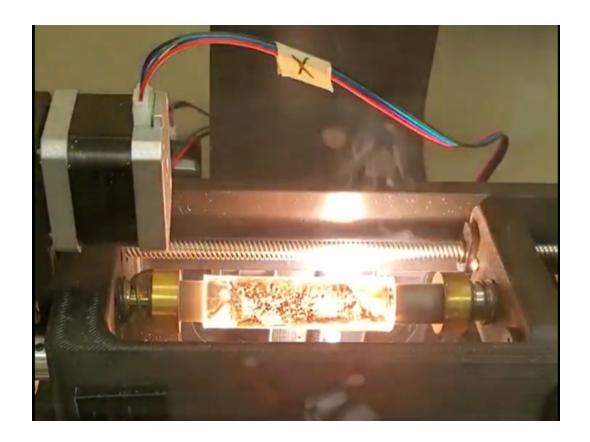


SURF Break | May 2025



Zero-Net Cost Method Turns Waste into Resource

Rice University has revealed a new method to remove per- and polyfluoroalkyl substances (PFAS) from water systems while simultaneously converting the PFAS into graphene. The method uses flash joule heating, which creates a literal "flash" of high voltage and high current to eliminate PFAS molecules. How does it work? Granular activated carbon saturated with PFAS is combined with mineralizing agents (like sodium or calcium salts) and then a high voltage is applied to create an intense thermal reaction. The reaction breaks the strong carbon-fluorine bonds of PFAS, converting the fluorine into immobile, nontoxic fluoride salt, while concurrently producing graphene from the activated carbon. Graphene is valued by electronic, energy storage, and construction industries (to name a few) for its strength, conductivity, and flexibility. The research was

funded by the Air Force Office of Scientific Research, U.S. Army Corps of Engineers, National Science Foundation Graduate Research Fellowship Program, Stauffer-Rothwell Scholarship, and Rice Academy Fellowship. Click here for more information.



Dive In! Is Your Site a Candidate for Transitioning to Monitored Natural Attenuation?

Do you have a favorite "age-old" question? Some people dive deep with "What's the meaning of life?" while others ask, "What came first, the chicken or the egg?" Remediation practitioners sometimes wrestle with the following:

- Is the plume at my site stable?
- What is the likelihood that my site has a persistent source that will be resistant to further active treatment?
- How can I establish if the performance of an active remedial technology has plateaued?
- What type of contaminant removal rates can I expect after transitioning to monitored natural attenuation (MNA)?

Sound like you? If so, a free, web-based decision-support tool developed under contract to the Department of Defense Strategic Environmental Research and Development Program (SERDP) may be of help (click here). The SERDP

Transition Assessment Teaching Assistant (TA²) contains 10 individual modules or tools to evaluate if a specific site is a strong candidate for transitioning to monitored natural attenuation or enhanced attenuation approaches. Training is available in the form of Microsoft PowerPoint slides (click <u>here</u>) and a webinar (click <u>here</u>). The final report, *Transitioning from Active Remedies to Monitored Natural Attenuation*, was published this month and is available <u>here</u>.

United States Government Accountability Office

Testimony
Before the Committee on Environment and Public Works, U.S. Senate

If you and 1900 as amount (ERCA) statistical fire Separation of Secretary Services Committee on Environment and Public Works, U.S. Senate

SUPERFUND

Many Factors Can Affect Cleanup of Sites Superior Secretary S

Did You Know? Pace of Superfund Cleanup Highlighted in Senate Testimony

Last month, the Government Accountability Office (GAO) published *Superfund: Many Factors Can Affect Cleanup of Sites Across the U.S.* The publication (click <u>here</u>) documents the statement of J. Alfredo Gómez (GAO Natural Resources and Environment Team Director) during his testimony before the U.S. Senate Committee on Environment and Public Works. In his testimony, Mr. Gómez addressed the following three topics:

- Trends in Superfund program appropriations
- The changing number of National Priority List (NPL) sites over time and EPA's explanation for those changes
- Factors EPA officials identified as affecting the timeliness of NPL site cleanups

Mr. Gómez's testimony is available <u>here</u>; questions and answers after his testimony are included on pages 28-61.

SURF MEMBER SPOTLIGHT

HALEY YOUNG, SURF TREASURER, EA ENGINEERING & GEOLOGY, P.C.

I've always followed the belief that "small actions can make a big impact." As an Environmental Scientist in EA's Syracuse, NY, office, that translates into performing green remediation and resiliency assessments, serving as the office's SiteWise" expert, and creating a tool to assess and reduce emissions of site management activities at 27 state-managed sites. As the office's Lead Sustainer, I create our monthly sustainability newsletter, maintain the TerraCycle program, and coordinate office outreach events. At home, I'm still composting and recycling, using refillable cleaning and skincare products, and buying secondhand clothes and housewares...just like always.

SURFER SINCE... 2023 (two years)

LINKEDIN LINK: https://www.linkedin.com/in/haley-young-438091268

WHAT'S YOUR FAVORITE PART ABOUT BEING A SURF MEMBER?

SURF's sense of community, the passion for sustainable remediation that connects us, and networking opportunities - I'm speaking to and collaborating with others that aren't in "my circle."



Upcoming Events

SURF Events

SURF Happy Hour @ Battelle Bioremediation Symposium

Wednesday, June 25, 2025 6:30 p.m.

Email Kathy Adams for details!

SURF Sessions and Meeting at AEHS East Coast Conference

41st Annual International Conference on Soils, Sediments, Water, and Energy October 20-23, 2025
University of Massachusetts, Amherst, MA
Click here for more information.

Other Events

AquaConSoil 2025

June 16-20, 2025 Liège, Belgium Click here for more information.

2025 National Brownfields Training Conference

August 5-8, 2025 Chicago, IL Click <u>here</u> for more information.

RemTech Europe 2025

September 15-19, 2025 Ferrara, Italy Click <u>here</u> for more information.

RemTEC & Emerging Contaminants Summit

October 14-16, 2025 Westminster, CO Click <u>here</u> for more information.

ecoforum 2025 - From Contamination to Restoration: Protect, Sustain, Thrive

October 28-30, 2025 Brisbane, Australia Click <u>here</u> for more information.

2025 Global Summit on Environmental Remediation

November 4–6, 2025 Pacific Northwest National Laboratory Richland, WA Submit abstracts by June 6; click <u>here</u> for more information.