

EPA Region 10 Dive Team

McCormick and Baxter Superfund Site Transition Zone Water Sampling and Solid Phase Microextraction Device Placement

What: The Region 10 dive team was asked to conduct sampling of transition zone water at the McCormick and Baxter Superfund Site (M&B) in Portland, Oregon. The sampling is conducted by the Oregon Department of Environmental Quality (ODEQ) for EPA to determine the effectiveness of the cleanup at this former wood treating/creosote site.

Why: This information is used by ODEQ and EPA to measure capping effectiveness in protecting benthic fauna as well as human consumption of living organisms in the benthos.

Where: The M&B site is located on the north side of the Willamette River in Portland, Oregon, near river mile 7 from the Columbia River.

When: April and October 2010.

How: Divers were given priority sampling locations by ODEQ. Divers worked with ODEQ contractors to collect both piezometer samples ten inches into the bottom, as well as placing a seepage meter which is actively pumped to gather transition zone groundwater impacting life in the shallow bottom (benthos). EPA divers also placed solid phase microextraction devices (SPMD/SPME) which act as a surrogate for biological uptake.

Equipment: EPA vessel Monitor was used as the dive platform, with the vessel Wooldive providing support for contracted sampling personnel.

Results: Photos and narrative descriptions were conveyed to the EPA and ODEQ project managers. Samples were successfully collected despite several winter storms that occurred during dive operations.

More Details: [McCormick and Baxter website](#)

Contact Info: [Sean Sheldrake](#) (206) 553-1220, Sheldrake.sean@epa.gov

Photos:



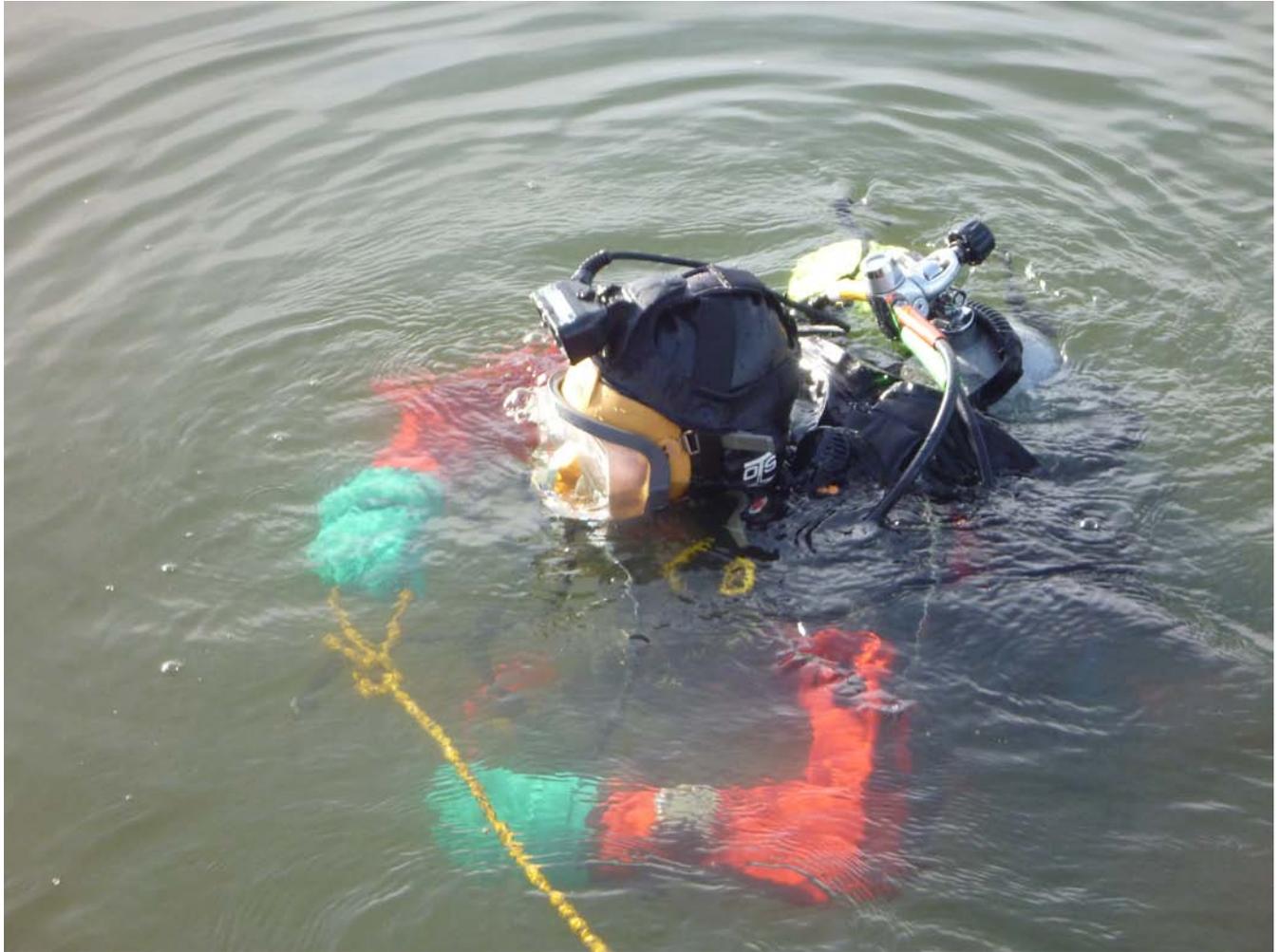
Diver being prepped to go in directly off the McCormick and Baxter site. Railroad bridge in the background.



Tender/standby diver Chad Schulze sorting out piezometer lines/piezometers in his right hand to hand to the diver in the water, while tending the diver tether line in his left hand.



Divemaster viewing helmet camera feed on a diver laptop/recording output directly to the hard drive.



Tethered SCUBA diver preparing to descend to obtain a sample.

Return to [EPA Region 10 Dive Team](#) homepage.