



**Department of Energy**  
 Albuquerque Operations Office  
 Los Alamos Area Office  
 Los Alamos, New Mexico 87544

*See P. 2* ← *Steph*  
*Please return to*  
*Surface Office*  
*for my pending file*  
*Brent*

**FEB 18 1998**

Hank Daneman  
 P. O. Box 31056  
 Santa Fe, NM 87594-1056

Dear Mr. Daneman:

Subject: Perched Aquifer Groundwater Contamination at Los Alamos National Laboratory (LANL)

This responds to your E-mail on the above subject, copy enclosed. I have concerns about radioactive contamination of the water beneath LANL, whether it is alluvial, perched, or the main aquifer. Providing timely and useful information to interested parties is important. That is why this office was very careful to ensure that data on tritium found in perched groundwater at a new well under development in Los Alamos Canyon was released recently to the public within days of our receipt of laboratory results. This data was prominently reported in Los Alamos and Santa Fe newspapers.

I recognize the subject of groundwater beneath LANL is complex and can lead to difficulties in communication. Answers to previous concerns you raised were attempted in good faith. My staff answered what they believed to be your main concern as they heard it expressed at the November 4 meeting. Indeed, four individuals from this office, including myself, took your questions to pertain to the main aquifer. Because we have received no written or otherwise clearly posed request for data or information from you on this topic, please accept this letter as both a reply to your E-mail, but more importantly, to invite your request for specific detailed responses or discussions on this topic where your concerns can be more clearly understood.

You made several allegations that I must respond to. Your assertion that perched water subsurface to LANL and surrounding lands have high levels of radioactivity above legal limits needs clarification. No monitoring on lands surrounding LANL has identified groundwater contamination suspected to be from LANL above or near legal limits. Monitoring within LANL shows instances of perched zones with contamination levels in excess of drinking water standards. Although these perched aquifers are not being used as drinking water sources, the contamination is a concern and is being addressed through LANL's environmental surveillance and environmental restoration programs.

You assert: "What is especially worrisome is the DOE assurances that surface water draining from contaminated sites could not penetrate or percolate through tuff - the dense soils on which the lab is built." Several years ago that had been a LANL position; however, DOE and LANL over the last few years have not maintained that position, recognizing that there was insufficient data to support such a conclusion. Accordingly, we have worked hard to develop a hydrogeological work plan in coordination with the New Mexico Environment Department (NMED) to investigate connections between perched systems and the main aquifer. As part of this plan, we already have begun to construct approximately 32 new deep wells and additional new shallow wells, at



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considerable cost, to add understanding to the complex groundwater systems at LANL. This understanding is necessary, among many other reasons, for determining any appropriate groundwater remediation or protection measures. Future actions and current investigation approaches are performed under regulatory oversight by NMED. Input from public, stakeholders, and the Northern New Mexico Citizens' Advisory Board (Board) is most welcome and desirable on this topic. This would be a particularly appropriate topic for the Board since the environmental restoration program leads the investigations and any resulting actions.

You assert: "Our attempts to get up-to-date information . . . have met with obstacles," and "delays in releasing data are tantamount to intentional foot dragging." Although I cannot concur with your conclusions, I am prepared to work with you to remove or reduce obstacles that exist or may arise. DOE has attempted to faithfully provide information to the Board, and you personally, when requested. We have provided subject matter experts, when requested, to discuss this and other issues with you personally and the Board. In addition, there have been several public meetings in which groundwater data, some of which was very current, was presented to interested parties. At your request, my staff will provide handout material and summaries of these meetings.

I agree that in the past LANL's annual environmental surveillance report was not made publicly available in a timely manner. It is for precisely that reason that this office has worked hard with LANL to improve the timeliness of that report as well as the reader friendliness of information being presented. I would welcome any constructive feedback on form and content you may care to share. It is not DOE's goal to "drag our feet" in releasing data to the public. Because the annual report contains the entire environmental surveillance data set, and is therefore not our most timely vehicle for releasing data, we have made progress in releasing high priority data in other ways. Some real-time and "quick time" surveillance data is now available on LANL's Internet home page, special reports in the public reading rooms, special data news releases, and fairly regular public meetings. Our next public meeting on environmental surveillance data is planned for the evening of February 24 in Santa Fe. I will ensure that you and other members of the Board receive the exact location and starting time when they are set. We are working on improving these means of distributing data, but if they are not working for you, a direct written request to me or my staff would be a useful alternative.

*Steph -  
who from  
your staff  
will attend?*

Sincerely,



G. Thomas Todd  
Area Manager

LAAME:2MJ-055

Enclosure

cc:  
See page 3

Hank Daneman

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cc w/enclosure:

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Hank Daneman

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FEB 18 1998

**From:** Hank Daneman <hld@juno.com>  
**To:** LAAO.LAAO WPO(ttodd)  
**Date:** 12/12/97 1:01pm  
**Subject:** Perched Aquifer Ground Water Contamination at Los Alamos Labs

Tom: I continue to be concerned about the high levels of radioactive chemical contamination in the perched water subsurface to LANL and surrounding lands as evidenced from the data from sampling wells in Mortandad Canyon. These levels are over legal limits.

Mat Johansen's answer (which you distributed on December 1) refers to the main aquifer. My questions were clearly on the perched aquifer - not the main aquifer. I can only assume at this point that there is no acceptable response to my questions on the perched aquifer and that this is why Mat chose to respond about the main aquifer.

What is especially worrisome is the DOE's assurances that surface water draining from contaminated sites could not penetrate or percolate through "tuff" - the dense soils on which the lab is built. Of course, it is now quite evident that this percolation has occurred. Further, no one can say that the water perched above the main aquifer will not soon penetrate to the main aquifer. While I will deal with this factor separately, there is the possibility (or probability) that there will be another earthquake within the faults wandering through LANL and that this will precipitate the intrusion of the perched water and its high levels of Strontium, Cesium and Tritium into the main aquifer. There are obviously other ways in which surface water gets into the main aquifer over the course of time.

As I said, my questions at the CAB meeting were about the very high levels of radioactive chemicals from LANL wastes getting into the perched aquifer and Mat's response which you have distributed is useless. Our attempts to get up-to-date information on the progress of this contamination into the waters under the lab and under the canyons progressing from the lab toward the Rio Grande river have met with obstacles.

I can only draw a personal conclusion that the DOE and the NMED management are reluctant to share this worrisome data with the public and that the year to year and one-half delays in releasing data are tantamount to intentional foot-dragging. In this entire matter, the AIP has, in my opinion, turned out to be a disadvantage to the public. As one whose patience is finite, I finally took my concerns, as an individual, to Governor Johnson's office asking for repeal of the AIP and proper funding of the NMED so they can provide independent surveillance. Why the NMED gave control over the sampling data to the DOE I'll never know but, it is now obvious that it has been a bad deal from the point of view of the public. There is a strong suspicion that the 12 - 18 month delays in releasing the information and the confusing form in which it is finally presented is an intentional effort by the DOE to obscure the dangerous levels of radioactive contamination from the public. I am also unclear as to why the EPA has separated itself

from this problem.

Tom, I feel the DOE has to come clean with the CAB and admit to a real concern about possible contamination of our water supply from as yet uncleaned sites within LANL. Only then, could we possibly trust the DOE to recharacterize the site and properly locate sampling points to assure us that the scope and rate of development of the problem can be tracked by an independent authority reporting directly to the public.

Hank Daneman

PS - Please advise all who received a copy of your transmittal of Mat Johansen's response that it is unacceptable for reasons given above.

CC: LAAO.LAAO WPO(jvozella),LAAO.smtp(btwining,"karol....