



2020 4C HSE Conference Refining Agenda

Table of Contents

Table of Contents	1
Wednesday February 19: Training	2
Thursday February 20: Breakout Presentations & Training	3
Friday February 21: Training	8
Saturday February 22: Training	9
Health & Safety – Breakout Presentations – Thursday February 20th, 2020	10
Legal – Thursday February 20, 2020	12
PFAS Workshop – Thursday February 20, 2020	13
Security, Emergency Management, and UAVs – Room 615 – Thursday February 20	14
Security Training Classes – Friday February 21, 2020	16
Emergency Management Breakout Presentations Room 615 – Friday, February 19	17

2020 4C HSE Conference Refining Agenda

Wednesday February 19: Training

Consider flying in on Tuesday if you would like to attend these courses.

- **LDAR - Beyond Basics and Underneath the Rules - Brian Whitley, EMSI**
 - 1:00 pm – Room 400
- **FAA Part 107 - Drone Certification - Uzkar Ibrahim, 4C Marketplace**
 - 1:00 pm – Room 402
- **Continuous Emissions Monitoring Systems (CEMS) Fundamentals - Tim Kuiken, M&C TechGroup, Brian Fowler, ESC, Paula Metz, Alliance Source Testing**
 - 1:00 pm – Room 404
- **Flares for Experts Class #1: Flares Essentials - Troy Boley, Herman Holm and, Spectrum Environmental Solutions**
 - 8:00 am – Room 406
- **Flare for Experts Class #2: Flare Flow Mass and Volume Measurement – Dr. Lei Sui, Baker Hughes, Donn Williams, Optical Scientific, Meha Jha, Emerson Automation Solutions**
 - 1:00 pm – Room 406
- **LDAR Auditing - Graham "Buzz" Harris & Mark Kelsey, Tricord Consulting**
 - 8:00 am – Room 408
- **Mass Spec Gas Analyzers: Operation and Maintenance - Chuck DeCarlo, Jim Brenner & Haley Gabor, Extrel**
 - 1:00 pm – Room 408
- **Stack Testing Essentials - Paula Metz & Jordan Laster, Alliance Source Testing**
 - 8:00 am – Room 410
- **Practical Dispersion Modeling - Robert Opiela, Naviknow**
 - 1:00 pm – Room 410
- **Liquids Fuels Terminals – Basics of Environmental Permitting and Compliance - Al Reich, Corey Mead, and Tony Shoberg, Barr Engineering**
 - 8:00 am – Room 412
- **Intermediate Air Permitting - Johnny Vermillion, Leah Pulin, Aaron Hebert & Robert Osborn , Spirit Environmental**
 - 1:00 pm – Room 412
- **Quantitative Optical Gas Imaging - Yousheng Zeng & Jon Morris, Providence Photonics**
 - 1:00 pm – Room 414
- **Optical Fenceline Monitoring - Troy Boley - Spectrum Environmental Solutions, LLC**
 - 1:00 pm – Room 417B

2020 4C HSE Conference Refining Agenda



Thursday February 20: Breakout Presentations & Training

Thursday is Presentation day, Refining and Chemical Tracks have presentations from 10:30am to 5:00pm

- **Air Permitting – Room 412**

- 10:30 am – The Brave New World of Renewable Fuels Projects – A Permitting Perspective - Bart Leininger, P.E. - Ashworth Leininger Group (ALG)
- 11:00 am – Upcoming MACT Residual Risk and Technology Reviews – What to Expect and Lessons Learned from the Refinery Sector Rule (RSR) - Rose E. Waypa - Barr Engineering Company
- 11:30 am – Calculating Project Increases - Johnny Vermillion - Spirit Environmental, LLC
- 12:00 pm – Lunch Break in the Exhibit Hall
- 1:00 pm – Recent TCEQ Permitting and Modeling Changes – Lessons Learned and Future Strategies - Frank Dougherty - ALL4 Inc.
- 1:30 pm – Air Quality Tools for the 21st Century - Robert Opiela - NaviKnow LLC
- 2:00 pm – Photochemical Modeling for Ozone Inter-Precursor Trading - Qi Zhang - GHD Services
- 2:30 pm – New Building Downwash Options in AERMOD - Sergio Guerra - GHD Services
- 3:00 pm – Break to Enjoy the Exhibit Hall Refreshments
- 3:30 pm – EPA NSR Reforms: How to Capitalize Now and Later - Kristin Gordon - ALL4 Inc.

