

General



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PETER MAGGIORE
SECRETARY

MEMORANDUM

TO: Gedi Cibas, Office of the Secretary

THROUGH: James Bearzi, Chief Hazardous Waste Bureau

FROM: John Kieling, Program Manager Permits Management Program 

SUBJECT: NMED File No. 1161 ER, PDEA: Future Disposition of Certain Cerro Grande Fire Flood and Sediment Retention Structures at Los Alamos National Laboratory

DATE: July 26, 2002

The Hazardous Waste Bureau has reviewed the Predecisional Draft Environmental Assessment (PDEA) for the Future Disposition of Certain Cerro Grande Fire Flood and Sediment Retention Structures at Los Alamos National Laboratory (LANL) and has the following comments:

Before any action is taken to remove the structures described in the document, the soil and vegetation would be stabilized or restored to near pre-fire conditions and the stormwater flows would have returned to pre-fire levels; consequently the Flood Retention Structure (FRS) would no longer be necessary to control flows in Pajarito Canyon. We consider the Disassembly Alternative for the FRS to be the preferred action. The streambed should be allowed to resume natural flow without future floodwater retention. Because partial removal (Proposed Action) would not allow Pajarito Canyon to attain pre-FRS conditions, it is considered to less preferable than complete removal of the structure. Partial removal would also require maintenance and potentially expensive disposal costs for the ponded debris and sediment.



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The amount of soil to be removed from the upstream reservoir associated with the FRS is an estimated volume. We are concerned that the PDEA states that further NEPA review will be needed if the amount of soil to be removed exceeds the estimated amount. There should be a tangible level (i.e. the natural ground surface) to which soil should be removed, regardless of the actual volume.

Due to historic and potentially ongoing contaminant releases to Pajarito Canyon from LANL activities, we believe that a soil sampling plan should be enacted before any soil is removed from the reservoir area associated with the FRS. Although the PDEA states that Potential Release Sites (PRSs) have been stabilized, we do not have evidence of that fact. Historic releases of solid wastes as well as hazardous and radioactive constituents have been delivered to the canyon bottom and are mobilized by flood waters, undoubtedly resulting in deposition of contaminated sediments behind the FRS. We are also concerned about the concentration of contaminants in the ash deposits from the Cerro Grande Fire which have washed into the canyon. As stated in the PDEA, the potential for the migration of chemical, radiological and heavy metal constituents in the canyons has increased due to increased surface runoff and erosion. Accumulated soil sediments should be tested for hazardous and radiological constituents and solid wastes (e.g. perchlorate) in several areas and at various depths prior to removal, so that they may be disposed of appropriately. Additionally, sediments at the outfall from the FRS, in particular the area where the channel is eroding, should be tested for the same constituents.

The PDEA states that unsaturated volcanic tuff and sediments insulate the regional aquifer from the perched aquifers. This statement is incorrect as there are indications (i.e. geochemical) of hydraulic connectivity between the aquifers. The intermediate aquifers are believed to be both a source of recharge to the main aquifer and a significant contaminant transport path. Fractures, faults and high permeability hydrostratigraphic units in the bedrock have been shown to provide pathways for downward water movement. There is also evidence of unsaturated flow to the regional aquifer from perched water.

NEW MEXICO ENVIRONMENT DEPARTMENT
ENVIRONMENTAL REVIEW COMMENT FORM

TO: James Bearzi (John Kieling)
HJB

FROM:

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DATE: 7-17-02

PROJECT TITLE:

PDEA: Future Disposition of Certain Cerro Grande Flood
and Sediment Retention Structures at LANL

NMED FILE NO.: 1611ER

SAI NO.: _____

A. Please review the attached document and return your comments to me (1) in hard copy AND (2) electronically, via E-mail or diskette (using **WORD** format), by no later than 7-25-02

Your review should consider:

- (1) All requirements or conflicts with NMED laws and regulations of which you know;
- (2) All deficiencies or inaccuracies in the information provided which prevent an adequate environmental assessment of the project;
- (3) If applicable, whether the anticipated accomplishments of the proposal justify the requested funding;
- (4) Other information which may be helpful to understand the environmental impact of the project (e.g., other environmental problems in the vicinity, other project impacts, problems which may develop for which no specific NMED law and regulations apply, and so on).

B. Unless otherwise noted, please apply the following procedures when conducting the review:

- (1) Use its above-stated **NMED FILE NO.** when referring to the project.
- (2) Return this routing sheet with the hard copy of your comments.
- (3) (a) Return document to me after review: YES NO
- (b) Return document to me ASAP if you have an extra copy for your review; indicating that that is why, in fact, you are returning it.

COMMENTS:

