

DESIGN, CONSTRUCTION, TESTING, AND APPLICATION OF PFAS EFFLUENT TREATMENT SYSTEM (PETS) FOR PERFLUORINATED ALKYL SUBSTANCES (PFAS) COMPOUNDS

PROJECT OVERVIEW

The PETS is a mobile platform designed to remove water contamination using adsorptive media. It is built around 16 tanks that can contain either physical filter cartridges or refillable caddies that can be filled with adsorptive media. The system incorporates a hose pump, diesel generator, and control system, so it can treat most water sources at any location independently.



BENEFITS

The PETS provides the military with an easy to deploy and operate mobile platform for treating waters with contaminants such as PFAS that can be removed with adsorptive media. This provides a method to quickly and deploy a system to treat bodies of water of up to a couple million gallons at low cost.



PATH FORWARD

The unit will be demonstrated on at least two PFAS contaminated bodies of water at military installations. Demonstration will demonstrate the efficacy of the system and published to encourage adoption of units for use on DoD installations and the private sector. The design will be patented and licensed to the private sector for production.



DoD Executive Agent

Office of the Assistant Secretary of the Army for Installations, Energy, and Environment

UNCLASSIFIED: Distribution A. Approved for Public Release; distribution Unlimited, per AR 380-5, OPSEC Review conducted per AR 530-1 and [Insert PM Organization OPSEC Policy Reference]

Revised MM.YYYY

FOR FURTHER INFORMATION

National Defense Center for Energy and Environment
<http://www.denix.osd.mil/ndcee/>

U.S. Army Engineer Research and Development Center
<https://www.erd.usace.army.mil/>