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LANL TA-3

September 2, 1997

Dean Triebel, Document Manager
Los Alamos Area Office
528 35th Street
Los Alamos, N.M. 87544

Dear Mr. Triebel:

RE: PREDECISIONAL DRAFT ENVIRONMENTAL ASSESSMENT FOR LEASE OF LAND FOR THE DEVELOPMENT OF A RESEARCH PARK AT LOS ALAMOS NATIONAL LABORATORY, LOS ALAMOS, NEW MEXICO (DOE-EA-1212); PREPARED BY US DEPARTMENT OF ENERGY, LOS ALAMOS AREA OFFICE; JULY 23, 1997

The following provides New Mexico Environment Department (NMED) staff comments concerning the above-referenced Predecisional Draft Environmental Assessment (PDEA).

1. Section 2.1.2, Page 9, Proposed Land Use, Paragraph 3

These figures should be revised to clearly show the proposed locations of the buildings, paved areas, etc., in relation to the locations of the Potential Release Sites (PRSs) which are depicted on Figure 3-1 (p. 24).

The boundaries of PRSs 3-038(a) and (b) appear to be near the location of a proposed building, parking lot, and road. Because the lateral extent of contamination may not be known, these improvements may be built over contaminated soils. Excavation of soil from these PRSs could result in the generation of radioactive or mixed waste and result in radioactive exposure to workers or the public. In addition, if remediation is required at these PRSs, there will need to be sufficient work space along their western boundary for contamination reduction zones and to allow access for heavy machinery. Consideration should be given to requiring a generous buffer zone between any improvements and the western boundary of the PRSs.

2. Section 2.1.2, Pages 12 and 13, Proposed Land Use

It should be made clear, if that is the intention, that the presence of radioactive materials or ionizing producing equipment must be properly licensed by the state of New Mexico prior to use at the proposed research park.

**3. Section 2.1.2, Page 12, Proposed Land Use, Paragraph 1
Section 4.1.1.3, Pages 32-33, Utility Demands, Paragraph 1**

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Section 4.1.4, Page 37, Environmental Restoration, Paragraph 1

The document is unclear regarding whether the PRSs will be developed or otherwise disturbed before NMED approves no further action for the sites. The document should clearly state whether the County or others will be allowed to trench or excavate within or near PRS boundaries before NMED approves the site for no further action. The areas at or near each PRS should not be developed or disturbed until after NMED approves no further action for that PRS. If the U.S. Department of Energy (DOE) allows these areas to be developed or disturbed, the County should be aware that these activities may result in the generation of hazardous, radioactive, or mixed waste and may result in exposure of workers to radioactivity. In addition, these areas may be investigated or remediated in the future which could impact the Research Park structures and developments. In addition, the document should state that DOE will be responsible for ensuring compliance with institutional controls (if any) at each PRS if the site is approved for no further action.

4. Section 3.6, Page 23, Environmental Restoration, Bullet 2

(Note: In the RFI Work Plan for OU 1114, March 1994, the citation for the information identified in this bullet statement is "Elder et.al. 1986" instead of "Vozella 1994".)

The information regarding contamination in the subsurface soil is misleading. Subsurface soils at this site appear to contain elevated levels of radioactivity (RFI Work Plan for OU 1114, March 1994). In addition, the soils may contain hazardous constituents from releases of industrial wastes, such as cyanide wastes, electroplating wastes, solvent wastes, etc. The Los Alamos National Laboratory (LANL) has proposed additional sampling to define the nature and extent of contaminants. Sampling and possible remediation of the site may be years away.

The RFI Work Plan does not state whether the surface soils were found to be contaminated during the 1982 clean up. If the surface soils were contaminated, they could have been transported northward toward Los Alamos Canyon via storm water runoff.

The document should be revised to include a description of the levels of radioactivity in the surface and subsurface soils; identify and compare the 1982 guidelines for radioactivity in surface and subsurface soils with today's guidelines; indicate that in several locations below the former waste lines, LANL was unable to remove sufficient soil to meet their established guidelines; and also, describe the hazardous constituents that are potentially present in the soil at the site.

It may be necessary for the DOE to erect a fence around the boundary of PRSs 3-038(a) and (b) to prevent digging within the PRSs until the area can be investigated and possibly remediated. In addition, the possibility of off-site migration of contaminated surface soils should be investigated.

5. Section 3.6, Page 23, Waste Management and Environmental Restoration

The PRSs which are not on the HSWA (Hazardous Solid Waste Amendments) module of the LANL RCRA (Resource Recovery and Conservation Act) permit should also be considered by NMED for No Further Action (NFA) status, as previously indicated. The PRSs not on the HSWA module may or may not be adequately addressed for NFA status. If any of these PRSs were not appropriately considered as a SWMU (Solid Waste Management Units) there is a reasonable chance that NMED may add these sites to the HSWA module.

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If LANL is considering to lease this area for development it should follow-up with the PRSs not addressed within a "No Further Action Proposal" through a Class 3 Permit Modification. For any further land transactions, leases, etc., that LANL is anticipating, the PRSs within these areas should be covered prior to the consideration of such proposals. At minimum, LANL should provide written notification to the lessee(s) of the potential hazards associated with the PRSs prior to lease of the property.

