DCHWS 2020 Call for Abstracts

13th Symposium Design and Construction Issues at Hazardous Waste Sites Co-Hosted by SAME Philadelphia Post and US EPA April 1-3, 2020 Philadelphia 201 Hotel & Conference Center, Philadelphia, PA

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## ABSTRACT SUBMISSION FORM

Abstracts are due on December 14, 2019. Incomplete submissions will not be considered.

## CALL FOR ABSTRACTS: FOCUS ON CASE STUDIES

Past symposium abstract submission categories have provided flexibility in the types of information and presentations that would be considered for panels. Based on the feedback received from past events, the presentations most highly regarded are those based on completed projects with focus on challenges and lessons learned. In order to be considered for a presentation at this year's symposium, abstracts must be based on a project conducted by the presenter that is either complete or substantially complete with a focus on challenges and lessons learned.

#### PANELIST INFORMATION

Elect one author to be a member of the panel. Additional authors can contribute during the question and answer period following the panel presentations from their seat in the audience.

Name: Joe DeFao

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# ADDITIONAL CONTRIBUTING AUTHORS

Calanog, Steve, OSC and EPA Incident Commander; Ronald Smith, CO, EPA Region 9; Ron McManamy, CHMM; ERRS Program Manager for Environmental Quality Management, Inc. (EQM)

# BRIEF PANELIST BIOGRAPHY \*

Your BRIEF biographical sketch should address the following: Education, current professional background and expertise in topic category. (100 words)

Janine Latham is the National Geospatial Technical Director for Weston Solutions, Inc and holds a Bachelor of Science Degree in both Earth Science and Environmental Resource Management from Penn State University. She has over 18 years of experience as an IT/GIS Professional including 15 years providing such services on EPA Projects with expertise in Emergency Response Data Collection Workflows in ESRI Enterprise Architecture

Mr. DeFao is a program manager with his BA in earth and environmental sciences from Lehigh University in Bethlehem, Pennsylvania. During his 22 years' experience, he has supported the EPA Superfund program, including providing environmental assessment, removal, and emergency response. He currently manages Weston's EPA START V program for Region 9 and

has supported the Hurricane Katrina emergency response with EPA Region 6 and the Site Assessment/Technical Assistance contract for Region 3. His expertise incorporates emergency response and environmental investigation design, and remediation with EPA and USACE Omaha, Sacramento, and San Francisco Districts.

### PANEL CATEGORIES

The panel topics are not set before the call for abstracts; instead, the final agenda is developed based on what types of abstracts we get in. Below are some suggested topic areas and suggested focus for the symposium:

## 1. Remedial Design/Remedial Action (RD/RA) Project Management

The focus for abstracts this year is to demonstrate how partnering, collaboration and the use of project management tools helped ensure efficient and effective RD/RA project completion. Potential topics include:

- A. RD Quality Assurance: Case Studies documenting the importance of value engineering and constructability review during design
- B. Change Management: Case studies demonstrating approaches to:
  - o manage "scope creep" during remedial design
  - o effectively and proactively managing project change
  - o Remedial Design/Remedial Action project risk management (with a focus on RA cost and schedule risk drivers)
- C. Team building: RD/RA case studies documenting strategies for building project team trust and how that supported effective and efficient project delivery
- D. Construction Cost and Schedule Control: Case Studies demonstrating effective and collaborative owner and construction cost/schedule project controls used during RA
- E. Case Studies demonstrating the use of other unique project management approaches and experiences

### 2. Technology

Potential topics include:

A. Case studies successfully employing a combination of technologies to address source and groundwater contamination

(focus on full scale applications).

