

REGENESIS Presentation Program

International Symposium on Bioremediation and Sustainable Environmental Technologies





Tuesday, May 9th

Platform Presentations A1 Advances in Amendment Solid Phase Colloidal Organic Amendments Promote 8:50 AM Formulation Sustained Biodegradation in Permeable Reactive Barriers Paul Erickson, PhD, Director of Research & Development REGENESIS" The In Situ Treatment of Dissolved BTEX and Gasoline **Residues Using Micro Activated Carbon** Rick McGregor, President InSitu Remediation Services, Ltd. INSIT® **E2** Sustainable Remediation Sustainable PFAS Remediation: Comparing the 11:20 AM Assessment Tools **Environmental Impact of Enhanced Attenuation Using** Colloidal Activated Carbon to Pump and Treat Gareth Leonard, Managing Director, Europe REGENESIS® **B2** Innovative Treatment Colloidal Activated Carbon to Enhance Natural 12:10 PM **Technologies for PFAS In Situ** Attenuation of PFAS at Airports Worldwide: A Multiple Site Review Maureen Dooley, Vice President, Industrial Accounts REGENESIS[®] PFAS Source Zone Management with Novel 12:35 PM **Immobilization Methods and Materials** Paul Erickson, PhD, Director of Research & Development REGENESIS® **C2** Remediation and Management Treating and Pretreating Hard to Access Hydrocarbon 1:00 PM of Petroleum-Hydrocarbon Contamination in Underground Storage Tank Basins and



Contaminated Sites



Multi-Site Trend Analysis and Remedial Design Implications of Passive Flux Data from PFAS-, CVOC- and Hydrocarbon-Contaminated Sites

Utility Corridors with Colloidal Activated CarbonTodd Herrington, Global PetroFix Product Manager

Chris Lee, Sr. Design Specialist

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10:30 AM - 10:55 AM



Tuesday, May 9th

Poster Presentations 5:45–7:00 PM

A1 Advances in Amendment Formulation



Sulfidated ZVI Accelerates Bioremediation in Permeable Barriers and Source Zones

John Freim, PhD, Director of Materials Science and ZVI Product Manager

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A3 Enhanced Methods for Biodegradation/Biotransformation of Organic and Inorganic Contaminants



Contaminant Degradation within Colloidal Activated Carbon Treatment Zones: A Multi-Site Review to Demonstrate Complete Destruction and Reduction of CVOCs Contaminants Using Multiple Lines of Evidence

Carlos Ortiz, South Central District Technical Manager

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A5 Optimization of Classical Bioremediation Technologies



Chlorinated Solvent Plume Reduced >95% via *In Situ* Combined Remedy Leading to Long-Term VI Risk Reduction at State-Led Project

Joel Parker, Principal Engineer, Hamp Mathews & Associates

HAMP MATHEWS

A7 In Situ Bioremediation
Applications



Combined Remediation Technologies Pave the Way for the Rapid Redevelopment of a Legacy Brownfield Site

John Freim, PhD, Director of Materials Science and ZVI Product Manager

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A Combined Remedy of *In Situ* Chemical Oxidation and Aerobic Bioremediation to Treat the Emerging Contaminant Tetrahydrofuran

Presented by Ryan Moore, Sr. Technical Manager and PFAS Program Manager, on behalf of Owen Miller

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B1 Fate and Transport of PFAS



Using a Multi-Phase, Finite-Difference, Multi-Species Model that Accommodates Dynamic Sorption and Competitive Interactions to Interpret and Predict PFAS Fate and Transport

Presented by Keith Gaskill, Sr. Design Specialist and Technical Services Group Coordinator, on behalf of Jeremy Birnstingl, PhD



Tuesday, May 9th

Poster Presentations (Continued)

5:45-7:00 PM

B2 Innovative Treatment Technologies for PFAS In Situ



PFAS Concentrations in Groundwater Reduced to Below Drinking Water Standards at a Former Michigan Manufacturing Facility

Angel Cuellar, Sr. Geologist, Tetra Tech, Inc.

