



State of New Mexico
ENVIRONMENT DEPARTMENT
 Harold Runnels Building
 1190 St. Francis Drive, P.O. Box 26110
 Santa Fe, New Mexico 87502
 (505) 827-2850

JUDITH M. ESPINOSA
 SECRETARY

RON CURRY
 DEPUTY SECRETARY

BRUCE KING
 GOVERNOR

March 17, 1993

TA 00

Mr. Allen J. Tiedman,
 Assoc. Director for Operations
 Los Alamos National Laboratory
 P.O. Box 1663
 ADO-Mail Stop A120
 Los Alamos, New Mexico 87545

Mr. Jerry Bellows, Manager
 Los Alamos Area Office
 Los Alamos, New Mexico 87544

Re: ¹³⁷Cs in Public Water Supply Wells,
 Los Alamos Canyon Well Field and San Ildefonso Pueblo

Dear Sirs:

At a meeting with representatives of the All Indian Pueblo Council in October of 1992, Gilbert Sanchez of the San Ildefonso Pueblo drew attention to the fact that 1990 data for public drinking water supply wells in the Los Alamos Canyon well field as well as water supply wells located on the pueblo¹ indicated apparent exceedances in both locations of DOE's allowable concentrations of ¹³⁷Cs in drinking water. New Mexico Environment Department's (NMED) Agreement In Principle (AIP) staff attending this meeting agreed to look into this matter solely to determine whether LANL was responding appropriately to existing DOE orders.

Contacts made between AIP and LANL staff in November indicated that these ¹³⁷Cs exceedances had resulted from the reduction by DOE of the drinking water exposure pathway to 4 mRem/yr². The laboratory's position was stated to be 1) that normal ambient background radiation ("noise") occupying the same energy spectra locations as the ¹³⁷Cs signal accounted for the largest part of this signal such that the actual ¹³⁷Cs values would be much below the reported values, and 2) that these ¹³⁷Cs signal levels were historically typical. AIP staff stressed at this time that regardless of these factors, standards set in a DOE order had been apparently exceeded and it was the lab's clear responsibility to respond accordingly. LANL agreed.

Contacts were resumed in January of this year, when LANL stated

¹Environmental Surveillance at Los Alamos during 1990, Environmental Protection Group, document LA-12271-MS, p. VI-15 and IX-9.

²DOE Order Number 5400.5, issued February 8, 1990.

TR



Tiedman/Bellows
March 17, 1993
Page 2

that the lab's analytical section had reconfigured its ¹³⁷Cs detection system and was working to reduce the background noise. The objective was to adequately eliminate that part of the signal which was due to noise and thereby determine whether the standards in DOE Order 5400.5 had actually been exceeded or not.

At a meeting between LANL and AIP staff in February of this year LANL stated that the problem remained unresolved.

It is clear that this is a difficult technical problem and that LANL has been unable to achieve a solution. I recommend the lab proceed with all due speed either to refine its techniques adequately to respond to the problem or to identify an analytical laboratory with the requisite capabilities to make a determination in this case. If as a result of this effort ¹³⁷Cs levels in the subject wells are found actually to be higher than regional ¹³⁷Cs levels LANL/DOE will need to identify the source of the additional ¹³⁷Cs and address any related problems.

If you have any questions regarding these matters, please contact Mr. Benito Garcia, Hazardous and Radioactive Materials Bureau Chief, at (505) 827-4358.

Sincerely,



Kathleen M. Sisneros, Director
Water and Waste Management Division

cc: Benito J. Garcia, HRMB Chief
Neil Weber, DOE/AIP Bureau Chief
Bruce Swanton, DOE Oversight Program Manager
John Parker, DOE Oversight Program Manager
Robert Gallegos, SWQB Program Manager
Gilbert Sanchez, First Lieutenant Governor, San Ildefonso
Pueblo