



# Clean-Up Information

Contaminated Site

## Welcome to the CLU-IN Internet Seminar!

### EPA Office of Research and Development's Office of Science Policy Mine and Mineral Processing Virtual Workshop Session 4 – Big Data

*Sponsored by: US EPA Office of Research and Development (ORD)'s Office of Science Policy  
Live Webinar: Wednesday, October 23, 2019, 1:00 PM-3:00 PM EDT (17:00-19:00 GMT)*

#### Instructors:

- Katie Deheer, CDM Smith (DeheerK@cdmsmith.com)
- Doug Cushing, CDM Smith (cushingdl@cdmsmith.com)
- Souhail Al-Abed, EPA Office of Research and Development (al-abed.souhail@epa.gov)
- James Rice, ICF International Inc. (James.Rice@icf.com)

#### Moderators:

- James Rice, ICF International Inc. (James.Rice@icf.com)
- Jean M Balent, US EPA Technology Innovation and Field Services Division (Balent.jean@epa.gov)

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## Welcome to the Mining and Mineral Processing Workshop Series

Session 1	October 2	Site Characterization (recording available)
Session 2	October 9	Emergency Management (recording available)
Session 3	October 16	Innovative Technologies and Strategies (recording available)
<b>Session 4</b>	<b>October 23</b>	<b>Big Data</b>



### About the Series

Each session in the virtual workshop series will include a short lecture by various subject matter experts in their respective fields but will also allow ample time for the presenters to interact with the audience, including time for questions and answers as well as brainstorming and identifying concerns from stakeholders participating in each virtual workshop.

### Webinar Objectives

- Describe the latest conceptual approaches to each technical area
- Offer methodologies and tools, and case study illustrations that address each of these concepts
- Solicit participant input to how these approaches can be revised to produce better, faster and cheaper outcomes



## Why are mining and mineral processing sites challenging?

### Mining sites present unique challenges

- Complex sources located above and below ground
- Large areas and large waste volumes
- Interactions between waste, groundwater and surface water
- Unstable conditions and potential for releases
- Higher remediation costs

### Systematic and coordinated efforts are needed to address mining related sites effectively

- Robust CSMs require innovative characterization tools
- Response actions must address unique issues like wildfires and impoundment releases
- Effective remedial actions involve adaptive management and innovative approaches
- Large and complex data sets must be managed for effective use



## Today's Topic: Big Data

### Leveraging Data Analytics to Turn Abandoned Mine Data into Insight

- Katie Deheer and Doug Cushing, CDM Smith

### Metal transport evaluation in a mining-impacted watershed: how metal partitioning affects the selection of remediation BMPs

- Souhail Al-Abed, EPA ORD

### 3-Dimensional Visualization and Analysis at Mine Sites - an Example from French Gulch

- Jim Rice, ICF