Agenda

Agenda at-a-glance

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|  | Day 1, Tuesday Nov 19 | |  | Day 2, Wednesday Nov 20 | |  | Day 3, Thursday Nov 21 | |
| 7:00 AM | Registration | 7:30 AM | Registration | 7:30 AM | Registration |
| 8:00 AM | Opening  Plenary Session | 8:00 AM | Opening  Concurrent Sessions | 8:00 AM | Opening  Concurrent Sessions |
| 11:50 AM | Lunch  70 min | 11:40 AM | Lunch  80 min | 12:30 PM | Adjourn |
| 5:25 PM | Adjourn | 5:30 PM | Adjourn |  |  |

Session Topic Guide

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| Beyond Water Infrastructure    H | Day 2, Concurrent Session 5 1:00 PM – 2:45 PM | York Room |
| Biological Agent Decontamination    B  De | Day 1, Concurrent Session 1 1:00 PM – 3:00 PM  Day 2, Concurrent Session 5 1:00 PM – 2:45 PM  Day 3, Concurrent Session 7 10:20 AM – 12:00 PM | Stratford Room |
| Biological Agent Sampling & Analysis Methods    B  S | Day 2, Concurrent Session 4 10:00 AM – 11:40 AM | York Room |
| Chemical Agent Research  C | Day 3, Concurrent Session 6 8:00 AM – 10:05 AM | York Room |
| Cross-Cutting Innovation    C  B  R | Day 1, Concurrent Session 2 3:25 PM – 5:25 PM | York Room |
| Fentanyl Detection & Cleanup    C  De | Day 2, Concurrent Session 3 8:00 AM – 9:40 AM | York Room |
| Public Engagement  L | Day 1, Concurrent Session 2 3:25 PM – 5:25 PM | Stratford Room |
| Radiological Agent Research  R | Day 3, Concurrent Session 7 10:20 AM – 12:00 PM | York Room |
| Regional, State, & Local Initiatives  L | Day 1, Concurrent Session 1 1:00 PM – 3:00 PM | York Room |
| Tech Café & Poster Session    C  B  R  H  W  De  Di  L | Day 2, Café and Poster Session 2:45 PM – 5:30 PM | York, Stratford, and Providence Rooms |
| Technology & Software Supporting Disaster Response  Di | Day 2, Concurrent Session 4 10:00 AM – 11:40 AM | Stratford Room |
| Waste Management  W | Day 3, Concurrent Session 6 8:00 AM – 10:05 AM | Stratford Room |
| Water Infrastructure Protection & Decontamination    H  De | Day 2, Concurrent Session 3 8:00 AM – 9:40 AM | Stratford Room |