Following are additional comments regarding the status of each of the PRSs:

PRS: Description	Comments:
3-009(b) Surface disposal	SWMU (Solid Waste Management Unit) on HSWA module Table A. Proposed for NFA (no further action) March 1995. Appears appropriate for removal from HSWA module. Class 3 Permit Modification has not been initiated by HRMB.
3-038(a) Acid Tank and associated Waste Lines	SWMU on HSWA module Table A. This SWMU has not been proposed for an NFA through a Class 3 Permit Modification.
3-038(b) Waste Retention Tank and associated Waste Lines	SWMU on HSWA module Table A. This SWMU has not been proposed for an NFA through a Class 3 Permit Modification.
3-055© Outfall	SWMU on HSWA module Table C - OU 1114. This SWMU was proposed for NFA within the OU 1114 Work Plan. This SWMU has not been proposed for an NFA through a Class 3 Permit Modification. This site is also a potential surface water concern.
30-001 Landfill/Surface Disposal	SWMU not on HSWA Module. SWMU proposed for NFA on March 1995 through a Class 3 Permit Modification. This SWMU has not been addressed by HRMB as an NFA (only HSWA SWMUs were considered at the time of the review, the non-HSWA have not been formally reviewed by HRMB).
3-001(m) Satellite Storage	SWMU not on HSWA module. Proposed for NFA in OU 1114 Work Plan. Considered as an AOC (area of concern) by LANL and proposed for NFA, September 1995, under NFA criterion 3 (the PRS is regulated under a different authority which addresses corrective action). Class 3 Permit Modification has not been initiated by HRMB.

PRS: Description	Comments:
3-055(d) Outfall	SWMU on HSWA module Table C - OU 1114. Proposed for NFA, September 1996. Appropriate for removal from HSWA module. Class 3 Permit Modification will be initiated soon by HRMB. This site is also a potential water concern.

6. **Section 4.1.1.3, Page 32, Utility Demands, Paragraph 2**
Section 4.1.1.3, Page 33, Utility Demands, Paragraph 1
Section 4.1.1.3, Page 33, Utility Demands, Paragraph 2

If any utility lines are installed or connected to existing lines, no trenching, digging, or excavating activities should be conducted within or near any PRS until the PRS is approved for no further action by NMED. Especially, these activities should not be allowed within the boundaries of PRSs 3-038(a) and (b) and the associated waste pipes (including the inactive waste pipes that lie beneath the intersection of West Jemez Road and Diamond Drive).

7. **Section 4.1.3, Page 34, Ecological Resources**

The Ecological Resources section states: " Effects such as erosion or alteration of drainage patterns within the canyon bottoms or along slopes would not be expected to occur. The wetland site would be maintained and enhanced." The Department's Surface Water Quality Bureau's Point Source Regulation Section (SWQB/PSRS) is concerned that various ER sites (PR5 3-005(c), 3-001, 3-001(m) and 3-005(d)) may be impacted by construction activity. PRS site 3-005(d) is listed by SWQB as a surface water concern site with potential to impact surface waters. The Department recommends that proper measures be taken by DOE/LANL to prevent any impact from these sites before construction activity begins. The SWQB/PSRS also requests that DOE/LANL inform it of what measures are being taken regarding this matter.

8. **Section 4.1.4, Page 36, Waste Management, Paragraph 1**

It may be necessary for the DOE to erect a fence around the boundary of PRSs 3-038(a) and (b) to prevent removal of vegetation or digging within the PRSs until these sites can be investigated and possibly remediated. Certain vegetation at these sites may contain elevated levels of radioactivity.

9. **Section 4.1.4, Page 36, Waste Management, Paragraph 1**

This section should address the generation of hazardous, mixed, or radioactive waste. Excavation of soil or debris within or near PRS boundaries may result in the generation such wastes in spite of the fact that a site may have been approved for no further action. Soil or debris wastes that are generated by excavating within or near the PRS boundaries must be characterized to determine whether they are hazardous, mixed, or radioactive wastes.

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10. Section 4.1.4, Page 37, Environmental Restoration, Paragraph 1

The last sentence is not correct. The PRSs were determined by LANL to require no further action based on human health risk. Potential adverse ecological effects have not been evaluated. If the areas within or near PRSs are developed before NMED approves no further action for the sites, adverse effects could be expected to result. The areas at or near each PRS should not be developed until after NMED approves no further action for that PRS.

11. Section 4.1.4, Page 38, Environmental Restoration, Paragraph 2

The areas at or near each PRS should not be developed until after NMED approves no further action for that PRS.

12. Section 4.1.6, Page 38, Human Health

This section should address human health effects with respect to PRSs 3-038(a) and (b) and construction activities and remediation activities. During construction or remediation activities in or near these PRSs, workers could be exposed to radioactively contaminated soil and hazardous constituents. The excavated soil could be subject to erosion by storm water runoff and wind dispersion. In addition, during remediation activities, the people working at Research Park could be exposed to wind-blown contamination.

