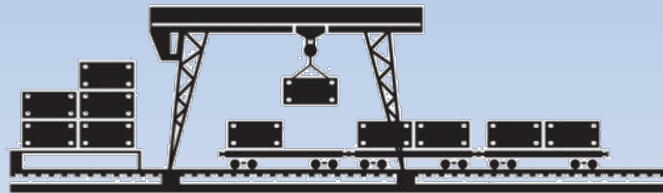
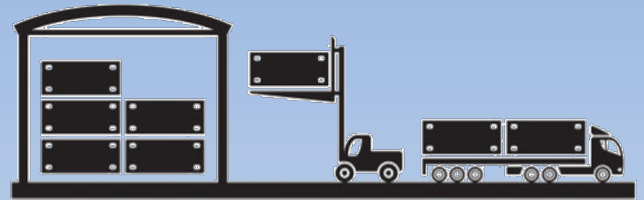
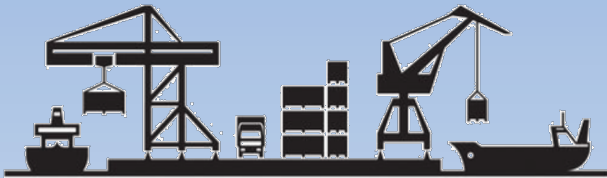
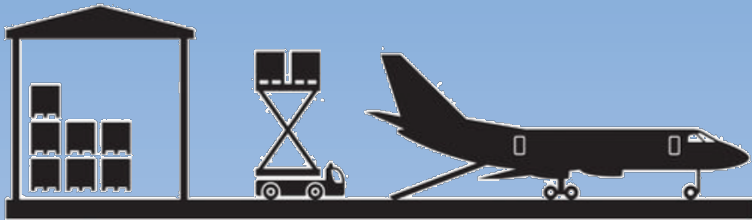


AIR & WASTE MANAGEMENT
ASSOCIATION

Freight & Environment: Ports of Entry

September 30 - October 1, 2024 • Corpus Christi, TX

CONFERENCE PROGRAM



Sponsored by:



CONFERENCE PROGRAM

General Information

Conference Overview

This conference will explore many solutions to reduce the environmental impacts of all freight transportation, focusing on air quality, noise, climate change, and sustainability. The technical program will include panel discussions of experts in the field and forward-looking presentations on reducing environmental impacts from experts in industry, consulting, government, and academia. The conference will bring together an international community of scientists, regulators, practitioners, and students to share ways to make freight more sustainable.

Location

Omni Corpus Christi Hotel

900 North Shoreline Boulevard
Corpus Christi, TX 78401
Phone: 361-887-1600

Hotel block cut-off is August 30. Book your hotel reservations at www.awma.org/portslocation.

Registration and Refund Policy

Register online at www.awma.org/ports and save on fees if you register before the advance deadline of August 30. Conference check-in and badge pickup will be held in the Nueces Foyer at the Omni Corpus Christi Hotel during the following hours:

Monday, September 30	7:00 am – 5:00 pm
Tuesday, October 1:	7:00 am – 3:00 pm

Cancellation and refund requests must be received in writing by August 30, 2024. After that date, no refunds will be issued for cancellations of any type, including no shows. All refunds will be subject to a \$100 USD administrative fee. Substitutions may be made at any time; payment for any difference is due at the time of substitution. This refund policy applies to all occurrences, including weather-related events and other natural disasters. In the unlikely occurrence of an event cancellation, the Association is not liable for any expenses incurred by the registrant other than the full refund of registration fee(s) paid.

A&WMA Meetings Policy

By registering for this meeting, attendees agree to abide by and accept the terms of the A&WMA Code of Conduct (available at www.awma.org/governance). Additionally, A&WMA conference attendees acknowledge that they may be photographed by A&WMA for promotional purposes while at events.

Conference Committee

Conference Chair:

Roger Wayson, AECOM

Committee Members:

Brian Bunger, Holland & Knight
Miranda De La Garza, Port of Corpus Christi
Sarah Garza, Port of Corpus Christi
Helen Ginzburg, VHB
Robert Mentzer, HMMH
George Noel, Federal Highway Administration (FHWA)

Presenter Details

All presenters should bring their presentation on a flash drive and load onto the conference laptop in Nueces A the morning of their session. Presenters should report to their presentation room at least 15 minutes prior to their session and plan to stay for the entire session.

Conference Proceedings

Conference proceedings will include the secured PDF copies of the slides from presenters who have provided permission. The online proceedings will be posted a few weeks following the conference and attendees will be notified when the slides have been posted to a password-protected website.

Continuing Education Units

Conference attendees may be eligible for continuing education credits and can apply to receive a Certificate of Participation for the sessions attended. Please sign the CEU sign-in sheet available at the registration desk and order your Certificate through the A&WMA Online Store. Members are eligible for free certificates. For more information, please contact Gloria Henning at +1-412-904-6021 or glhenning@awma.org.

Special Accommodations

The Air & Waste Management Association supports the Americans with Disabilities Act (ADA). Attendees requiring specific equipment, food, or services should contact Lisa Moses at Imoses@awma.org to make those needs known in advance. A&WMA will make every reasonable effort to accommodate them.

Thank You to Our Sponsors and Exhibitors

Gold Sponsor & Tabletop Exhibitor



RAMBOLL

Ramboll is a global architecture, engineering, and consultancy company, employing more than 18,000 experts. We work across the markets of Buildings, Transport, Energy, Environment & Health, Water, Management Consulting and Architecture & Landscape. We leverage local experience with a global knowledge base to deliver sustainable, integrated solutions. Our globally recognized Environment & Health practice has earned a reputation for technical and scientific excellence and innovation. We are trusted by clients to manage their most challenging environmental, health and social issues, and continually strive to achieve inspiring and exacting solutions that make a genuine difference to our clients, the environment and society. www.ramboll.com

Silver Sponsor & Tabletop Exhibitor



**Civil & Environmental
Consultants, Inc.**

When public officials and agencies are facing radical growth, aging infrastructure, regulatory uncertainties, and pressures from stakeholders, we offer a clear understanding of regulatory responsibilities and an integrated approach to planning. CEC seeks to build personal business relationships to better understand our clients' objectives. Let's talk about your most complex air quality, climate resiliency, water resources, environmental, transportation, and waste management challenges. We are local to Corpus Christi, and around the country. www.cecinc.com

Bronze Sponsor



AECOM

As air, waste and environmental regulations become more stringent and diverse, AECOM is actively partnering with clients to develop and implement compliance solutions - leveraging innovative approaches and state-of-the-art technology. With a global workforce of 49,000 spanning 150 countries, AECOM takes proactive steps to address challenges through strategic insight and collaboration. www.aecom.com

CONFERENCE PROGRAM

Thank You to Our Sponsors and Exhibitors, con't.

Tabletop Exhibitors

Aerosol Magee Scientific

www.aerosolmageesci.com

Aerosol Magee Scientific instruments are used by environmental monitoring agencies, research institutions and industries for real-time measurements of carbonaceous aerosols in more than 70 countries on all continents. As an industry pioneer in the research, design and production of carbonaceous aerosols monitoring equipment, we partner with researchers and clients globally for measurements relating to carbonaceous aerosol science, air pollution source characterization, health exposure and climate change impact studies. Our clients utilize the high-quality, real-time continuous carbonaceous data measured by our equipment to gauge the efficacy of fuel optimization measures and control strategies at ports and airports.

Ambilabs

www.ambilabs.com

Ambilabs specializes in innovative air pollutant monitoring technology solutions to obtain accurate, valid data. We offer instrumentation with regulatory approval designations and are committed to applying cutting edge science and technology to help customers achieve the most precise air measurement information to assist in areas of defense, environment, research, and regulatory monitoring. Our solutions are utilized in applications including construction/demolition, coatings/components analysis, industrial process monitoring, smoke/dust analysis, human health studies, environmental research, and regulatory measurements. We offer expertise, engineering, software, instrumentation service, and turn-key solutions to assist government agencies, laboratories, industrial facilities, and research centers with their air monitoring needs.

Sonitus Systems

www.sonitussystems.com

Sonitus Systems develops, manufactures and supplies surveillance systems for monitoring noise, air quality and particulate (PM 10 and PM 2.5) facilitating compliance with environmental standards. Automating environmental control with robust instrumentation, Sonitus helps port operators and freight organizations manage risk around noise and air quality. The Sonitus Cloud automatically collects data from the instrumentation and provides actionable alerts, reports and analysis. The system supports noise identification and recording and proactive engagement with stakeholders.

Become a sponsor or tabletop exhibitor to expand your business and showcase your products and services! Find more details at www.awma.org/portssponsor.