- **Best Management Practices – Room 417A**

- 10:30 am – Process Burner Flames: The Good, the Bad, and The Ugly - Charles Baukal, Bill Weimer, & John McGuire - John Zink Company, LLC
- 11:00 am – Integrating Speciation Data For Chemical Plants and Refineries - John Beath - John Beath Environmental, LLC
- 11:30 am – Barr will demonstrate its free Microsoft Excel spreadsheet tools for storage tank emissions, LDAR program review and compliance reporting, and MACT CC flare NHVcz standards - Corey Mead - Barr Engineering Company
- 12:00 pm – How Do You Feel About Storing Your Emissions Data in the Cloud? - Matthew Radigan - REGS, LLC
- 12:30 pm – Lunch Break in the Exhibit Hall
- 1:30 pm – I got 99 problems... now what? Best Practices for Addressing Audit Findings - Courtney Edge - Trinity Consultants
- 2:00 pm – Utilizing Vapor Lock Technology for Tank Degassing and Tank Vent Management versus Thermal Destruction or Activated Carbon - Jim Woodard & Jeff St. Amant - Vapor Point, LLC
- 2:30 pm – Conforming to ASTM-D7036: Self-Declaration vs. Third-Party Accreditation - David Fricker - A2LA
- 3:00 pm – Break to Enjoy the Exhibit Hall Refreshments

2020 4C HSE Conference Refining Agenda

- 3:30 pm – Utilizing Temporary Control Systems to Meet Recent EPA MACT Subpart CC and to Eliminate Flare Gas Recovery Bottlenecks During Maintenance and Turn-Around Activities - Jim Woodard & Sean Kirkpatrick - Vapor Point, LLC
- **BWON – Room 402**
 - 10:30 am – On-Going BWON Compliance Concerns - Ken Garing - Ken Garing & Associates
 - 11:00 am – A Wastewater Solution for an Air Pollution Problem - Todd Lusk - SLR Consulting
 - 11:30 am – BWON Auditing - Bart Leininger - Ashworth Leininger Group (ALG)
 - 12:00 pm – BWON Masterclass - Steve Probst - 4C Marketplace
 - 12:30 pm – Lunch Break in the Exhibit Hall
 - 1:30 pm – BWON Compliance Sampling - Chad Vogege - Think Environmental
 - 2:00 pm – Downstream Confirmation of Benzene Loading - Kati Petersburg - Trinity Consultants
 - 2:30 pm – Break to Enjoy the Exhibit Hall Refreshments
 - 3:00 pm – VAPORLOCK™ SCRUBBER TECHNOLOGY REDUCING CARBON USAGE FOR BWON COMPLIANCE - Jim Woodard & Jeff St. Amant - Vapor Point, LLC
 - 3:30 pm – BWON Compliance Post Consent Decree Era - Kati Petersburg - Trinity Consultants
- **CEMS – Room 404**
 - 10:30 am – Live Demo: Improving Sample Probe, Chiller and Filter Performance - Donny Klotz - M&C Tech Group N.A.
 - 11:00 am – Common CEMS RATA Failures and Risks - Paula Metz - Alliance Source Testing
 - 11:30 am – CEMS Lessons Learned - Ty Smith - CEMTEK KVB-Enertec
 - 12:00 pm – Lunch Break in the Exhibit Hall
 - 1:00 pm – Reporting of Component and System IDs During Missing Data Periods - Brian Fowler - Environmental Systems Corporation (ESC)
 - 1:30 pm – Common CEMS Program Audit Findings - Eric Wiley - VIM Technologies
 - 2:00 pm – Break to Enjoy the Exhibit Hall Refreshments
 - 2:30 pm – Simplifying CEM Reporting: The Revolution in Data Acquisition & Handling - Brian Fowler - Environmental Systems Corporation (ESC)
 - 3:00 pm – Particulate Testing: Modern Solutions to Modern Limits. - Justin Sullivan - Alliance Source Testing
 - 3:30 pm – Comprehensive CEMS Stack 102: Process Optimization - Dean Kotecki – Envea
- **Emerging Technologies – Room 417B**
 - 10:30 am – How Digital Transformation Can Impact Compliance for Environmental and Safety Regulation – Marcelo Carugo, Marcio Donnangelo & Steve Probst - Emerson Automation Solutions & 4C Marketplace

