Transparency: it’s not just for windows

March 20, 2012

Database provides an unprecedented level of transparency

"Intellus New Mexico," the new, web-based application, will display the same internal data that Laboratory scientists and regulatory agencies see and use for environmental analysis and monitoring of the LANL site.

The new system contains more than 9 million records, including historical data as well as a near-real-time view of ongoing data collection activities.
"Intellus NM will provide scientists, regulators, and the public with the latest data available," said Pete Maggiore, assistant manager of the Environmental Projects Office for the National Nuclear Security Administration’s Los Alamos Site Office. “The timeliness factor is a huge improvement over the old system.”

Los Alamos National Laboratory monitors the surrounding environment to ensure that its workers are protecting the environment while performing the Laboratory’s national security work, and to comply with environmental requirements and standards mandated by the U.S. Environmental Protection Agency, the New Mexico Environment Department, and the U.S. Department of Energy.

The Laboratory also is conducting cleanup and monitoring programs to address legacy contamination from historic activities and wastes produced by current operations.

LANL and regulatory agencies survey the air, soil, sediment, groundwater, and surface water around the Laboratory to make sure contaminants from these operations are not posing problems to workers or the public.

The Intellus NM database contains the results of environmental investigation and monitoring activities, including:

- Air quality sampling
- Soil and sediment testing
- Groundwater and surface water monitoring
- Examining produce grown in the area

"The database provides an unprecedented level of transparency," said Chris Echohawk, manager of environmental data systems for the Laboratory. "The public will be looking at the exact same data that the LANL scientists do."

The database’s developers, Locus Technologies, designed it for ease of use. Data can be displayed in a number of ways. For example, users can select an area on a map and see all the environmental data collected for that area. Users can also choose specific radionuclides or chemicals and see where they are located, and in what concentrations.

Intellus NM interfaces with Google Terrain, Google Hybrid, Google Satellite, and Google Maps systems, topographic and aerial maps produced by the U.S. Geological Survey, and the Laboratory’s geographic information systems to produce detailed map displays.

In addition to an improved user interface and more ways to view and sort the data, Intellus NM does not require a manual feed of the latest data into the system, and as a result, reduces the potential for human error. For this reason, users will see results faster and will be able to view the most recent information.

Intellus NM is administered by the New Mexico Community Foundation.

More details about the Intellus database, as well as a link to the database itself, can be found at www.intellusnmdata.com.