GoatThroat™
Hand-pressurized precision pumps that handle anything

Technical Article #112

Ground Water Remediation at JFK Airport

CASE STUDY: Ground Water and Soil Remediation

An Environmental Remediation Company was hired to remove contamination from soil and groundwater at John F. Kennedy Airport without excavation or continuous equipment on the site. Applying the most advanced technologies and contracting solutions, they restored contaminated soil and groundwater in the shortest possible time using GoatThroat Pumps. In the customer's own words:

"We are using the pump to dispense 93% sulfuric acid, which then is diluted in 500-gallon tanks to 0.5%. The dilute acid is pumped into the groundwater through injection wells within an area that has been impacted by petroleum compounds from old underground storage tank releases. The acid is used to lower the pH of the groundwater as a conditioning step prior to injection of dilute hydrogen peroxide as an oxidizing step, which breaks down the petroleum compounds. In the photos you can see the GT300 set up on 15-gal carboys of sulfuric. The big 500-gal dilution tanks are in the background. All of the mixing & dilution operations are conducted in Type C PPE and within a secondary containment device. Pumps and reinforced hose are used to distribute the dilute reagents to the injection wells up to 250-feet away. Within the various treatment areas there may be up to 20 or so injection points. The total quantity of reagent (acid + oxidizer) for all areas in this contract is approximately 200,000 gallons. Upon completion we will have used approx. 31 carboys of 93% sulfuric acid – equal to approx 470 gallons - with the GT300. Thanks again for helping us out."