2020 4C HSE Conference Refining Agenda



- 11:00 am – Meeting Flare Emissions Regulations with BTU Measurement - Tom Watson - AMETEK Process Instruments
- 11:30 am – New Absorption Technology for VOC Capture - Ray Ozdemir & Jeff St. Amant - Framergy Inc. & Vapor Point, LLC
- 12:00 pm – Lunch Break in the Exhibit Hall
- 1:00 pm – New Absorption Technology for VOC Capture - Ray Ozdemir & Jeff St. Amant - Framergy Inc. & Vapor Point, LLC
- 1:30 pm – Digital Camera Visible Emissions Method (Alternative Method 082) in lieu of Method 9 for Visible Emissions - Shawn Dolan - Virtual Technology LLC
- 2:00 pm – A New Way to Measure Toxic Gases in Upstream O&G with Wireless and IIoT - Josh Hernandez - Emerson Automation Solutions
- 2:30 pm – Break to Enjoy the Exhibit Hall Refreshments
- 3:00 pm – Advanced Technology for Real Time Fence-Line Perimeter Monitoring. - Gilad Shpitzer - Atmosfir Optics Ltd.
- 3:30 pm – Advanced Data Collection Technologies for Rugged Field Work - TBD - Juniper Systems
- **Fenceline Monitoring – Room 415B**
 - 10:30 am – Implementation of California's Refinery Fenceline Monitoring Rule - Troy Boley - Spectrum Environmental Solutions, LLC
 - 11:00 am – New Applications in Fenceline Monitoring - Jason Robles - CAMSCO
 - 11:30 am – Avoiding Under-Reporting and Over-Reporting of Fenceline Plant Emissions - James Shinkle - Optical Scientific, Inc. (OSi)
 - 12:00 pm – Lunch Break in the Exhibit Hall
 - 1:00 pm – California Rule 1180 Fence Line Monitoring Regulation: Lessons Learned and planning for Regulatory Compliance - Gilad Shpitzer - Atmosfir Optics Ltd.
 - 1:30 pm – New and Emerging Fenceline Monitoring Technologies - Peter Zemek - Montrose Environmental Group, Inc.
 - 2:00 pm – SPOD: Continuous VOC Monitoring for Targeted Grab Sample Acquisition - Jacob Melby - SENSIT Technologies
 - 2:30 pm – Break to Enjoy the Exhibit Hall Refreshments
 - 3:00 pm – Portable GC for Fenceline Monitoring - Chris Schepcoff - SGS
 - 3:30 pm – Advanced Data Collection Technologies for Rugged Field Work - TBD - Juniper Systems
- **Flare Instrumentation & Analyzers – Room 406**
 - 10:30 am – Flare Instrumentation – Minimum “Expectations” - Derek Stuck - Spectrum Environmental Solutions, LLC
 - 11:00 am – Flare Guardian Project - Clayton Francis - Zeeco, Inc.
 - 11:30 am – Meeting Flare Emissions Regulations with BTU Measurement - Tom Watson - AMETEK Process Instruments

2020 4C HSE Conference Refining Agenda



- 12:00 pm – Optical Flow Sensors for Environmental Compliance and Process Control -
Donn Williams - Optical Scientific, Inc. (OSi)
- 12:30 pm – Lunch Break in the Exhibit Hall
- 1:30 pm – Flare System Control and Optimization at Refineries and Chemical Plants - Dr.
Lei Sui - Baker Hughes
- 2:00 pm – Measurement & Speciation Using Mass Spectroscopy Flare Gas Composition -
Chuck de Carlo - Extrel Core Mass Spectrometers
- 2:30 pm – Flare Gas Measurement Lessons Learned from Refineries & Future of Chemical
Plants - Arnold Griswald - Fluenta
- 3:00 pm – Break to Enjoy the Exhibit Hall Refreshments
- 3:30 pm – Does CZNHV Track Flare Performance? - Yousheng Zeng - Providence
Photonics, LLC
- **Flares for Regulatory Compliance – Room 406**
 - 10:30 am – New Flare Requirements within the Ethylene, MON, and OLD MACTs -
Herman Holm - Spectrum Environmental Solutions, LLC
 - 11:00 am – ELIMINATING H₂S & SO₂ MAINTENANCE RELATED EMISSIONS AT
SRU SULFUR SUMPS, COKER AND OTHER SULFUR HANDLING UNITS OF
REFINERIES - Jim Woodard & Sean Kirkpatrick - Vapor Point, LLC
 - 11:30 am – Natural Draft Low-Emissions Combustors - TBD - Ashcor & Clearsign
Combustion
 - 12:00 pm – “4G” Combustion Technology for Flares - Jason Voskuhl & Kurt Kraus -
Honeywell UOP Callidus
 - 12:30 pm – Lunch Break in the Exhibit Hall
 - 1:30 pm – Looking Down the Road: The Future of Ground Flares and AMELs - Troy Boley
- Spectrum Environmental Solutions, LLC
 - 2:00 pm – Ultra-Low Steam Consumption, High Capacity Smokeless Flare - Clayton
Francis - Zeeco, Inc.
 - 2:30 pm – Break to Enjoy the Exhibit Hall Refreshments
 - 3:00 pm – PRV Monitoring Systems - Marcelo D. - Emerson Automation Solutions
 - 3:30 pm – Midas Meter - TBD - Score Valves
- **Health & Safety – Room 416B**
 - 10:30 am – 11:30 am – Tiny Habits® and Behavior Design to Transform the EH&S
Workspace - Shirley Rivera - Resource Catalysts (R|CAT)
 - 11:30 am – Break for Lunch in the Exhibit Hall
 - 12:30 pm – 1:30 pm – Same Road; Different Trees - Daniel Boreman - Emission Monitoring
Service, Inc.
 - 1:00 pm – Safety's Competitive Advantage and the Future of the Safety, Health, and
Environmental Profession - Colin Brown - Board of Certified Safety Professionals
 - 12:30 pm – Lunch Break in the Exhibit Hall

2020 4C HSE Conference Refining Agenda

- 1:30 pm – Looking Down the Road: The Future of Ground Flares and AMELs - Troy Boley - Spectrum Environmental Solutions, LLC
- 2:00 pm – Improving Safety with Wireless Safety Shower Monitoring - Marcio Donnangelo - Emerson Automation Solutions
- 2:30 pm – Break to Enjoy the Exhibit Hall Refreshments
- 3:00 pm – 4:00 pm – Process Safety - Ric Hartung - Process & Safety Solutions LLC
- **LDAR – Room 400**
 - 10:30 am – The Evolution of Optical Gas Imaging - Craig O’Neill & Rob Raymer - FLIR Systems
 - 11:00 am – Advantages of Hot-Filter Cooled OGI technology for Leak Detection and Quantification - Ram Hashmonay - Opgal
 - 11:30 am – Turnaround LDAR Best Management Practices - Jeff Diehl - Think Environmental
 - 12:00 pm – EPA AWP Update - Karen Marsh - Environmental Protection Agency
 - 12:30 pm – Lunch Break in the Exhibit Hall
 - 1:30 pm – The Forecast for Your LDAR Program Looks Cloudy, and Why That’s a Good Thing - Christopher Tucker - InspectionLogic Corporation
 - 2:00 pm – The Transformation of LDAR: Predictive Leak Management Software - Brian Whitley - Emission Monitoring Service, Inc. (EMSI)
 - 2:30 pm – Leveraging Digital Twin technology to reduce inspection-related defects and optimize your LDAR program. - Boun Sananikone & David Tullos - Bureau Veritas
 - 3:00 pm – Opening up the opportunities for performance verification and reliability enhancement of valves. - Dave Anderson - Score Valves
 - 3:30 pm – Break to Enjoy the Exhibit Hall Refreshments
 - 4:00 pm – A New Era of LDAR in Texas: Industries Can Now Use OGI in Lieu of Method 21 to Meet “28” Series LDAR Requirements - Brandon Mogan - Tora Consulting, LLC
 - 4:30 pm – Enhanced LDAR Training; An Unconventional Approach to Training LDAR Technicians - Todd Morrison - Insight Environmental, Inc.
- **Legal – Room 410**
 - 10:30 am – It's Not Dead, It's Mostly Dead - CD Termination - Suzanne Murray - Haynes and Boone, LLP
 - 11:00 am – Are You Ready? Contingency Planning for the RMP Amendments and Litigation - Justin Savage & Simone Jones - Sidley Austin, LLP
 - 11:30 am – Downstream Environmental Enforcement Updates - Patrick Traylor - Vinson & Elkins
 - 12:00 pm – Lunch Break in the Exhibit Hall
 - 12:30 pm – Benzene Fence-line Emissions at Refineries: What Legal Standard Applies? - Simone Jones and Marshall Morales - Vinson & Elkins
 - 1:30 pm – Federal, State and Local Enforcement - James Smith - Crain, Caton & James
 - 2:00 pm – Spectrum Environmental Solutions, LLC

