NORTHERN NEW MEXICO CITIZENS' ADVISORY BOARD (NNMCAB)
Environmental Monitoring, Surveillance and Remediation Committee

Recommendation to the Department of Energy
No. 2009-01

Recommendation for Improved Description of Data in the Next Environmental Surveillance Report

Background

The Department of Energy (DOE) requires Los Alamos National Laboratory (LANL) to annually publish an Environmental Surveillance Report (ESR). In fact, LANL has been publishing these reports since 1971. This report contains environmental monitoring activities and results, including air, water, soil and biomass. The report explains to the general public LANL's interpretation of data readings, trends and actions being taken.

This is a very long highly technical report containing tables of data values, graphs and technical discussions. Even the 2007 Executive Summary is 24 pages, a fairly long reading assignment for the general public.

For the past two years the Northern New Mexico Citizen's Advisory Board (NNMCAB) has had the opportunity to review the Executive Summary of this report before publication. The NNMCAB has tried to make suggestions so that the report is as understandable as possible and accurately portrays the progress made every year as well as the areas with problems and areas where remedial actions are underway.

It appears to the NNMCAB that the 2007 ESR describes contamination levels which fall above New Mexico Environment Department (NMED) standards in an abbreviated textual format, while referring to cases in which contamination levels fall below standards in a more complete way. For example, in a sidebar on p. 13 of the Executive Summary to the ESR the following language appears: "LANL detected chromium contamination in the regional aquifer under one canyon at concentrations above the NM Groundwater Standards and under an adjacent canyon at 70% of the standard."

It would have been more accurate to have said that: "LANL detected chromium contamination in the regional aquifer under one canyon at concentrations 800% that of the NM Groundwater Standard and under an adjacent canyon at 70% of the standard." (Levels of Cr(VI) in well R-28 were measured to be approximately 400 micrograms per liter of groundwater during 2007; i.e., 8 times the NM standard of 50 micrograms per liter.)

Similar language also appears in the full ESR on p. 15, just after Figure. ES-4, and again on p. 136 of Chapter 5. This type of language also appears in the 2006 ESR.

The technical data in the full report includes these measurements, but it seems accurate verbiage should be used, especially in the Executive Summary, which makes it clear that some pollutants have been found at extremely high levels using standards of NMED and the Environmental Protection Agency (EPA). The NNMCAB thinks that the significance of this data should be conveyed in plain language, so that it will be more understandable to the general public.

Comments and Observations:

Especially for the ESR, the NNMCAB believes that it is generally best to describe contaminant concentration data lying above established background, a federal or state standard or an established screening level with the same linguistic precision as data falling below the same standard. Failure to do so can be perceived by the public as an attempt by LANL to conceal the significance of its own data.

Recommendation:

The NNMCAB recommends that DOE and LANL work to improve the uniformity of description in the Environmental Surveillance Report for 2008. Description of data lying above established background, a federal or state standard or an established screening level should occur with the same linguistic precision as data falling below that standard.

Intent

The intent of this recommendation is to aid the DOE and LANL in their efforts to keep the general public fully informed of the ongoing cleanup.

Effect

The effect of implementing this recommendation will be to increase public confidence in the cleanup at LANL.