



DTSC Employees Are Honored by Technology Council

Two technical teams partially staffed and led by DTSC employees were honored for their work in preparing guidance and training material designed to improve the environmental cleanup process.

The Interstate Technology & Regulatory Council (ITRC) named a team co-led by Roman Racca, Statewide Munitions Response Coordinator for DTSC, as 2013's Team of the Year for its work in developing guidance and Web-based training on the use of advanced sensors on munitions sites.

Also honored was DTSC senior hazardous substance engineer Ning-Wu Chang for his efforts in developing a Web-based technical and regulatory guidance document that makes it easier for people without deep statistical expertise to understand statistical techniques used in groundwater remediation. Chang, who works out of DTSC's Cypress office, was named "Team Leader of the Year."

Racca is co-leader of a team that includes DTSC employees Alice Gimeno-O'Brian of Cypress, and Stephen Sterling and Ed Walker, both of Sacramento. More than 70 people from across the country are on the team, including representatives of federal agencies, industry, the public and tribes.

Their project involves developing guidance for using advanced sensors that use 3-D technology to assess what is under the soil at former munitions sites.

The ITRC says hundreds of military or former military sites across the nation are littered with unexploded ordnance and other munition, and many of them are in California. Clean up is expected to cost \$35 billion. Highly trained technicians using conventional technology uncover and examine all the items to determine if they are hazardous. Often, they aren't.

"It could be an 81-millimeter mortar or a horseshoe," Racca said. "But you won't know until you dig it up."



The Unexploded Ordnance (UXO) technicians are preparing for a demolition shot to destroy dangerous munitions by blowing them up.



All of that digging is time consuming and expensive. Millions of dollars could be saved if advanced 3-D sensors that use cutting-edge “geophysical anomaly classification” technology that calculates depth, size, material composition, thickness and shape to determine the difference between unexploded ordnance and scrap metal.

The team co-led by Racca hopes to publish its guidance document by the fall of 2014, with affiliated Internet-based materials slated to be finished by 2015.

Meanwhile, Chang leads a team that is close to wrapping up a three-year project that will produce a Web-based guidance document that the ITRC says is designed to bring clarity to the planning, implementation and communication of statistical approach in groundwater cleanups.

Says the ITRC: “There are many good sources of information about statistics and a wide variety of tools and software packages for implementing statistical calculations for environmental cleanup. However, it is challenging for practitioners, who are not experts in statistics, to accurately apply the latest approaches.”

Chang said 78 team members from 15 states and representing a variety of federal departments, industry and other groups held monthly conference calls as they worked together to develop the guidance in statistics for groundwater cleanup and monitoring.

His team could complete its work as early as next week.