- B. Case studies demonstrating the benefit of using remedy performance to support conceptual site model updates and modifications to support decision making.
- C. Case studies demonstrating the unique use of established technologies to address site with challenging access issues

## 3. Remedy Completion

Potential topics include:

- A. Case Studies demonstrating the successful change in remediation approach during remedy implementation
- B. Case Studies demonstrating the successful implementation of a groundwater remedy completion strategy
- C. Case Studies demonstrating the use of tools or approaches to expedite remedy completion

#### 4. Miscellaneous Experiences with Hazardous Waste Cleanups

Potential topics include:

- A. Case studies demonstrating the successful inclusion of sustainability considerations, approaches and results in RD/RA projects.
- B. Case studies highlighting the application and impact of redevelopment considerations during remedial design and remedial action

# ABSTRACT CATEGORY: Remedial Design/Remedial Action Project Management

Remedial Design/Remedial Action Project Management

Technology

Remedy Completion

Miscellaneous Experiences with Hazardous Waste Cleanups

ABSTRACT TITLE: Project Management of an Explosive Wildfire and Associated Data in Real Time to Reduce Risk, Address Hazardous Waste, and Quickly Return People to their Homes

# ABSTRACT BODY \*

Your description should address the following: central theme of the presentation, relevance to conference audience, and relevance to current issues in the design and construction field related to hazardous waste sites (500 words)

When the November 2018 Northern California Camp Fire exploded over 150,000 acres, it created a site without infrastructure or utilities and littered with household hazardous waste (HHW) and potential asbestos from over 18,000 impacted properties. EPA was tasked with assessing and removing the HHW and asbestos on over 32,000 acres to reduce the environmental risk and enable the 52,000 affected residents to rebuild.

Completing this large, complex project 3 months ahead of EPA's projected 6-month completion required strict project management. START (Weston) and ERRS (EQM) contractor collaboration was instrumental in removing the hazardous waste threats to residents, the community, and the environment. From project onset, Weston and EQM jointly met with EPA to determine response team makeup, roles, and responsibilities.

On-site management communicated EPA direction and the project's scope and needs daily. In the field, once HHW or asbestos was identified, the ERRS team addressed easily identifiable and removable material requiring <2 hours to remove. More complex removals were put into the collection team's rotation. Through sorting materials by hazard level, the team efficiently and cost-effectively profiled, containerized, manifested, transported, and disposed of the waste segregated within 54 waste streams. Additional procedures outlined response to encountered compressed gas cylinders, ammunition, radiological items, and reactive wastes.

Weston and EQM's rapid response experience and refinement of existing/development of custom tools and procedures for this project strengthened cross-response communication while accommodating stakeholder authorities and responsibilities regarding data collection, sharing, visualization, planning, and reporting. Stringent QA/QC provided for realistic goals, measurement of effectiveness, and resource utilization.

For this enormous site, duplicating teams without losing quality and performance amidst the chaos, along with communicating QA/QC procedures and policies to all parties proved essential. The Incident Command identified roles and responsibilities, delegating decision making to field managers, which facilitated efficient communication and understanding of incident objectives. Initially, EQM established scalable infrastructure to support 500 responders. Weston and EQM embedded with the EPA and government stakeholders and rapidly deployed significant resources: up to 32 concurrent teams. Weston provided 27 initial staff in late November 2018, peaking 5 weeks later at 143 personnel. EQM mobilized 75 ERRS personnel in November 2018, ramping up to 155 onsite personnel by February 2019. The development of tasks and performance criteria included in-house and rapidly-procured subcontracted expertise. The teams managed and communicated in real-time across the remote locations.

One notable tool was Weston's custom StoryMap, an interactive, web-based tool for the public to view progress for their property. It also provided real-time updated metrics for operations and planning and helped drive the incident response through nightly reporting for FEMA metrics. The large multi-agency collaboration, residents, and stakeholders accessing this data included

EPA, FEMA, California DTSC and local police and sheriff departments. The tool's >49,000 views demonstrates its efficacy and utility. Data collection, sharing, and archiving within a strategic data management and reporting process enabled a seamless transition into the state's ArcGIS Online environment. EPA Region 9 was nominated for the EPA Mason Hewitt Award for Technical Excellence in GIS for this work.