2020 4C HSE Conference Refining Agenda



Friday February 21: Training

- **LDAR - Beyond Basics and Underneath the Rules - Brian Whitley, EMSI**
 - 8:00 am – Room 400
- **PSM Excellence - Ric Hartung - Process & Safety Solutions**
 - 8:00 am – Room 402
- **Continuous Emissions Monitoring Systems (CEMS) For Experts - Tim Kuiken, M&C TechGroup, Brian Fowler, ESC, Paula Metz, Alliance Source Testing**
 - 8:00 am – Room 404
- **Fenceline Monitoring: Training & Updates – CAMSCO**
 - 8:00 am – Room 404
- **Flare for Experts Class #3: Flare Composition/Btu Measurement - Chuck DeCarlo, Extrel, Robert Paddison, Thermo Fisher Scientific, Kevin Lingard, Spectrum Environmental Solutions**
 - 8:00 am – Room 406
- **Flare for Experts Class #4: Flare Control – Dr. Lei Sui, Panametrics**
 - 1:00 pm – Room 406
- **Operations Troubleshooting of Biological Treatment in Refineries and Petro Chemical Facilities - D'Ann Wilkins & Todd Lusk, SLR Consulting**
 - 8:00 am – Room 408
- **Essentials of Air Permitting & Compliance for Chemical Plants**
- **Advanced Stack Testing - Paula Metz & Jordan Laster, Alliance Source Testing**
 - 1:00 pm – Room 410
- **Air Permitting for Experts - Johnny Vermillion, Leah Pulin, Aaron Hebert, Robert Osborn & Scott Hyden, Spirit Environmental**
 - 8:00 am – Room 412
- **EPCRA/TRI Training - Bob LaRosa, Archer Inc**
 - 1:00 pm – Room 412
- **Workshop on Best Practices in Valve Condition and Performance Monitoring - Score Valves - Dave Anderson**
 - 8:00 am – Room 414
- **BWON Auditing for Experts - Ken Garing, Steve Probst, 4C Marketplace, Cal Niss, Trihydro**
 - 8:00 am – Room 416A
- **Tanks Essentials - Rob Ferry - Trinity Consultants**
 - 8:00 am – Room 416B
- **SPCC Training - Bison Engineering**
 - 8:00 am – Room 417A
- **Stormwater Pollution Prevention Plan Training - SLR Consulting**
 - 1:00 pm – Room 417A

2020 4C HSE Conference Refining Agenda

- **Refinery Fenceline Monitoring Root Cause Analysis: How To Conduct and Then Develop An Effective Corrective Action Plan - Robert Opiela – NaviKnow, LLC**
 - 8:00 am – Room 417B
 - **Microsoft Excel Best Practices for Plant Professionals (and Others) – John Beath Environmental**
 - 10:00 am – Room 417B
 - **Drone 3D Modeling, Mapping and Photogrammetry Course Utilizing Pix4DMapper - Kwasi Perry, UAV Survey Incorporated**
 - 1:00 pm – Room 417B
 - **US EPA Alternative Method 082 (Visible Emissions Management) Certification - Shawn Dolan, Virtual Technology, LLC**
 - 1:00 pm – Room 602
-

Saturday February 22: Training

- **HSE Leadership Excellence – Steve Probst – 4C Marketplace & Conference**
 - 9:00 am – 1:00 pm – Room 602

