

US EPA ARCHIVE DOCUMENT

EPA Region 10 Dive Team Pacific Sound Resources Cap Survey September 2010

What: At the request of the EPA Environmental Cleanup program the EPA Region 10 Dive Team surveyed the Superfund sediment cap at the PSR site. The PSR site is a former creosote manufacturer site.

Why: Diver survey objectives were to: 1) Install solid phase microextraction devices (SPMEs) designed to detect very low levels of polyaromatic hydrocarbons (PAHs) discharging out of the cap, 2) make any visual observations regarding cap integrity, and 3) collect sediment samples from the top 4 inches of the seafloor. SPMEs are designed to mimic the uptake of various aquatic organisms living in the cap area over time that might accumulate contaminants seeping at very low levels, if present. SPME results will indicate whether the cap is effective in protecting the bottom of the food chain.

Where: PSR sediment site, Elliot Bay, Seattle, WA

When: Dive surveys were conducted in September, 2010.

How: Diver investigations included several dives to install SPMEs measuring 3 feet in length along 7 transects as well as a surface water SPME at a reference site near Alki Point. Shallow water areas covered in cobble often required shorter SPME installation due to refusal (one foot length). Sediment samples were taken at each SPME station along the 7 transects.

Results: Divers found no visual evidence of cap breakthrough. SPME and sediment sample results are pending to determine the level of cap effectiveness in protecting aquatic life from underlying contaminants.

A number of fish were seen along the site including perch and sea bass. One harbor seal was seen underwater transiting the site. A variety of algal growth coated the bottom of the seafloor at many locations.

For more information about the PSR Cleanup:

<http://yosemite.epa.gov/R10/cleanup.nsf/sites/psr>

King5 News coverage of the dive operation:

<http://www.king5.com/news/environment/EPA-Divers-Get-To-Bottom-Of-Superfund-Site-104039559.html>

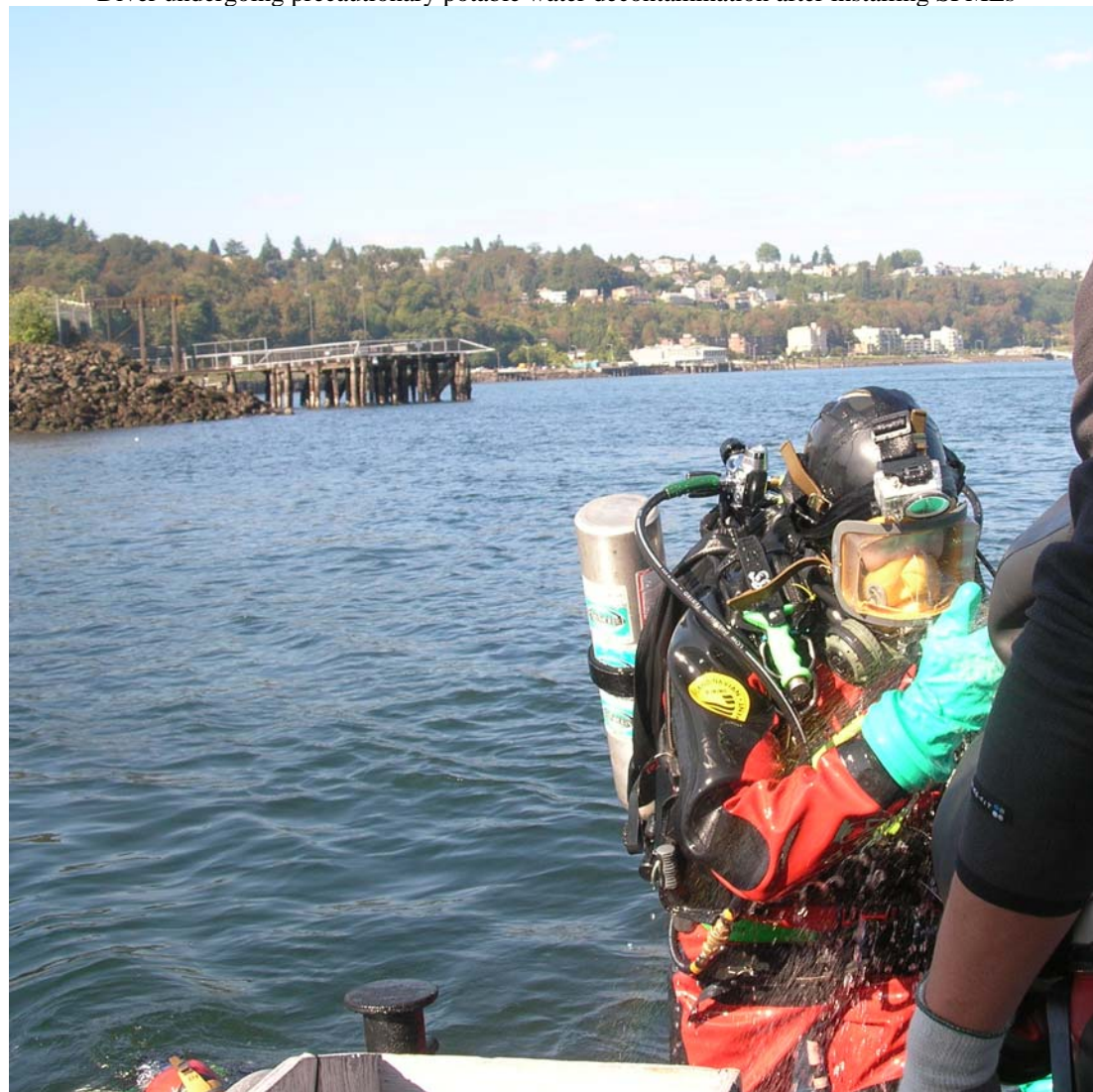
For more information about the EPA Region 10 Dive Team:

<http://yosemite.epa.gov/r10/OEA.NSF/investigations/dive+team>

Contact: Sean Sheldrake at (206) 553-1220, sheldrake.sean@epa.gov

Photos:

Diver undergoing precautionary potable water decontamination after installing SPMEs



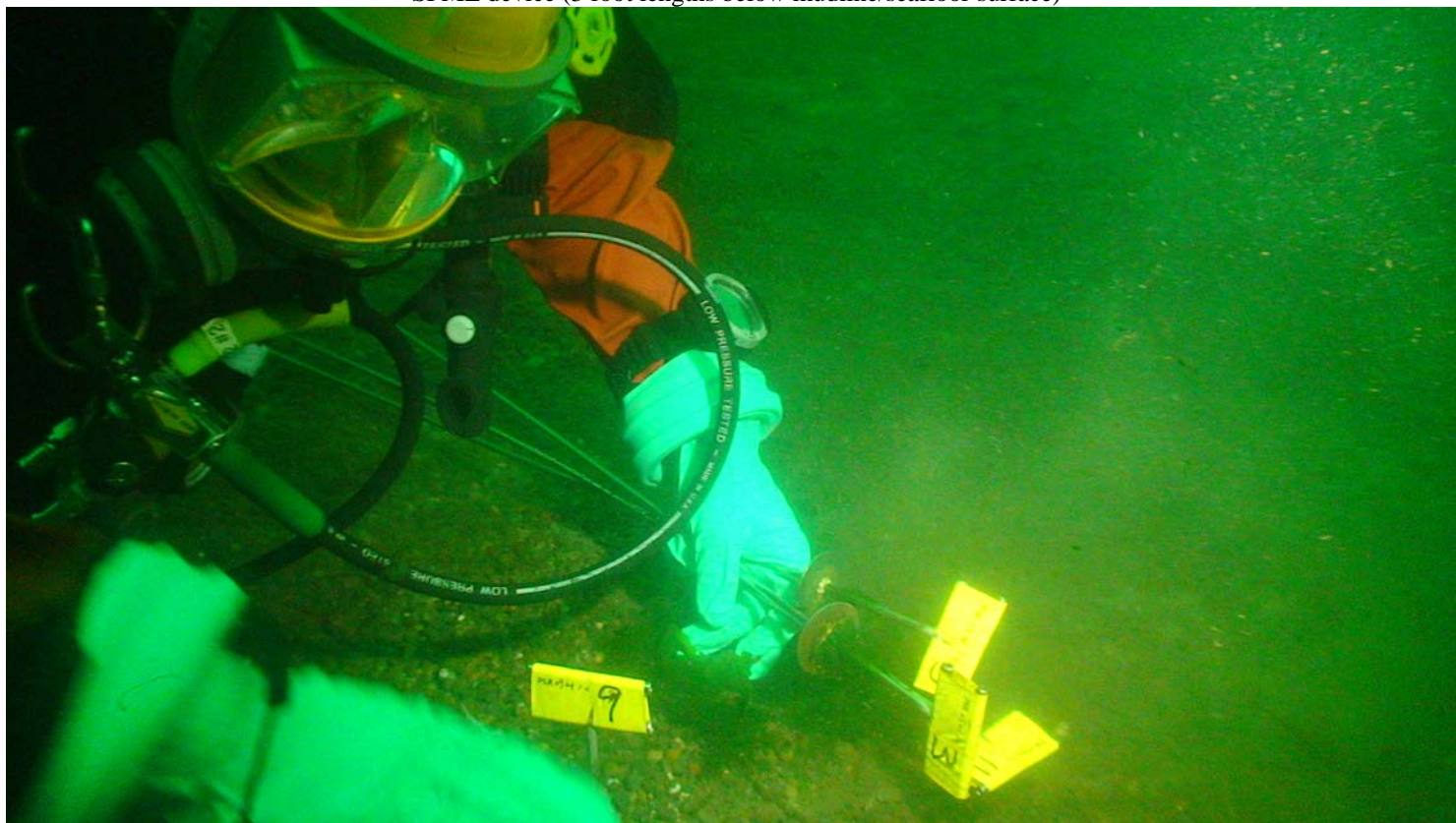
Diver relaying SPME installation details between dives



Divers beginning their transect from shore outward



SPME device (3 foot lengths below mudline/seafloor surface)



PSR Site

