



## Applied Research Program

Haley & Aldrich's Applied Research Program advances industry capabilities to minimize clients' costs and shorten project timelines.

### Innovative solutions for urgent environmental challenges

Whether dealing with emerging contaminants or climate change, our clients often face problems that have no solutions yet.

That's where Haley & Aldrich's Applied Research Program comes in: We research and develop ways to tackle the difficult environmental problems we face today as well as the problems we see on the horizon.

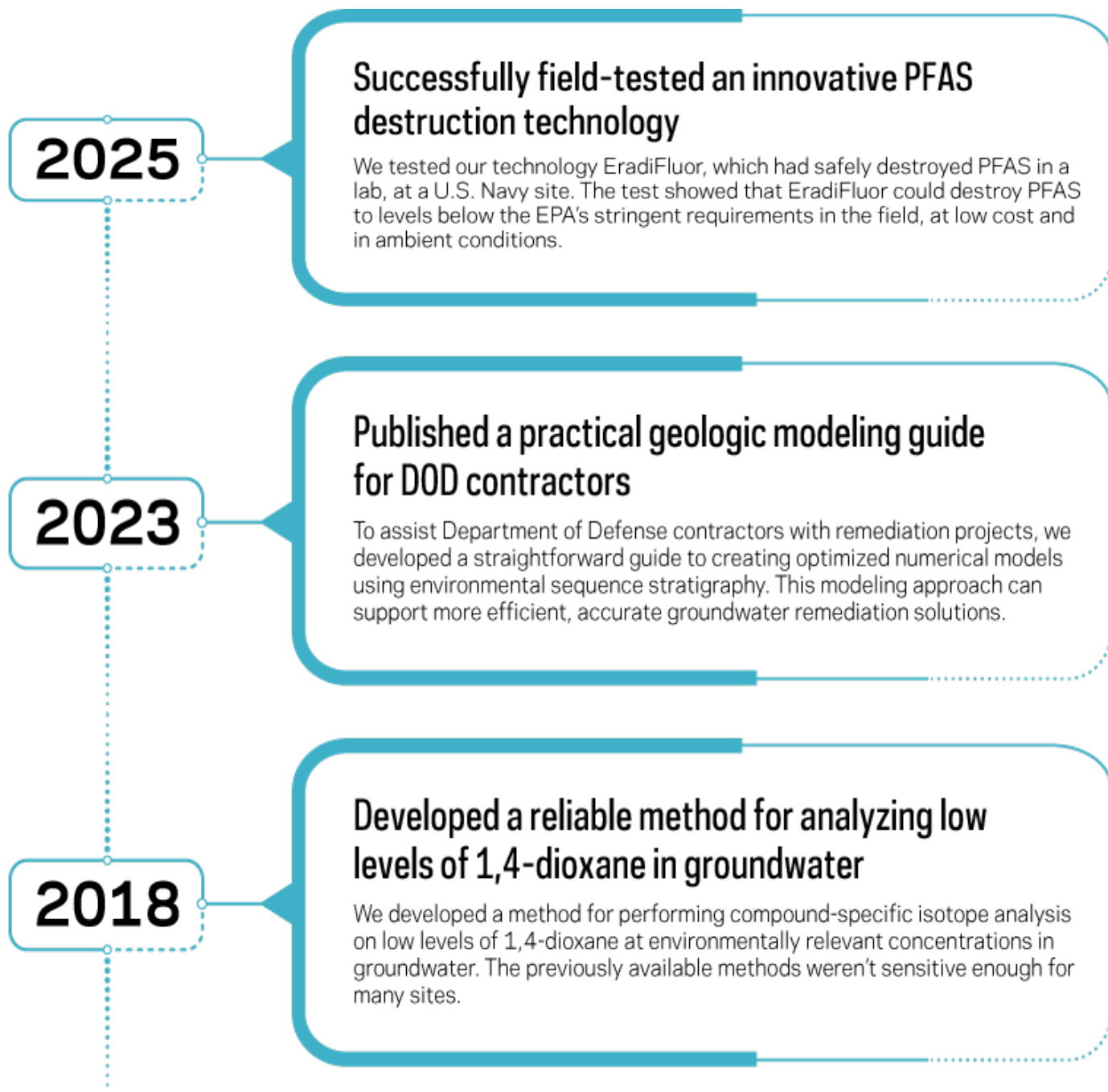
Haley & Aldrich researchers have developed technologies to remediate contaminants — such as [PFAS](#) (also known as per- and polyfluoroalkyl substances) and 1,4-dioxane — that previously had few effective treatment options. They've developed [novel methods](#) to map the presence of chemicals in groundwater. They've advanced the field of heat mitigation, building our resilience to the effects of climate change. Some of these innovations have become industry

standard approaches.

The Applied Research Program's scientists and engineers often collaborate with university research centers and government agencies — namely, the Department of Defense's [environmental research programs](#). They also collaborate with clients, partnering to field-test emerging technologies and methods to realize the benefits of new approaches.

Environmental challenges will never stop evolving, so neither will we. [Learn more](#) about the current Applied Research Program projects.

## Applied Research Program milestones



**2017**

### **Demonstrated a novel bioremediation technique for deep, large, dilute plumes**

The treatment and control of deep, large, dilute contaminant plumes in groundwater pose a major remediation challenge. We successfully demonstrated that recirculation-based aerobic cometabolic biodegradation can provide a cost-effective treatment for 1,4-dioxane in these plumes.

**2017**

### **Launched a new tool to map a chlorinated solvent in groundwater**

Our team launched a new dye-enhanced laser-induced fluorescence (DyeLIF) probe for mapping a chlorinated solvent, DNAPL, that had previously been undetectable in contaminated groundwater. Dakota Technologies bought DyeLIF and now offers it for efficient, cost-effective remediation.

People are our greatest asset. Get to know the Haley & Aldrich team.

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Get in touch with Haley & Aldrich today