2020 4C HSE Conference Refining Agenda

Health & Safety – Breakout Presentations – Thursday February 20th, 2020

- **10:30am – 11:30 am**
- **Tiny Habits® and Behavior Design to Transform the EH&S Workspace - Shirley Rivera - Resource Catalysts (R|CAT)**
 - A first-of-its-kind approach, Shirley brings Tiny Habits and Behavior Design to complement existing EH&S practices - think compliance management, training, refreshers, and workspace culture. Behavior Design, a field of study by Stanford Behavior Scientist, BJ Fogg, PhD., is based on a set of models and methods to design solutions that can influence behaviors. Behavior Design shares a similar context - environment, interactions, choice - with behavior-based safety programs, procedures development, and training endeavors. Attendees of this session will learn the Fogg Method and Tiny Habits, which simplifies habit formation. They will self-design three tiny habits that match one's environment to practice and discover opportunities to apply the method in their workspace and personal lives
- **12:30 – 1:30 pm**
- **Same Road; Different Trees - Daniel Boreman - Emission Monitoring Service, Inc. (EMSI)**
 - In an environment where so much emphasis is placed on safety, it is easy for workers to lose sight of who is truly responsible for individual safety. Complacency is arguably one of the biggest hazards faced by LDAR monitoring technicians in the field environment. This presentation highlights just how easy it is, even with the best intentions, to become complacent and offers some techniques to get workers re-focused and combat complacency.
- **1:30 pm**
- **Safety's Competitive Advantage and the Future of the Safety, Health, and Environmental Profession - Colin Brown - Board of Certified Safety Professionals**
 - Compliance with state and federal regulations is the absolute minimum and does not ensure the safety and health of workers. Safety and health in today's dynamic industry space must no longer be defined as the absence of harm and death. How do you turn safety into a competitive advantage, and what does the future hold for the profession entrusted with employee and customer well-being? This presentation highlights how professional development through accredited certification can change organizational culture and drive results through SH&E leadership. Upon completion, the participant will be able to:
 - **Describe why compliance is not enough to reduce injuries and loss in construction.**
 - **Recognize at least three ways that safety makes a company competitive.**
 - **Leverage training and certification to drive higher levels of safety and productivity.**
 - **Show how H&S is important not only for workers but also for front-line supervisors and executives.**
- **Improving Safety with Wireless Safety Shower Monitoring - Marcio Donnangelo - Emerson Automation Solutions**

2020 4C HSE Conference Refining Agenda



- Think you're covered? Radios aren't always enough. Find out how to improve safety by monitoring safety shower and eye-wash stations, as well as comply with OSHA without incurring complex installation and deployment costs. A safety shower system integration using wireless technology is not only cost-effective but can provide instant alerts and quick and effective response time.
- **3:00 pm**
- **Process Safety - Ric Hartung - Process & Safety Solutions LLC**

2020 4C HSE Conference Refining Agenda

Legal – Thursday February 20, 2020

- **10:30 am**
- **It's Not Dead, It's Mostly Dead - CD Termination - Suzanne Murray - Haynes and Boone, LLP**
 - What is the process for terminating a consent decree with EPA and the Department of Justice? Is the process improved in this Administration or are terminations still stalled by disagreements over terms and what does "done" mean? This presentation will walk through the current overview of PRI CDs that have been terminated and lessons learned for those still open and for future agreements.
- **11:00 am**
- **Are You Ready? Contingency Planning for the RMP Amendments and Litigation - Justin Savage & Simone Jones - Sidley Austin, LLP**
 - The RMP Amendments impose several burdensome obligations, including reporting up to the Board of Directors. EPA's attempt to repeal or narrow the amendments will likely be tied up in litigation in the DC Circuit, but in the meantime, compliance deadlines are soon approaching. In the midst of this uncertainty, this session will discuss the DC Circuit litigation, enforcement trends, and planning for the amendments.
- **11:30 am**
- **Downstream Environmental Enforcement Updates - Patrick Traylor - Vinson & Elkins**
 - Abstract Coming Soon.
- **1:30 pm**
- **Benzene Fence-line Emissions at Refineries: What Legal Standard Applies? - Simone Jones and Marshall Morales - Vinson & Elkins**
 - With refinery fence-line data now publicly available, EPA, states and private parties appear to be aggressively mining the data to determine whether any concerns exist. In particular, EPA appears to be taking the position that 9 mg/yr standard is only the starting point for analysis and that other agencies' legal standards should inform risk and compliance. What standard should refineries aim to hit with benzene emissions?
- **2:00 pm**
- **Federal, State and Local Enforcement - James Smith - Crain, Caton & James**
 - The presentation will highlight recent federal environmental enforcement trends and update state and local enforcement developments.