DAY 1: TUESDAY, November 19, 2019

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| 7:00 am | Registration | |
| Plenary Session  York & Stratford Rooms  Session Chairs: Worth Calfee, Leroy Mickelsen, Lukas Oudejans, Ted Stanich, and Sarah Taft | *U.S. Environmental Protection Agency* | | |
| 8:00 am | Welcome  Timothy Boe, Conference Chair | U.S. Environmental Protection Agency | |
| 8:10 am | Introduction  Ted Stanich, Acting Associate Administrator | *U.S. Environmental Protection Agency*, Office of Homeland Security | |
| 8:25 am | **U.S. Biodefense Enterprise and National Biodefense Strategy**  Robert Kadlec, Assistant Secretary of Health and Human Services | U.S. Department of Health and Human Services | |
| 8:55 am | National Biodefense Strategy Calls for a Robust Decontamination Capability  Tonya Nichols | U.S. Environmental Protection Agency | |
| 9:25 AM | BREAK | |
| 9:50 AM | Coastal Operational Resiliency (AnCOR) Project  Dana Tulis | *U.S. Coast Guard* | |
| 10:20 AM | The Skripal Incident − Addressing the Decontamination Challenge  Norman Govan | *U.K. Defence Science and Technology Laboratory* | |
| 10:50 AM | Waste Management following the Novichok Incidents in the U.K.  Sara Casey | *U.K. Department for Environment, Food, and Rural Affairs* | |
| 11:20 AM | The California Camp Fire: EPA’s Response Efforts  Martin McComb | *U.S. Environmental Protection Agency* | |
| 11:50 AM | LUNCH | |
| Concurrent Sessions 1 | | |
|  | Regional, State, & Local Initiatives  York Room  Session Chairs:   * Gary Flory | *Virginia Department of Environmental Quality* * Viktoriya Plotkin | *U.S. Environmental Protection Agency* | Biological Agent Decontamination  Stratford Room  Session Chairs:   * Sanjiv Shah | *U.S. Environmental Protection Agency* * Worth Calfee | *U.S. Environmental Protection Agency* |
| 1:00 PM | Animal Carcass Disposal Following Hurricane Florence  John Howard, Joseph Hudyncia | North Carolina Department of Agriculture & Consumer Services | Evaluation of Three Devitalization Methods for Plant Origin Materials as Quarantine Treatment at U.S. Ports of Entry  Hong Chen | U.S. Department of Agriculture |
| 1:30 PM | Case Study: A Fentanyl Incident, Notification, Response, and Remediation. A Local Jurisdiction’s Perspective  Jason Doerflein | Marion County Public Health Department | Decontaminating Materials Contaminated with an Enveloped RNA Virus Surrogate for Influenza, Ebola, and Smallpox, and *Francisella* Vegetative Cells Using Hot Humid Air  Tony Buhr | Naval Surface Warfare Center Dahlgren Division |
| 2:00 PM | How S&T is Supporting the DHS Counterdrug Mission and Combating Opioid Smuggling  Rosanna Anderson | U.S. Department of Homeland Security | Development of a Dry Decontamination Method for Mass Casualty Events – The NIOSH DryCon System  Barbara Alexander | National Institute for Occupational Safety and Health |
| 2:30 PM | Teaming of Federal and Private Sector Capabilities on Highly Hazardous Chemical and Biological Agent Remediation Projects  Amy Dean | U.S. Army, Chemical Biological Center | Laboratory Decontamination Using Low-Concentration Hydrogen Peroxide  Leroy Mickelsen | U.S. Environmental Protection Agency |
| 3:00 PM | BREAK | |
| Concurrent Sessions 2 | | |
|  | Cross-Cutting Innovation  York Room  Session Chairs:   * Timothy Boe | *U.S. Environmental Protection Agency* * Paul Lemieux | *U.S. Environmental Protection Agency* | Public Engagement  Stratford Room  Session Chairs:   * Lahne Mattas-Curry | *U.S. Environmental Protection Agency* * Brittany Kiessling | *U.S. Environmental Protection Agency* |
| 3:25 PM | Will 2D Nanomaterials be the New Security Threat in the Next Decade?  Rouzbeh Tehrani | Temple University | Measuring Success Beyond Cleanup Levels in Environmental Decontamination  Keely Maxwell, Brittany Kiessling | U.S. Environmental Protection Agency |
| 3:55 PM | Recent Advances in Autonomous Radiation Survey and Sample Collection for SRNL  Mitch Pryor | University of Texas at Austin | Mass Casualty Decontamination Research: What Next?  Kate McCarthy-Barnett | U.S. Department of Homeland Security |
| 4:25 PM | NASA's Sterilization Working Group for Backwards Planetary Protection for Mars Sample Return Planning  Alvin Smith | California Institute of Technology, Jet Propulsion Laboratory | Management and Disposal of Vehicles Following a Wide Area Incident  Colin Hayes | Eastern Research Group, Inc. |
| 4:55 PM | Biological Indicator and Test Program for Sterility Assurance for Mars Sample Return Planning  J. Nick Benardini | *National Aeronautics and Space Administration* | EPA’s Office of Research & Development Engagement Efforts with State, Local, and Tribal Government  Viktoriya Plotkin | U.S. Environmental Protection Agency |
| 5:25 PM | **DAY 1 ADJOURNS** | |