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Immediate and Effective PFAS Treatment in Bedrock Aquifer at a Hazardous Sites Clean-Up Act Site

Presented by Barry Poling, Regional Vice President, on behalf of Glenn Iosue

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C2 Remediation and Management of Petroleum-Hydrocarbon Contaminated Sites



Treatment Success and Application Insights with Colloidal Activated Carbon for Hydrocarbon Plumes: A Multi-Site Review

Todd Herrington, Global PetroFix Product Manager

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D1 Innovative Tools for Evaluating Vapor Intrusion Risk



Best Practices for Quality Assurance/Quality Control for Passive Barrier Installations at New and Existing Buildings

Presented by Jordan Morgan, South Central District Technical Manager on behalf of Hieu Nguyen

Land Science

D3 HRSC and Conceptual Site Models



Improving Remedial Designs Using Passive Flux Meter Studies and Plume Dimension Analysis

Chris Lee, Sr. Design Specialist



Wednesday, May 10th

Platform Presentations

B4 Activated Carbon-Based PFAS Treatment Technologies



Using Colloidal Activated Carbon to Reduce PFAS and PCE Concentrations in Groundwater to below Michigan's Drinking Water Limits for over Four Years

Ryan Moore, Sr. Technical Manager & PFAS Program Manager

8:00 AM

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The *In Situ* Treatment of TCE and PFAS-Impacted Groundwater Using Anaerobic Bioremediation, Polylactate Ester, and Colloidal Activated Carbon

Rick McGregor, President, IRSL

INSIT®



Large Full-Scale *In Situ* Remediation of Groundwater with High Concentrations of PFAS Using PlumeStop®

Rebecca Mora, Sr. Technical Leader, AECOM

AECOM



Longevity of Colloidal Activated Carbon for *In Situ* PFAS Remediation at AFFF-Contaminated Airport Sites

Grant Carey, PhD, President, Porewater Solutions

Porewater Solutions
Experies - Experience - Innovation

A5 Optimization of Classical Bioremediation Technologies



In Situ Treatment for Hexavalent Chromium Using ISCR
Enhanced Bioremediation in Saturated Clay Soils Results in
No Further Action

Presented by Keith Gaskill, Sr. Design Specialist and Technical Services Group Coordinator, on behalf of Owen Miller

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C5 Impacts of Mixed Contaminants on Biodegradation



Treatment Technology Considerations at Plating Facilities Commingled with PFAS and Chromium-6

Keith Gaskill, Sr. Design Specialist and Technical Services Group Coordinator

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5:10 PM

9:15 AM

Learning Labs



Multi-Site Trend Analysis and Remedial Design Implications of Passive Flux Data from PFAS-, CVOC- and Hydrocarbon-Contaminated Sites

Chris Lee, Sr. Design Specialist

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4:20 PM - 4:45 PM



Wednesday, May 10th

Session Chairs

13A Bioremediation of Munitions Constituents



Paul Erickson, PhD Director of Research & Development

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Rula Anselmo Deeb, PhD Senior Principal, Geosyntec

Geosyntec consultants

B4 Activated Carbon-Based PFAS Treatment Technologies



Scott Wilson President and CEO, REGENESIS

REGENESIS®



Jack Sheldon Senior Professional, Antea Group



Poster Presentations

5:45-7:00 PM

B9 Emerging Contaminants: Detection, Degradation, Fate and Transport



Testing of a Long-Term Solution for Low-Level 1,2,3-TCP in a Deep Aquifer Using Colloidal Activated Carbon with Monitoring Natural Attenuation

Presented by Chris Lee, Sr. Design Specialist on behalf of Andrew Kiggen

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D9 Tools for Site Assessment and Bioremediation Monitoring



Long-Term Performance of a Carbon Barrier Evaluated through Integrated Use of Aspect Ratio, Passive Flux and Modelling Analytical Tools

Presented by Keith Gaskill, Sr. Design Specialist and Technical Services Group Coordinator, on behalf of Jeremy Birnstingl, PhD



8:00 AM

Thursday, May 11th

Platform Presentations

C6 Bioremediation
Case Studies



Improving Performance of Abiotic Destruction and Anaerobic Bioremediation at Multiple Sites through the Use of Passive Flux Meters

Chris Lee, Sr. Design Specialist

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E8 Advances in Tools and Techniques for Assessing MNA



Leveraging a Robust Microbial Profile for an MTBE Sorptive Biobarrier

Jack Sheldon, Senior Professional, Antea Group



Session Chairs

E8 Advances in Tools and Techniques for Assessing MNA



Rick Gillespie Senior Vice President, North America



Kate Clark, PhD

VP of Global Laboratory Services, Microbial Insights



