

Hanford Employees Engage Future Workforce in Cleanup Mission

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Washington State University students test their tank-waste crust sampling devices at the Hanford Site's Cold Test Facility as part of their senior projects.

RICHLAND, Wash. — Several new partnerships will help provide the workforce necessary for the future of the **Hanford Site's** cleanup mission.

Employees with **EM Office of River Protection** (ORP) tank operations contractor Washington River Protection Solutions (WRPS) are fostering the next generation of professionals that will move the cleanup mission forward. WRPS engineers are working with Washington State University (WSU) to mentor students on tank waste mission-related projects.

"The **Department of Energy** (DOE) and its prime contractors are working to interest students in employment to support the crucial cleanup and closure operations at the Hanford Site and other locations across the DOE complex," said Ricky Bang, ORP Tank Farms Program Division director. "This immersive method of engagement provides opportunities for students to contribute toward cleanup projects, see equipment and learn about how the complex operates as part of their studies."

This spring semester, Washington State University (WSU) materials science majors from the Tri-Cities campus in Richland, Washington, developed a next-generation tank waste-level detector. The mobile unit can be attached to the top of an underground waste storage tank.

Another group of students from the main WSU campus in Pullman, Washington, developed a simulant and a sampler to identify floating crust layers in waste-storage tanks.

Deploying new tools to further the Hanford cleanup mission is important, but even more so is obtaining the talent that soon will develop and operate the equipment as industry professionals. "Mentoring students through projects like these facilitates a real-world application of the concepts they've learned in class," said Doug Reid, a WRPS mechanical engineer who served as company sponsor for the student projects. "It also familiarizes them with the Hanford tank-waste mission."



Washington State University students gain hands-on experience by taking measurements from a municipal stormwater system.

In yet another partnership, Michele Hendrickson, a WRPS engineer and WSU adjunct instructor, took a novel approach to leading a new laboratory course at WSU Tri-Cities. She learned that several Tri-Cities civil engineering students would need to regularly travel more than 100 miles to the WSU Pullman campus to take a required course, which could negatively affect their studies and abilities to work. Instead, she offered to teach the course at the Tri-Cities campus, where it has never been taught before.

When it became apparent the Tri-Cities engineering lab would not have all the necessary course equipment, Hendrickson got creative by working with other organizations to take the lab experience out into the real world. Students ventured under Richland bridges to monitor stream flow in the city. They also learned about water flow by using modeling software, and even visited a local engineering firm to see a turbine pump planned for installation at the Hanford Site.

"I really believe others were so willing to help because they understand the importance of bringing up the next generation of STEM professionals," said Hendrickson.