PFAS Investigation & Remediation

Arizona Department of Environmental Quality

• EXPERIENCE
• INTEGRITY
• SERVICE

HARGIS + ASSOCIATES, INC
ENGINEERING • HYDROGEOLOGY

Per- and polyfluoroalkyl substances (PFAS) contamination impacts the drinking water of more than 200 million people in the US. Scientists are just now understanding how to effectively characterize and remediate this class of emerging contaminant in groundwater.

Hargis' engineers and hydrogeologists are on the leading edge of PFAS investigation and remediation with recent work on three high-profile projects under the direction of the Arizona Department of Environmental Quality (ADEQ).

Central Tucson PFAS Project
Hargis compiled a team of experts to conduct site investigations and remedial design in parallel to meet an accelerated schedule. Our teaming partners include:

- Carollo: treatment system design and construction oversight
- Smyth Industries: construction and operation & maintenance services
- Environmental Simulations, Inc.: groundwater modeling and assistance with remedial wellfield design

Field investigations included the collection of in-situ groundwater samples to evaluate the vertical extent of contamination; installation of a network of monitor wells; and sampling and analysis of groundwater from monitor wells, private wells, and municipal supply wells. A successful pilot treatment system for the removal of PFAS by ion exchange technology has led to on-going full-scale remedial design.

Marana Sampling Program
Hargis conducted a reconnaissance sampling program along a 24-mile stretch of the Santa Cruz River in northwest Tucson and the Town of Marana for the presence of PFAS and 1,4-dioxane. Surface water samples along the Santa Cruz River and groundwater samples from monitor and irrigation wells were collected upgradient of the Marana municipal supply wells.

Tucson International Airport Superfund Site
Hargis provides ADEQ and the Environmental Protection Agency (EPA) sampling, testing, and consulting services for the presence of VOCs, 1,4-dioxane and PFAS at the Tucson International Airport Area Superfund Site. Specific tasks include evaluation of sampling protocols and establishing project specific sampling and analysis procedures, coordination with environmental laboratories and EPA consultants, and collection and analysis of groundwater samples from monitor wells and private water supply wells.

KEY ACCOMPLISHMENTS

- Compiled a team of experts to conduct site investigation, remedial design, and construction of a remediation system in parallel.
- Conducted field investigations including installation of a network of monitor wells, groundwater sampling, and surface water sampling.
- Developed project specific sampling and analysis protocols for emerging contaminants PFAS and 1,4-dioxane.