13. Section 4.1.7., Page 39, Air Quality

Radioactive materials including sealed sources are *licensed*, not "permitted", by the State Of New Mexico. As indicated previously, the radioactive materials usage is licensed through the State of New Mexico.

14. Section 4.1.10, Page 43, Water Quality, Paragraph 1

BMPs should be implemented and maintained at each PRS to prevent erosion of contaminants during and after construction activities. The BMPs should be maintained at least until the sites are approved for no further action by NMED. BMPs should include devices that minimize the amount of storm water entering and leaving the PRS boundaries.

15. Section 4.2, Page 44, Potential Accident Scenarios, Paragraph 1

In the RFI Work Plan (OU 1114, March 1994) an accident scenario is presented that involves PRSs 3-038(a) and (b). This scenario involves the rupture of nearby steam or gas lines in the contaminated soil zone resulting in a surface release of radioactivity to the public and to construction workers. This scenario should be evaluated to determine if this accident would pose a more serious risk than "scenario 1" which is presented on page 44.

16. General Comments

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a) Regulations concerning flooding/erosion that could possibly affect surface water quality have been promulgated by the U.S. Environmental Protection Agency (USEPA) in 40 CFR Section 122.26 which govern permitting and pollution control requirements regarding storm water discharges from construction sites.

Owners/operators of construction projects of five acres or more are required to apply for, at a minimum, permit coverage under the National Pollutant Discharge Elimination System (NPDES) baseline general storm water permit for construction activities. This permit coverage may be obtained by filing a Notice of Intent (NOI) no later than forty-eight hours prior to commencing construction activities.

Among other items, this permit requires that a site-specific, storm water pollution prevention plan (SWPPP) be prepared before submission of the NOI and that appropriate pollution prevention measures be installed at the site, in a timely manner. Information regarding storm water permits may be obtained by calling USEPA at (214) 665-7185 or Taylor Sharpe of the USEPA at (214) 665-7112.

Best Management Practices (BMPs) are measures or practices used to reduce the amount of pollution entering surface waters, air, land or ground waters, which must be developed and implemented for each five acre or larger construction site. Information on the development of BMPs may be obtained from the New Mexico State University/Cooperative Extension Service, the U.S. Department of Agriculture/Soil Conservation Service and the USEPA document entitled **Storm Water Management For Construction Activities. Information regarding this document and copies of the baseline general permit (which includes the NOI form) may be obtained by calling USEPA at (202) 260-7786.**

Also, anyone who wants to do any dredge and fill work in a water of the U.S. (river, creek, arroyo, gully etc.) must obtain a Section 404 (Clean Water Act) permit from the Corps of Engineers. Almost all permits for work in a perennial stream have the condition of State water quality certification (Section 401).

b) The PDEA includes two options for treating sanitary wastewater, discharge to the LANL wastewater treatment plant (DP-857) or discharge to the Los Alamos County wastewater treatment plant (DP-814). Each of these wastewater treatment plants currently operates under a ground water discharge permit. Therefore, the discharge of domestic wastewater from the research park to the wastewater treatment plant would not require a separate ground water discharge permit. Research park tenants would have to discharge in accordance with any pre-treatment requirements of the receiving wastewater treatment plant. However, if any of the tenants of the research operate in a manner that could adversely impact ground water quality, individual ground water discharge permits may be required.

c) Los Alamos County has been classified as an attainment area for all air pollutants identified in the National Ambient Air Quality Standards (NAAQS) and the New Mexico Ambient Air Quality Standards (NMAAQs).

Only permitted radioactive sealed sources, unsealed sources less than Nuclear Facility Category 3 levels of radioactive materials, and ionizing producing equipment (such as x-ray machines) would be allowed to be used and stored at the research park. No special nuclear materials would exist, be used, or be generated within the research park laboratories. For the purposes of air quality

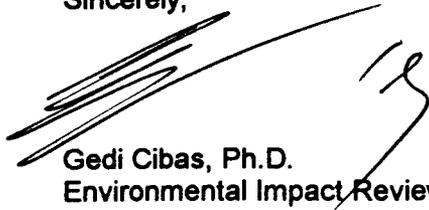
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compliance, multiple facilities under common ownership or control are treated as one for air emissions reporting. The owner, the operator of the facility or both can be responsible for operating in accordance with the Clean Air Act Amendments of 1990. Therefore, it is possible that companies occupying the research park together with DOE may be required to have an air emission permit to operate.

Construction of the proposed project will result in a temporary increase in particulate emissions due to earth disturbing activities. The Department's Air Quality Bureau requires that an air quality permit must be obtained by any source which has a potential emission rate greater than 10 lbs/hr or 25 tons/year. Since most asphalt plants and rock crusher spreads exceed this rate, the contractors supplying the asphalt and aggregate for the construction must have current air quality permits, which there is no mention of in this assessment.

We appreciate the opportunity to comment on this document. Please let us know if you have any questions.

Sincerely,



Gedi Cibas, Ph.D.
Environmental Impact Review Coordinator

NMED File No. 1118ER