



Kieling, John, NMENV

From: Bobbe Besold [bobbebird@gmail.com]
Sent: Thursday, May 06, 2010 3:19 PM
To: Kieling, John, NMENV
Subject: Groundwater Protection

6 May 2010

John E. Kieling, Program Manager

Hazardous Waste Bureau - New Mexico Environment Department

2905 Rodeo Park Drive East, Building 1

Santa Fe, New Mexico 87505-6303

E-mail: john.kieling@state.nm.us

Re: Lack of Groundwater Protection Requirements in Proposed Hazardous Waste Permit

for Los Alamos National Laboratory

Dear Mr. Kieling:

I am providing the following public comments about the lack of groundwater protection requirements in the proposed Hazardous Waste Permit for Los Alamos National Laboratory (LANL).

Chris Busby, a British physical chemist, has studied radioactivity extensively and says that, "the ingestion of radioactive materials through food and water has effects quite distinct from those of external exposure." Internal exposure can create multiple hits on a single cell within hours. This means that unlike external exposure, when radioactivity is ingested, in food or water, it is up to 100 times more toxic to human beings and will cause cells to mutate and create cancers and tumors.

It is important to note that most studies of the toxicity of radioactivity have only been done on high levels of radiation. Chris Busby and other scientists have been following the effects of ingestion of radioactivity AND the effects of low levels on life. Much of the arguments for the supposed safety of radioactivity are based on studies done on high levels of radioactivity (and only externally).

As a woman and mother who has lived in Santa Fe for 30 years, I am one of many I know who live in the area who have developed thyroid issues. This is one of the effects of radioactivity. I understand that those who actually live on the mesa near Los Alamos are even worse off.



The 40-square mile LANL Facility is located in the Española Basin. The Environmental Protection Agency (EPA) has designated the Española Basin as a sole source aquifer, meaning that the Española Basin is the sole drinking water source for the area between the Jemez and Sangre de Cristo Mountains, running from Tres Piedras, to the north, to just outside of Galisteo, to the south.

Since operations began in 1943, LANL has buried over 21 million cubic feet of radioactive, hazardous and toxic wastes in unlined pits, trenches and shafts dug into the volcanic tuff. The LANL groundwater monitoring network has been under development since 1998 and has yet to provide reliable and representative samples of groundwater from the regional aquifer.

I am particularly concerned about the lack of detection and compliance groundwater monitoring for the "regulated units," Areas G, H and L, at Technical Area 54 (TA-54). I quote the March 19, 2010 written testimony by James Bearzi, Bureau Chief of the NMED Hazardous Waste Bureau:

"... groundwater contamination has already been detected beneath the regulated units at TA-54" p. 62.

Groundwater beneath LANL discharges to springs along the Rio Grande. Albuquerque residents are already drinking water from the Rio Grande and Santa Fe residents will begin next year.

To protect our community and others NMED must require LANL to install wells drilled only with air. The wells must be able to detect contamination and provide the necessary information in order to make informed decisions about corrective action, or "cleanup." The necessary information is not available to determine if the wastes can be left in place or whether they must be excavated. Execution of these decisions must be done in an efficient and cost-effective manner that are protective of human health and the health of all things. Already too much taxpayer money has been wasted drilling defective wells, collecting and analyzing samples from defective wells and reporting data to the public that is unreliable. Please work to protect the lives of our children, and our grandchildren and their grandchildren. Our quality of life depends on your actions. It is time to hold LANL accountable.

We depend on you to act responsibly and thank you for your careful consideration of my comments.

Sincerely,

Bobbe Besold

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