DAY 2: WEDNESDAY, november 20, 2019

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| 7:30 AM | Registration | |
| Concurrent Sessions 3 | | |
|  | Fentanyl Detection & Cleanup  York Room  Session Chairs:   * John Archer | *U.S. Environmental Protection Agency* * Lawrence Kaelin | *U.S. Environmental Protection Agency* | Water Infrastructure Protection & Decontamination  Stratford Room  Session Chairs:   * Anne Mikelonis | *U.S. Environmental Protection Agency* * Katherine Ratliff | *U.S. Environmental Protection Agency* |
| 8:00 AM | Scenario Specific Opiate Detector Selection  Evan Durnal | MRIGlobal | (Un)expected Water Contamination Research  Matthew Magnuson, Jeffrey Szabo | U.S. Environmental Protection Agency |
| 8:25 AM | Evaluation of Environmental Fentanyl Contamination and Sampling Effects for Remediating Affected Areas  Stuart Willison | U.S. Environmental Protection Agency | Microbial Inactivation by Peracetic Acid in Sewage and Feces to Optimize Disinfection of Highly Infectious Waste Waters  Collin Knox Coleman | University of North Carolina at Chapel Hill |
| 8:50 AM | Decontaminant Reactivity Screen with Select Fentanyls  Amanda Schenning | U.S. Army Combat Capabilities Development Command | The PFAS Effluent Treatment System (DETS): Design, Construction, and Testing  Jacob Lalley | U.S. Army Engineer Research and Development Center |
| 9:15 AM | Surface Decontamination Options for a Fentanyl Contaminated Building Interior  Lukas Oudejans | U.S. Environmental Protection Agency | Disinfection of *Legionella pneumophila* within Drinking Water Biofilms Using Various Treatment Technologies  Jeffrey Szabo | *U.S. Environmental Protection Agency* |
| 9:40 AM | BREAK | |
| Concurrent Sessions 4 | | |
|  | Biological Agent Sampling & Analysis Methods  York Room  Session Chairs:   * Sanjiv Shah | *U.S. Environmental Protection Agency* * Sarah Taft | *U.S. Environmental Protection Agency* | Technology & Software Supporting Disaster Response  Stratford Room  Session Chairs:   * Stuart Willison | *U.S. Environmental Protection Agency* * Paul Lemieux | *U.S. Environmental Protection Agency* |
| 10:00 AM | Feasibility of a Bioaerosol Sampling Network to Measure Resuspended Spores  Jonathan Thornburg | RTI International | A Virtual Reality Platform for Training Personnel on Biological Surface Sampling Techniques  Ellen Shumaker | *RTI International* |
| 10:25 AM | Comparison of Sampling Methods for an Extended Duration Outdoor Biological Study  Anne Mikelonis | U.S. Environmental Protection Agency | An Introduction to the U.S.-EPA CompTox Chemicals Dashboard – Web-Based Access to Data for ≈900,000 Chemicals  Antony Williams | U.S. Environmental Protection Agency |
| 10:50 AM | Development of an Improved Concrete Testing Coupon for Recovery of Viruses in Quantitative Carrier and Decontamination Efficacy Tests  Lindsay Gabbert | Plum Island Animal Disease Center | An Open Source Quick Response System for Tracking Personnel and Resources  Jonathan Pettit | U.S. Environmental Protection Agency |
| 11:15 AM | Evaluation of Analytical Methods for the Detection of *Bacillus anthracis* Spores: Compatibility with Real-World Samples Collected from Outdoor and Subway Surfaces  Scott Nelson | Battelle | A GIS Application for Developing Biological Sampling Designs and Estimating Resources Necessary for Implementation  Colin Hayes | Eastern Research Group, Inc. |
| 11:40 AM | LUNCH | |
| Concurrent Sessions 5 | | |
|  | Beyond Water Infrastructure  York Room  Session Chairs:   * Jeff Szabo | *U.S. Environmental Protection Agency* * Stuart Willison | *U.S. Environmental Protection Agency* | Biological Agent Decontamination  Stratford Room   * Gary Flory | *Virginia Department of Environmental Quality* * Shannon Serre | *U.S. Environmental Protection Agency* |
| 1:00 PM | Using Stormwater Models to Inform Recovery Efforts Following a Wide-Area Contamination Incident  Katherine Ratliff | U.S. Environmental Protection Agency | Decontamination Studies Related to Vehicles in a Biologically-Contaminated Wide Area: Interior Vehicle Decontamination Using Vapor Phase Hydrogen Peroxide  William Richter | Battelle |
| 1:25 PM | Wash Penalty Factors: Insight into the Effects of Water Wash Down of Building Materials for RN Decontamination  Michael Kaminski | Argonne National Laboratory | Virucidal Efficacy of DiKlor® Chlorine Dioxide on Diverse Vehicle Surface Materials in an Automated Commercial Truck Wash under Field Conditions  Julian Rosenberg | Sabre Companies |
| 1:50 PM | Logistics Modeling of a Wide Area Decontamination Operation Using Wash Down Techniques  Katherine Hepler | Argonne National Laboratory | Decontamination of Category A Viruses on Porous Surfaces and Sensitive Equipment Using Chloride Dioxide  Daniel Lorch | METSS Corporation |
| 2:15 PM | Water-On-Wheels (WOW) Emergency Water Treatment System Cart  James Goodrich | U.S. Environmental Protection Agency | Novel Methods for Environmental Remediation of *Bacillus* Species  Christine Tomlinson | *U.S. Environmental Protection Agency* |
| 2:40 PM |  | ANNOUNCEMENT: Call for a CBRN Mitigation and Recovery International Technical Working Group  Michael Kaminski | Argonne National Laboratory |
| Technology Café & Poster Session  York, Stratford, & Providence Rooms | | |
| 2:45–5:30 PM | Join us in the York and Stratford Rooms to view posters, interact with poster presenters, and review posters as part of the student poster competition, and the Providence Room to view technical demonstrations to gain hands-on experience with some of the technology discussed at the conference. | |
| 5:30 PM | DAY 2 ADJOURNS | |

