



**detected in these boreholes, this information will be used as a basis to further limit analysis of inorganic, semivolatile organic compounds (SVOCs), and volatile organic compounds (VOCs) in the remaining MDA T boreholes."**

The list of COCs should not be limited or reduced based on the analytical results of these boreholes. This Technical Area has had a long history which included a variety of processing and waste handling methods and waste materials. Before the list is limited, each of the absorption beds, the shaft area, and the retrievable waste storage area should be investigated for the entire suite of possible COCs

4. **Page 15, Paragraph 2; " Previous data indicate that these boreholes will intercept the paleochannel,..."**  
Contingency boreholes should be proposed to determine if the paleochannel is a pathway for contamination migration.
5. **Page 18, § 2.3, Paragraph 3; "Ten percent of the samples collected for MCAL analyses of VOCs and metals will be submitted to a fixed laboratory to evaluate the performance of the field laboratory analysis."**  
More than the standard 10% may be needed to confirm the performance of the field laboratory. We suggest that at least one fixed laboratory analyses is needed for each borehole.
6. **Page 19, Paragraph 1; " Ten percent of these samples will be submitted to a fixed laboratory for analyses by gamma spectroscopy, and for analyses of total uranium, isotopic plutonium, tritium, and strontium-90."**  
See specific comment 5.
7. **Page 19, Paragraph 2; "Core samples will be collected from the upper 50 ft of borehole 1 (beneath absorption bed 1) and from the entire length of boreholes 21 and 22 (beneath building TA-21-257) at 10-ft intervals and analyzed by a fixed laboratory for SVOCs."**  
The list of COCs should not be limited or reduced based on the analytical results of these boreholes. See specific comment 3.

8. **Page 19, Paragraph 3; " If RCRA constituents are detected at concentrations less than SALs in boreholes drilled in absorption beds 1,2, or 4, samples will not be collected for these analyses from contingency boreholes."**

RCRA constituents should be analyzed in samples below absorption bed 3 and the shafts to help characterize vertical migration of contamination at each waste input location at MDA-T. These areas may have received different waste streams than absorption beds 1, 2, and 4. See specific comment 2.

9. **Page 20, Paragraph 2.**

Regarding the count time of greater than 30 minutes or less than 10 minutes. The count time for gamma spectroscopy, gross gamma, and gross alpha beta should be specified. If LANL uses a count time of less than 10 minutes some boreholes may be characterized using data described in the SAP as qualitative. Nature and extent of contamination should not be defined by qualitative data results alone.

Please see attachment B, Table B-1. Boreholes 16-004, 006, 008, 009, 013, 015, and 019 are not scheduled for any fixed lab analysis. See general comment 5.

If there are any questions concerning this review, please contact me at 505-672-0448 or Martyne Kieling of our staff at 505-827-1536.

Sincerely,



Steve Yanicak, LANL POC  
Department of Energy Oversight Bureau

SY:MK:mk

cc:w/attachment

Mat Johansen  
Review of Sampling Analysis Plan  
PRS 21-016(a,b,c)  
February 24, 1997

Page 4 of 4

John Parker, NMED, Chief, DOE OB  
Benito Garcia, NMED, Chief, HRMB  
Marcy Leavitt, NMED, Chief, GWQB  
Ted Taylor, DOE LAAO, Program Manager, MS A316  
Bonnie Koch, DOE LAAO, FU-1 FPC, MS A316  
Garry Allen, LANL, FU-1 FPL, MS D462  
File