



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

MAR 09 1994

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General

Barbara Driscoll
RCRA Permits Branch
Hazardous Waste Management Division
U.S. Environmental Protection Agency, Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

Dear Ms. Driscoll:

This letter responds to your letter to me dated January 14, 1994. Enclosed is an expansion on the response to Mr. Jon Rauscher's comments on the technical assumptions for data collection and evaluation. Please consider the enclosure, and if you or Mr. Rauscher still have concerns, please call me and I will arrange a teleconference with Dr. Lars Sohlt of the University of California, who prepared the response.

If you have questions, please call me at 505-665-7203.

Sincerely,

Theodore J. Taylor
Program Manager
Environmental Restoration Program

Enclosure

cc w/ enclosure:
K. Sisneros, New Mexico Environment Department
T. Taylor, ESH, LAAO
C. Fesmire, ESH, LAAO
K. Boardman, ERPO, AL, MS A906
K. Schenck, Scientech/LAAO, MS A316
cc w/o enclosure:
W. Spurgeon, EM-452, HQ
T. Baca, EM-DO, UC-LANL, MS-J591
RFP, MS M707



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Los Alamos

NATIONAL LABORATORY

Environmental Restoration, MS M773
Environmental Management Program
Los Alamos, New Mexico 87545
(505) 665-3033
FAX(505-667-3395)

Date: January 4, 1994
Refer to: EMP/ER:94-S4

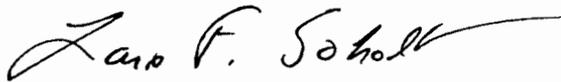
Ted Taylor
U.S. Department of Energy
Los Alamos Area Office, MS A316
Los Alamos, NM 87545

Dear Mr. Taylor,

Kelly Bitner has asked me to expand on my responses to Mr. Jon Rauscher's comments on our technical assumptions for exposure parameters. Enclosed is my response to this request as well as the original comments and responses. Feel free to pass them on to Mr. Rauscher at the EPA.

If you have any questions, please contact me at 665-3029.

Sincerely,



Lars F. Soholt
EMP/Environmental Restoration

LFS:ck

Enclosure: Response to comments

Cy: J. Shipley, EMP, MS J591
B. Vocke, EMP/ER, MS M992
E. Kelly, EMP/ER, MS M773
A. Dorries, HS-5, MS M773
K. Bitner, DOE-AL/ERPO, MS A906
CRM-4, MS A150 w/o enc.
RPF, MS M707

**Expanded Responses to
EPA's Comments on Technical
Assumptions for Exposure Parameters**

Specific Comment #2:

In general, homes in Los Alamos County are wood-frame, stucco, with modest shielding against photon radiation. The NCRP (Report 76, 1984) reports shielding factors of 60 to 90% for such structures. We have chosen the factor of 70% because it falls in about the middle of this range. In addition, this value is used by U.S. Nuclear Regulatory Commission for evaluating compliance with 10 CFR 50 and by the U.S. Department of Energy for evaluating compliance with its standards for limiting radiation exposure of the general public.

Specific Comment #3:

Dust loading in Los Alamos County has been measured by the state of New Mexico since the 1970s. The maximum 24-h average dust load is quite variable from year to year, ranging from about 50 to over 150 $\mu\text{g}/\text{m}^3$. We chose to use 90 $\mu\text{g}/\text{m}^3$ as reported in the 1989 Los Alamos surveillance report because it is approximately central to this range. The maximum 24-h average represents a conservatively high estimate of dust loads, being approximately 3 times the annual geometric mean.

Specific Comment #5:

Kelly pointed out that I overlooked this comment in my first response. The general worker at Los Alamos does not usually handle soils. Environmental and waste management workers may be exceptions to this generality. However, for these categories of workers, standard operating procedures normally call for eliminating or reducing contact with contaminated soils. Risk management for these workers is implemented through our health and safety program. Therefore, we have assumed this to be an unimportant pathway for general, long-term workers at Los Alamos.