DAY 3: thursday, NOVEMBER 21, 2019

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| 7:30 AM | Registration | |
| Concurrent Sessions 6 | | |
|  | Chemical Agent Research  York Room  Session Chairs:   * Lukas Oudejans | *U.S. Environmental Protection Agency* * Lawrence Kaelin | *U.S. Environmental Protection Agency* | Waste Management  Stratford Room  Session Chairs:   * John Archer | *U.S. Environmental Protection Agency* * Joseph Wood | *U.S. Environmental Protection Agency* |
| 8:00 AM | Development and Application of Unventilated Monitoring to Recovery following a Chemical Release  David Bradley | *U.S. Department of Homeland Security* | Responding to African Swine Fever (ASF): Research to Develop New Methods to Manage ASF Infected Animal Carcasses  Gary Flory | *Virginia Department of Environmental Quality* |
| 8:25 AM | Establishing Risk-Based Action Levels for Unique Exposure Scenarios in Response to Illegal Pesticide Applications  Kristen Keteles | U.S. Environmental Protection Agency | **Assessment of the Biosecurity of Animal Mortality Size Reduction Using Horizontal Grinders Prior to On-Farm Composting**  Paul Lemieux | *U.S. Environmental Protection Agency* |
| 8:50 AM | Evidence-Based Mass Casualty Decontamination Strategies for Responding to Chemical Incidents  Joanne Larner | University of Hertfordshire | Simulation of Incineration of Waste Generated from Cleanup following Chemical/Biological Incidents  Martin Denison | Reaction Engineering International |
| 9:15 AM | Systematic Optimization of High Activity Neutralization Materials for Bulk Chemical Agent Detoxification  Patrick Burton | Sandia National Laboratories | Control of Emissions from Combustion of Cesium-Contaminated Biomass via Sorbent Injection  Paul Lemieux | U.S. Environmental Protection Agency |
| 9:40 AM | Relating Laboratory-Scale Dispersion Experiments to Full-Scale Field Data from Jack Rabbit II  Michael Pirhalla | U.S. Environmental Protection Agency | Disaster Waste Management (WM) Tools – Improving Their Effectiveness While Minimizing Resource Needs  Timothy Boe | U.S. Environmental Protection Agency |
| 10:05 AM | BREAK | |
| Concurrent Sessions 7 | | |
|  | Radiological Agent Research  York Room  Session Chairs:   * Timothy Boe | *U.S. Environmental Protection Agency* * Katherine Ratliff | *U.S. Environmental Protection Agency* | Biological Agent Decontamination  Stratford Room  Session Chairs:   * Anne Mikelonis | *U.S. Environmental Protection Agency* * Leroy Mickelsen | *U.S. Environmental Protection Agency* |
| 10:20 AM | Overview of the MACCS Consequence Analysis Computer Code  AJ Nosek | U.S. Nuclear Regulatory Commission | Efficacy of Waterless Spray on Sensitive Equipment Decontamination System  William Guglielmo | ITL Solutions |
| 10:45 AM | Effective RN Decontamination of Sensitive Equipment Method Formulation Using Non-Radiological Surrogates  Zakir Kazi | Defence Research and Development Canada | The Use of Low Concentration Hydrogen Peroxide Vapor for the Inactivation of Ebola Virus Surrogates MS2 and Phi6 Bacteriophages  Joseph Wood | U.S. Environmental Protection Agency |
| 11:10 AM | Assessment of Non-Destructive Decontamination Methodologies for Mixed Porous Surfaces under High Humidity and UV Conditions  Ryan James | Battelle | Evaluation of an Electrostatic Sprayer for Personnel PPE Bio Decontamination – Mannequin Testing  John Archer | U.S. Environmental Protection Agency |
| 11:35 AM | **EPA’s Integrated Rad Remediation Decision Support Tool (IRRD-ST) to Optimize Radiological Cleanup Decisions**  Bruce Letellier | Serco Inc. | The D7 Decontaminant: Results of Recent Laboratory Tests and Field Applications Against Toxic Chemicals and Biological Pathogens  Mark Tucker | Decon7 Systems, LLC |
| Closing  Stratford Room | | |
| 12:00 PM | Closing Remarks  Sarah Taft | U.S. Environmental Protection Agency | |
| 12:30 PM | CONFERENCE ADJOURNS | |