Technical Agenda – Monday, September 30

7:00 am – 5:00 pm
Conference Registration
Nueces Foyer

7:00 am – 8:00 am
Continental Breakfast
Nueces B

ALL TECHNICAL SESSIONS WILL BE HELD IN NUECES A

Conference Opening and Welcome

8:00 am – 8:15 am

Opening Remarks

Leah Blinn, A&WMA President-Elect, Civil & Environmental Consultants; Roger Wayson, Conference Chair, AECOM

Session 1: Making Ports Work

Session Chair: Leslie Ruta, Port of Corpus Christi

8:15 am – 8:40 am

FE11

Marine Transportation- Shipping

Kim Marcus, Landau, Inc.

8:40 am – 9:05 am

FE09

EPA Clean Ports Program

Samantha Prior, U.S. Environmental Protection Agency

9:05 am – 9:30 am

FE23

Potential Emission Reductions from a Successful Clean Programs Grant

Roger L. Wayson, AECOM

9:30 am – 9:45 am

Networking Break and Display Viewing

Nueces B and Foyer

Session 2: Local Impacts and Environmental Justice

Session Chair: Helen Ginzburg, VHB

9:45 am – 10:10 am

FE13

Monitoring to Determine Air Quality at a Near-Port Community

Sally Pang, Vancouver Fraser Port Authority

10:10 am – 10:35 am

FE16

Mitigating and Managing Disproportionate Human Health and Environmental Impact on Disadvantaged Communities

Kun Zhao, Ramboll

10:35 am – 11:00 am

FE18

Proactive Emissions Reductions Through Voluntary Efforts - A Port/Community Success Story

Sharon Bailey Murphy, Coastal Bend Air Quality Partnership

11:00 am – 11:15 am

Networking Break and Display Viewing

Nueces B and Foyer

Panel: Stormwater Master Plan and Nature-Based Solutions in a Port Setting

11:15 pm – 12:30 pm

Moderator: Sarah Garza, Director of Environmental Planning and Compliance, Port of Corpus Christi

This panel will discuss planning for stormwater management using innovative tools and solutions and using partnerships to facilitate change across the greater area.

Panelists include:

- Yvonne Dives-Gomez, Environmental Permitting Coordinator, Port of Corpus Christi
- Chuck Naiser, President, FlatsWorthy
- Charriss York, Program Director, Green Infrastructure for Texas, Clean Coast Texas

12:30 pm – 1:30 pm

Lunch

Nueces B

CONFERENCE PROGRAM

Technical Agenda – Monday, September 30, con't.

Keynote Presentation

1:30 pm – 2:30 pm

Leading by Example: Committing to Environmental Stewardship in the Global Energy Marketplace

Kent Britton, Chief Executive Officer, Port of Corpus Christi



Kent Britton is the Chief Executive Officer for the Port of Corpus Christi, where he oversees \$200 million in revenue and more than 300 employees. In his role as CEO, Kent leads the largest United States port in total revenue tonnage and the largest gateway for U.S. produced energy exports. Prior to joining the Port of Corpus Christi in 2017, Kent worked as Chief Financial Officer for the Glencore-owned Sherwin Alumina Company. His career spans more than 30 years of progressive experience in the accounting and finance fields, including leadership and executive roles at Alcoa, the world's leading integrated aluminum company, and Blackbaud, Inc., the premiere software provider to non-profit organizations. A seasoned finance executive, Kent was named Chief Financial Officer for the Port of Corpus Christi in 2019. In 2023, the Port of Corpus Christi Commission voted to promote Kent to Chief Executive Officer.

Kent is an advocate for his communities and is a staunch believer in service to others. Currently, Kent serves as a Board Member for the local United Way and is the Chairman of the American Association of Ports Audit Committee. Kent holds a bachelor's degree in industrial management from Georgia Tech and is a licensed CPA.

Technical Tour – Port of Corpus Christi

Monday, September 30, 3:15 pm – 5:15 pm

Join the Port of Corpus Christi for a tour of the Inner Harbor, leaving from the new state-of-the-art Executive Administration Building. The tour will include a one-hour narrated cruise along the Port's Inner Harbor. Have a close-up view of the construction of the new Harbor Bridge, the longest cable stay bridge in the US, upon completion. Other sites to be seen on tour include the Port's public and private docks, where cargo such as bulk materials, bulk liquids, wind cargo, etc., are transferred. Also, see the fourth and final phase of the Channel Improvement Project, which is projected to be completed in early 2025.

The Port of Corpus Christi also has several other infrastructure projects in development or under construction, which can be seen on the tour, including improvements to its Bulk Terminal docks, upgrades to Cargo Dock 9 – which handles break bulk cargo, like wind farm components – and expansion of Oil Dock 1. The latter project will make Oil Dock 1 the first of the Port's Inner Harbor docks to accommodate the new 54-foot channel depth.

Cost: \$20. Pre-registration required by August 30.



