

Tufts CEE Seminar Series Presents



Paul Dombrowski
Senior Remediation Engineer
ISOTEC Remediation Technologies

Topic: Implementation of In-Situ Hazardous Waste Remediation Programs During the COVID-19 Pandemic
Friday April 9, 2021 12:00pm – Virtual Event

Paul Dombrowski, Senior Remediation Engineer at ISOTEC Remediation Technologies, Inc. has over 16 years in the environmental industry with experience in hazardous waste site investigation and remediation, with a focus in designing and implementing in-situ remediation technologies. He has direct experience designing and/or implementing a broad range of in-situ groundwater technologies including chemical oxidation, bioremediation, zero valent iron, surfactants, and thermal remediation. At ISOTEC, Mr. Dombrowski is a technical leader for design, implementation, and management for a full suite of remediation technologies and supports activities to incorporate developing and innovative technologies and approaches to support ISOTEC projects and customers. Prior to joining ISOTEC, Mr. Dombrowski was a consultant with AECOM for 12+ years and served as leader of the Global Environmental Technical Practice Network. He also has experience with PFAS investigations, design and build for water/wastewater projects, and research experience in arsenic and metals geochemistry. Mr. Dombrowski is a Part-Time Lecturer at Tufts University where he teaches Site Remediation Technologies (CEE143) and has taught Senior Capstone and has been a committee member for multiple master's degree candidates. He received a Bachelor's and Master's Degrees in Environmental Engineering from Manhattan College in New York City. Mr. Dombrowski is a registered Professional Engineer in Massachusetts and Connecticut.

The implementation of site remediation programs requires extensive time and planning in order to have a successful and safe outcome. A successful project must effectively remove and/or destroy site contaminants; provide for an optimized reduction of the exposure of field personnel to hazardous contaminants, unsafe working conditions, and physical and biological hazards; comply with the relevant regulatory framework; and while fulfilling the expectations and demands of the different stakeholders. All parties involved must recognize the different obstacles to implementing field remediation and to work together to find solutions that are in the best interest of all parties. With the onset of the COVID-19 pandemic, caused by a novel coronavirus (SARS-CoV-2), for which understanding of the methods of transmission have been evolving, entirely new and previously unknown obstacles have created additional and extensive procedures to ensure the safe work activities including, and not limited to mobilizing to the project site, daily field activities, overnight accommodations, and social distancing.

The seminar will include processes and approaches taken in planning and implementing remediation in March and April 2020, at the beginning of the declared pandemic, and will also include modifications for projects since as more information about COVID-19 has become available. The presentation will detail field procedures specific to COVID-19 such as modes of travel, modified PPE, health monitoring programs, overnight accommodations, and the creation of additional sections within the existing HASP(s) and JSAs. Social distancing, and later the use of masks, were key factors in each of the updated procedures. For many field remediation activities improved safety with lower potential for incident occurs when performed by more than one site worker. Therefore, procedures needed to be modified to allow social distancing and/or minimize potential for virus transmission when adequate interpersonal distancing needed to be less than 6 feet. Additionally, ISOTEC personnel deployed during the COVID-19 emergency response had site-specific details regarding their essential work assignment as a remediation worker and were required to have all documentation available upon request by Local, State or Federal personnel.