



State of New Mexico
ENVIRONMENT DEPARTMENT
DOE OVERSIGHT BUREAU
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August 31, 1998

Joe Vozella, DOE AIP POC
U. S. Department of Energy
Los Alamos Area Office, MS A316
Los Alamos, New Mexico 87544

RE: Review of Los Alamos National Laboratories "Sampling Plan for Upper Sandia Canyon" dated March 1998.

Dear Mr. Vozella:

The DOE Oversight Bureau (DOE OB) has reviewed the subject document. The attached comments are provided for the purpose of communicating the results of the review. They are not provided or intended for the purpose of representing the regulatory position of the New Mexico Environment Department.

The Sampling Plan for Upper Sandia Canyon provides the framework for the characterization of Upper Sandia Canyon including sediments, and surface water. Generally, the plan includes appropriate detail regarding specific contaminants found during previous investigations. However, the plan deviates from the approach presented in the Canyons Core Document by proposing a limited suite of analytes during phase-one sampling. Also, the plan proposes further investigation of contaminants posing risk rather than contaminants found above background concentrations or detect for organics. We believe that phase one sampling should include a more representative analytical suite and all contaminants found above background or detect for organics should be investigated to define extent and calculate inventory.

The attached comments address these subjects and include recommendations intended to help LANL better characterize the canyon system. The comments have been discussed with the appropriate LANL ER Canyons Focus Area Staff.

If there are any questions, please contact me at 505-672-0448 or Chris Hanlon-Meyer, the DOE Oversight Bureau Canyons Focus Group Manager at 505-827-1536.

Sincerely,

Steve Yanicak, LANL POC
Department of Energy Oversight Bureau

SY:CHM:chm

Attachment

cc w/o attachment:

J. Parker, NMED, Chief, DOE Oversight Bureau



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cc w/ attachment:

B. Garcia, NMED, Chief, HRMB
M. Leavitt, NMED, Chief, GWQB
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P. Longmire, LANL, CST-7, MS J534
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SF Fiche

• Hexins?

• Landfill (61-005) → WPCs ^{in sandia canyon} should include any potential contaminants from landfill

**New Mexico Environment Department
DOE Oversight Bureau Review of
Sampling and Analysis Plan for Upper Sandia Canyon,
Los Alamos National Laboratory, March 27, 1998**

General Comment:

1. The document is very successful in presenting historical information in detail including concentrations of contaminants and descriptions of sites potentially contributing to the Upper Sandia Canyon watershed.

Specific Comments:

1. **§ 1.3, paragraph 4, Page 12, Existing Data and Historic Information.**

“In addition, dioxins are not included on the COPC list because there is no reason to expect them to be present at the site.”

According to “Toxicological Profile for Chlorinated Dibenzofurans” (DHHS, 1993), “Toxicological Profile for Chlorinated Dibenzo-p-Dioxins” (ATSDR, 1997), “Health Assessment Document for Polychlorinated Dibenzofurans (EPA, 1986) and “Sources and emissions of PCDD and PCDFs” (Hutzinger and Fielder, 1989) dioxins and furans can be expected to be present along with PCBs.

We suggest that LANL assess the possibility that dioxins and furans were associated with PCB releases into the canyon.

2. **§ 2.1, paragraph 2, Page 30, Project Overview.**

“... 2) collection of sediment samples from numerous locations for analysis of PCBs, which are being used as indicator constituents because they are expected to be the most widely distributed contaminants in Upper Sandia Canyon and are likely to be collocated with other potential contaminants...”

The plan limits the phase one sampling suite to PCBs based on expected conditions. The potential for collocation of PCBs, PAHs, metals and radioactive materials have not been adequately documented.

We suggest that at a minimum, LANL include metals in the phase one sampling. Also, we suggest that LANL consult NMED during decision making regarding the need for and objectives of, further sampling.

3. **§ 2.5.2.2, paragraph 1, Page 38, Analysis for Additional Constituents.**

“The objective of analyzing for additional constituents is to evaluate the collocation hypothesis and further define the nature and extent of contaminants contributing to risk.”

The plan states that the nature and extent will be investigated only for those contaminants contributing to risk.

We suggest that LANL define nature and extent for those contaminants found above background for inorganics and above detect for organics.

4. § Appendix A, paragraph 4, Page A-2, Data Quality Requirements and Statistical Sampling Design.

“ Because of the limited storage of sediments in the two tributaries associated with Reach S-1, polychlorinated biphenyl (PCB) concentrations are expected to be low in these reaches”

While most of the stored PCBs may be located in the wetland reaches, sediment packages in reach S-1 south should be considered as potentially containing higher concentrations of PCBs due to its close proximity to a major source of PCB contamination (PRS 3-056(c)).

Document reviewed by: Chris Hanlon-Meyer.

REFERENCES:

DHHS. 1994. Toxicological Profile for Chlorinated Dibenzofurans (CDFs). Atlanta, GA: Office of External Affairs, Exposure and Disease Registry Branch, Agency for Toxic Substances and Disease Registry.

ATSDR. 1997. Toxic Profile for Chlorinated Dibenzo-p-Dioxins. Draft for Public Comments (Update). Atlanta, GA: Agency for Toxic Substances and Disease Registry,

EPA. 1986. Health Assessment Document for Polychlorinated Dibenzofurans. Cincinnati, Ohio. U.S. Environmental Protection Agency, Environmental Criteria and Assessment Office. NTIS PB86-221256

Hutzinger O. and Fielder H. 1989. Sources and emissions of PCDD and PCDFs. *Chemosphere* 18:23-32.