2020 4C HSE Conference Refining Agenda



PFAS Workshop – Thursday February 20, 2020

-
- **10:30 am**
 - **Growing Regulatory Concerns for \$1,000 – Man-made Chemicals widely used in Fire-Fighting Foam: “What are PFAS?” - Tiffany Thomas – EnSafe**
- **11:00 am**
 - **Preventing Contamination During Field Sampling - Dennis Leeke - Pace Analytical**
- **11:30 am**
 - **Lab Test Methodology for PFAS Analysis - Martha Maier - Vista Analytical Laboratory**
- **1:00 pm**
 - **Innovative Sampling and Analysis Techniques for Stack Sampling of PFAS Compounds in Air Emissions from Stationary Sources - Wesley Fritz - Weston Solutions, Inc.**
- **1:30 pm**
 - **You've Got PFAS. How to Prepare, Dispose and Respond. - Ward Swanson - Barr Engineering Company**
- **2:00 pm**
 - **A Practitioner’s Guide to PFAS – Lessons learned and best practices to ensure project efficiency and desired outcomes - Tiffany Thomas – EnSafe**
- **3:00 pm**
 - **Identifying Potential Off-site PFAS Sources to Limit Liability at Fuel & Petrochemical Facilities - Montrose Environmental Group**
- **3:30 pm**
 - **New Technology with the Potential to eliminate PFAs and PFOAs from water sources - Ray Ozdemir & Jeff St. Amant - Framergy Inc. & Vapor Point, LLC**

2020 4C HSE Conference Refining Agenda

Security, Emergency Management, and UAVs – Room 615 – Thursday February 20

- **10:00 AM - 10:30 AM**
- **Where do Security, Environmental and Safety Overlap? – Tony Robledo - US EPA**
 - Drones equipped with Forward Looking Infrared Camera payloads perform critical security, environmental and safety missions. The camera may detect a flange leak thereby preventing a flange fire or worse. The drone capabilities enhance loss mitigation (theft prevention) and provide situational awareness during emergency response. The RMP regulation touches on many of these elements. Where does the general duty clause begin and end? How will time alter our view of the boundary of the clause? Does the increasing availability of satellite images and google video impact the boundaries of the clause or the public’s expectations regarding reasonable security measures? Aspects of risk management in regard to the current environmental impacts and facility regulatory requirements as outlined in the Clean Air Act Sections 112(r)(1) AND 112(r)(7) and compliance with 40 CFR Part 68 - Chemical Accident Prevention Provisions will be covered by Tony Robledo of the US EPA. The presentation includes a short case study regarding an explosion at a Natural Gas Plant.
- **10:30 AM – 11:15 AM**
- **DHS CISA Stakeholder Engagement Strategy – Regional Service Delivery Model – Michael Dailey, Stakeholder Engagement Branch Chief, Region VI**
 - Regional Offices could identify organizations that have not traditionally served as members of CISA-led sectors to further inform risk mitigation solutions by focusing on sector-specific regional issues. The resulting regional-level networks would directly expand CISA's reach into multiple stakeholder segments. Creating a “one-stop shop” at the regional level for issues associated with CISA-led sectors would significantly enhance customer experience. Regional-level collaboration mechanisms (discussion forums, roundtables, and workshops) would enhance knowledge transfer among public and private sector stakeholders through discussions tailored to the regional landscape.
- **11:15 AM - 12:00 AM**
- **DHS CISA Cybersecurity – Protecting Critical Infrastructure**
 - Cyber threats collectively now exceed the danger of physical attacks against us. This is a major sea change for my department and for our country’s security.
- **12:00 PM - 1:00 PM Lunch Break in the Exhibit Hall**
- **1:00 PM – 2:00 PM**
- **UAS threat to Critical Infrastructure, George Reeves, DHS CISA R6 Cybersecurity Advisor**
 - After years of close coordination, the Federal Aviation Administration (FAA) and Departments of Defense, Energy, Justice, and Homeland Security (DOD, DOE, DOJ, and DHS) obtained congressional relief in order to test, operate, and evaluate systems that detect and mitigate unmanned aircraft systems (UAS) in the United States. The National Defense Authorization Acts of 2017 and 2018 granted the DOD and DOE counter-UAS (C-UAS) authorities in 2018 the FAA Reauthorization Act provided DHS and DOJ with their

2020 4C HSE Conference Refining Agenda



authorities. FAA also received authority in the FAA Reauthorization Act of 2018 to employ CUAS, for test and evaluation. The Act became Pub. L. 115-254 and amends Titles 46 (Domestic Security), 14 (United States Coast Guard), and 49 (Transportation) Preventing Emerging Threats Act of 2018 (“the Act”) authorizing the DHS and DOJ to engage in certain C-UAS activities, notwithstanding provisions of Title 18 and Title 49 that prohibit the interception of communications and interference with aircraft. The Act authorizes DHS and DOJ to conduct C-UAS activities against unmanned aircraft systems (UAS) that poses a credible threat to the safety or security of a “covered facility or asset,” as defined by the Act.

