INEEL Intelligence

Idaho National Engineering and Environmental Laboratory Volume 5 Issue 1 • January 25, 2005

A high-level monthly briefing on operations and activities at the U.S. Department of Energy's Idaho National Engineering and Environmental Laboratory – Home of Science and Engineering Solutions. Work at the lab advances the Department's strategic goals in the areas of energy, environment, defense and science.

■ ENVIRONMENT – New Buried Waste Retrieval Project Begins

Waste that has been buried for decades is being retrieved starting this month from a half-acre portion of the INEEL's Subsurface Disposal Area at the Radioactive Waste Management Complex. Workers on the Accelerated Retrieval Project are beginning the process of removing selected waste containing uranium, plutonium and americium from a portion of Pit 4. The project will also remove volatile organic compounds, which are the most mobile constituents in the waste. Pit 4 was chosen for this retrieval action because it is known to contain some of the highest levels of transuranic contamination in the Subsurface Disposal Area. These actions are being performed under the federal Comprehensive Environmental Response, Compensation and Liability Act – commonly known as CERCLA, or the nation's Superfund law.

■ ENERGY – Electric Vehicles Put Through Paces

Four new 2005 Neighborhood Electric Vehicles – NEVs – have completed performance testing by researchers with DOE's Advanced Vehicle Testing Activity, which is managed by the INEEL. The baseline performance testing included range, acceleration, top speed, braking, handling, climbing and charging efficiency. NEVs are generally licensed to operate on streets with speed limits up to 35 mph, and they are increasingly being used in industrial, residential, government and international applications. Baseline performance testing fact sheets for the 2005 models, as well as the 10 other NEVs previously tested, can be found at http://avt.inel.gov/nev.html.

■ DEFENSE – Laboratory Hosts Industry Day

The INEEL's National Security Division recently hosted an Industry Day to demonstrate the Remote Standoff Explosives Detection System (RSEDS) to commercial companies potentially interested in licensing the technology. RSEDS can detect explosives hidden within a cargo van within 300 seconds. As part of a pilot test program, the system will be installed at the entrance to a military installation in 2005. Currently, four companies are in discussions with the laboratory on the possibility of licensing the technology.

■ SCIENCE – Annual Student Educational Outreach Effort Kicks Off

The 2005 broadcasts of the internationally renowned Jason Expedition kick off Jan. 31 and continue through Feb. 4, and thousands of Idaho students will be taking part. In southwest Idaho alone, more than 2,000 students are registered to participate in sessions at both Northwest Nazarene University and at Boise State University. The broadcasts will interactively share the wonders unearthed as part of the new disappearing wetlands expedition. In addition to the satellite transmissions, students in the Treasure Valley also take in the related science and engineering extravaganzas staged at the two universities. In these sessions, students learn about amphibians of Idaho, solar-powered wetlands and more. The mission of this Jason Expedition is to work with host researchers to help teachers, students and their families better understand what wetlands are, why they are disappearing and how to best manage these ecosystems in Idaho, the United States and around the world. The Jason Expedition was brought to Idaho in 1999 by the INEEL, and in 2004 reached 22,500 students through 404 teachers in 39 districts.

For more information, contact Brad Bugger at 208-526-0833