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#59173

Date: July 16, 1998
Refer to: EM/ER:98-237

Mr. Benito Garcia
NMED-HRMB
P.O. Box 26110
Santa Fe, NM 87501

SUBJECT: REQUEST TO USE INDUSTRIAL EXPOSURE SCENARIOS IN LIEU OF RESIDENTIAL SCENARIOS FOR HUMAN HEALTH RISK ASSESSMENT IN 260 OUTFALL [PRS 16-021(c)] RFI/CMS PROCESS (FORMER OU 1082, FU 3)

Dear Mr. Garcia:

The purpose of this letter is to request the New Mexico Environment Department's Hazardous and Radioactive Material Bureau's (HRMB's) concurrence with the use of exposure scenarios associated with industrial land use in lieu of residential land use based scenarios for human health risk-based decision making at the 260 Outfall site.

The Los Alamos National Laboratory's Environmental Restoration (ER) Project is in the process of preparing a Resource Conservation and Recovery Act facility investigation (RFI) report documenting the Phase II investigation work at the Technical Area (TA) 16 260 Outfall [Potential Release Site (PRS) 16-021(c)]. This report is part of the corrective actions process ongoing at this PRS located in TA-16. In the effort to develop technical approaches with the Administrative Authority as work is accomplished, the 260 Outfall Technical Team has met regularly with HRMB personnel to provide updates on progress and to resolve technical issues. In March 1998, the Laboratory's ER Project technical personnel met with HRMB personnel (meeting notes available) to discuss the human health risk assessment approach for the 260 Outfall corrective measures study (CMS) project.

As a result of this meeting, a strategy to approach human health risk-based decision making for the CMS process specific to the 260 Outfall was developed. A key component of this strategy is the use of the industrial land use based exposure scenario in place of a residential land use based exposure scenario for the evaluation of human health risk due to potential exposure at this site. The use of this strategy more accurately reflects the projected future land use of the site.

The justification of the Laboratory solely applying an industrial land use exposure scenario at this site is based on the following reasons.



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1. TA-16-260 is an active high explosives machining facility located in the heart of the High Explosives (HE) Research and Development (R&D) and Testing Area of the Laboratory. This area of the Laboratory is industrial, and future land use for this property is slated for continued Laboratory operations as the HE R&D and Testing Area.

The future land use of the site is described in the Land Use Master Plan and Future Land Use Map for the Laboratory. The Master Plan and Future Land Use Map are a part of the 1990 LANL Site Development Plan, and Annual Update 1995. A copy of the Site Development Plan Annual Update 1995, including the Future Land Use Map, is attached for your information and review. The Site Development Plan is a master planning document covering a 20-year period. The Master Plan and Future Land Use Map represent the Laboratory's plan for the future use of the site. These documents demonstrate that no change in the industrial land use designation for this area of the Laboratory is expected.

2. The potential for human exposure to contaminants in the environment at this site is very low. This is a highly secure area of the Laboratory and access for workers is very restricted. Due to safety restrictions, actual access behind the 260 HE machining building is not allowed during machining operations. The Laboratory believes that the worker with the highest potential for exposure at this site is the environmental worker obtaining samples in support of the CMS process.

Therefore, the industrial land use exposure scenario evaluation is most realistic as a decision making tool for human health risk-based decisions at this site. The following industrial exposure scenarios are proposed for evaluation during the CMS process:

- environmental worker,
- worker trail user, and
- industrial and construction worker.

These receptors were chosen to represent a range of potential exposures to those that work at TA-16. These receptors are not hypothetical, but are the most likely industrial receptors based on actual activity at this site. The environmental worker is representative of individuals involved in environmental monitoring, i.e., field sampling efforts. The worker trail user is defined as a worker involved in recreation/exercise purposes such as walking/jogging. The industrial and construction worker is representative of workers involved in more industrial activities than other defined receptors.

It should also be noted that because of the low potential for human exposure at this site, other considerations, including ecological risk and aesthetic quality thresholds, are expected to drive the decision making process.

Based on the reasons stated above, the Laboratory requests that you approve the use of industrial land use exposure scenarios for human health risk-based decisions during the TA-16-260 Outfall RFI/CMS process. The Laboratory will continue to evaluate industrial exposure scenarios within the Phase II RFI Report.

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this approach is required prior to publication of the report scheduled for delivery in August 1998, we would very much appreciate an expedited review of this request. Thank you for your prompt consideration of this matter.

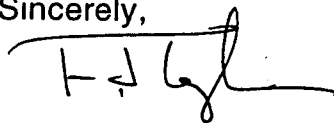
Should you have any questions, please contact Dave McInroy at (505) 667-0819 or Joe Mose at (505) 667-5808.

Sincerely,



Julie A. Canepa, Program Manager
LANL/ER Project

Sincerely,



Theodore J. Taylor, Program Manager
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JC/TT/JM/rfr

Enclosure: Site Development Plan Annual Update 1995

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