Technical Agenda – Tuesday, October 1

7:00 am – 3:00 pm
Conference Registration
Nueces Foyer

7:00 am – 8:00 am
Continental Breakfast
Nueces B

Session 3: Modeling of Pollutants

Session Chair: Roger Wayson, AECOM

8:00 am – 8:25 am

FE12

Applying the Maritime Energy, Noise, and Emissions Model (MENEM) for U.S. Vessel Fuel Use Scenarios

Kirby Ledvina, US Dept. of Transportation, Volpe Center

8:25 am – 8:50 am

FE03

Environmental Considerations, Noise Analysis, and Best Management Practices for Drone Package Deliveries in the U.S.

Missi Shumer, HMMH

8:50 am – 9:15 am

FE14

MARINER: Development and Application of a Shipping Emissions Estimation Program

Fiona Jiang, Ramboll

9:15 am – 9:40 am

FE05

Improvement in Spatial Allocation of Ship Emissions and its Impact on CMAQ PM_{2.5} Simulation Results

Young Sunwoo, Konkuk University

9:40 am – 10:05 am

FE02

Studies on Dust Resuspension from Stockpiles using a Mechanistic Approach

Umangi Mehta, Indian Institute of Technology, Bombay

10:05 am – 10:30 am

FE24

Zero-Emission Railyard (ZERY) Assessment Framework

Anjuliee M. Mittelman, Volpe National Transportation Systems Center, Cambridge, MA

10:30 am – 10:45 am

Networking Break and Display Viewing

Nueces B and Foyer

Session 4: Measurement of Pollutants in the Vicinity of Freight Facilities (Part 1)

Session Chair: Robert Mentzer, HMMH

10:45 am – 11:10 am

FE04

How Ports Can Use Continuous Noise, Particulates and Gas Monitoring to Help Manage and Control Their Environmental Impacts from Freight and Port Operations

Will Averdieck, Sonitus Systems Ltd.

11:10 am – 11:35 am

FE17

Real-Time Monitoring of Shipping Emissions: A Case Study from the Balearic Islands

Kathleen Masse, APEX Instruments

11:35 am – 12:00 am

FE01

Air Pollutant Emission Measurements for Vessels at Berth and During Dock Loading and Unloading Operations

David Ramirez, Texas A&M University – Kingsville

12:00 pm – 1:00 pm

Lunch

Nueces B

CONFERENCE PROGRAM

Technical Agenda – Tuesday, October 1, con't.

Session 5: Measurement of Pollutants in the Vicinity of Freight Facilities (Part 2)

Session Chair: Brian Bunger, Holland & Knight

1:00 pm – 1:25 pm

FE06

Rapid Detection by SIFT-MS of Toxic Inorganic and Organic Compounds Relevant to Worker Safety in the Shipping Industry

Nathan Hoppens, Syft Technologies

1:25 pm – 1:50 pm

FE15

Determining the Elemental and Chemical Composition of Ambient Particulate from a Port City (Auckland, New Zealand)

Hamesh Patel, Mote

1:50 pm – 2:15 pm

FE08

Prescott Greening: Mitigating Particulate Pollution with Green Infrastructure

Merissa MacDonald, Hyphae Desing Lab

2:15 pm – 2:40 pm

FE25

Louisville International Airport Proposed Aircraft Maintenance Facility Ground Noise Study

Robert Mentzer, HMMH

2:40 pm – 3:05 pm

FE07

Best Practices for Container Port Air Emission Inventories

Leah Blinn, Civil & Environmental Consultants, Inc.

3:05 pm – 3:20 pm

Networking Break and Display Viewing

Nueces B and Foyer

Session 6: Greening of Ports

Session Chair: Robert Mentzer, HMMH

3:20 pm – 3:45 pm

FE22

Electric Conversion Case Studies and a Framework for Fleet Turnover

McKenzie Ward, Port of Corpus Christi

3:45 pm – 4:10 pm

FE10

Implementing Battery Electric Locomotive Project in Port of Baltimore

Rebecca Hensley, CSX Transportation

4:10 pm – 4:35 pm

FE21

Planning for Sustainability with Environmental Precepts and an Environmental Sustainability Action Plan

Sarah Garza, Port of Corpus Christi

4:35 pm – 5:00 pm

FE20

Developing a Climate-Related Baseline – Best Practices and Methodologies

Miranda De La Garza, Port of Corpus Christi

5:00 pm – 5:30 pm

Conference Wrap-Up and Future Planning Discussion

Conference organizers, presenters, and attendees will discuss topics presented at this conference and future issues.

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.