- **2:00 PM - 2:30 PM**
- **AFPM Security – UAS Toolkit, Regulatory Advocacy Updates – Jeff Gunnulfsen, AFPM, Senior Director**
- **2:30 PM - 3:30 PM**
- **Counter UAS Strategies: Prevention, Detection, Reponse – Uzi Ibrahim, 4C Marketplace, Michael Quiroga & Michael Lichko, Asylon**
 - A roundtable giving an overview of Counter UAS, Regulatory Framework, Presentation/Response Planning and a Primer on Radar and Radio Frequency Detection Systems Strategies
 - **Counter UAS Discussion**
 - An introduction into what Counter UAS means, the different components of it as well as the difference between detection and mitigation
 - **Prevention:** Doing a Threat Assessment of your Facility’s Airspace
 - **Detection:** Various Systems and how to use them
 - **Observation Without Limits**
 - An introduction in Ground and Aerial Radars
 - **Aerial Armor and the Benefits**
 - An introduction in RF Based Detection
- **3:30 PM - 4:00 PM Break to Enjoy the Exhibit Hall Refreshments**
- **4:00 PM – 5:00 PM**
- **Autonomous Security Programs**
- **Building Autonomous Infrastructure**
 - **The Crawl, Walk, Run progression from zero to Autonomous UAVs flying around your facility**
 - **People**
 - **Training & Certifications**
 - **Programs**
 - **Asigning Roles and Responsibilities**
 - **Policy**
 - **Interfacing with the FAA**
-

2020 4C HSE Conference Refining Agenda



- **Use Case for Automation - Uzi Ibrahim, 4C Marketplace, Michael Quiroga & Michael Lichko, Asylon**
 - **An introduction into Autonomous Security Design, and the potential Environmental benefits of Autonomous Infrastructure. Use Cases to be discussed are as follows:**
 - Security
 - Emergency Management
 - Environmental
 - Industrial Hygiene and Liability Mitigation

Security Training Classes – Friday February 21, 2020

- **Room 615 8:00 AM – 10:00 AM**
- **CFATS 101**
- **CFATS 101 - CFATS is the Nation's first regulatory program focused specifically on security at high-risk chemical facilities. The Cybersecurity and Infrastructure Security Agency (CISA) manages the CFATS program by working with facilities to ensure they have security measures in place to reduce the risks associated with certain hazardous chemicals, and prevent them from being exploited in a terrorist attack**
 - Personnel Surety Program
 - Understanding Risk-Based Performance Standards (RBPS) 12 – Personnel Surety requires facilities to perform background checks on affected individuals (facility personnel and unescorted visitors) which includes checks to verify:
 - Identity
 - Criminal History
 - Legal Authorization to Work
 - Steven Shedd, DHS Chief Regulatory Compliance
 - Shawn Perceful, DHS Senior chemical Security Inspector
 - Ann Ratliff, DHS Regulatory Analyst
- **Room 615 10:00 – 11:00 AM**
- **ACTIVE SHOOTER Training - Mitigating the Active Assailant – DHS CISA, Region 6**
- **Active shooter incidents are often unpredictable and evolve quickly. In the midst of the chaos, anyone can play an integral role in mitigating the impacts of an active shooter incident. DHS aims to enhance preparedness through a "whole community" approach by providing products, tools, and resources to help you prepare for and respond to an active shooter incident.**
- **Topics Covered:**
 - Active Shooter Preparedness
 - Counter-Improvised Explosive Device
 - Insider Threat
 - Presenters:
 - Active Shooter Preparedness (PSA Lee Otten)

2020 4C HSE Conference Refining Agenda



- Counter-Improvised Explosive Device (OBP, Doug Delancey)
- Insider Threat (Susan Schneider, Chief, CISA Emerging Threats Branch)

Emergency Management Breakout Presentations Room 615 – Friday, February 19

- 11:00 AM – 12:00 PM
 - Crisis Response vs. Incident Management
- 12:00 PM - 1:00 PM Lunch
- 1:00 PM - 1:30 PM
 - Developing Unified Command
- 1:30 PM – 2:00 PM
 - Lessons Learned in Emergency Response Exercise Planning
- 2:00 PM - 2:30 PM
 - UAV's for Emergency Response; Being Prepared for the Unthinkable – Refinery Response using UAVs
- 2:30 PM - 3:00 PM
 - An Operator's Perspective: In-House Tools and UAS for Initial Response (Inland Pipeline Response)
- 4:00 PM – 4:30 PM
 - Community Outreach in Emergency Response