V. RHODES
J MOSE
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M. DALE

LANL 3/1082/16/16-003 [illegible]

PRESENTATION MATERIALS :

Upcoming PRS 16-021(c) Activities - ~~NMED Participation Desired~~

DATED

12/3/98

6135

Los Alamos National Laboratory
Environmental Restoration Project

VG-97-000(1)

PRS 16-021(c) Investigation History

- Pre-RFI characterization of outfall, springs and Canon de Valle - 1970s-1994
- Phase I RFI investigations - 1995
- Initial BMPs - 1995
- Bioremediation studies 1995-1998
- Phase I RFI Report - 1996, NMED approved 1998
- Phase II Investigations - 1996-present
- Phase II RFI Report - Submitted 9/98
- CMS Plan- Submitted 9/98
- Additional BMPs - 10/98 CONCRETE BERM TO REPLACE SANDBAGS
  GLORK TO ELIM RUNOFF THRU SURF OF TROUGH

PRS 16-021(c) Upcoming FY 99 Activities

- **Phase II RFI - ongoing** QTRLY SPR, ALLUV. WELLS V BHS FOR LOTR
- **Phase III RFI** CMS CH. 6 RFI III/IM RPT
- **Ecorisk assessment pilot activities**
- **CMS Bench & Pilot studies** CMS CH. 4
- **Source region interim measure (IM)**

Note - R-25 deep groundwater results may impact work scope

Ongoing Phase II RFI

- Daily spring sampling for bromide tracer
- Quarterly sampling of springs, alluvial wells 12, 3, 6, 9 MONTHS
- Geohydrologic data, geologic mapping AFTER MAY FOR CDV (END. SPECIES)

- CNYNS FCC. AREA TO BE EXPEDITED
* DISCUSS THIS ON MONDAY MTG (EXPEDITED CDV + WTR)
* REQUEST TO USE ONLY UNFILTERED FOR 12/98; OB CAN DO FILTERED

NMED Input Needed

LANL proposes to:

1) Convert daily bromide samples to flow integrated samples. Convert frequency to less than daily. VS. (CURRENTLY) DAILY GRAB

2) Convert inorganics from filtered/unfiltered pairs (EPA SW 846) to filtered (CWA methods). SW MULTI-SECTOR PERMIT Include 1 in 4 filtered/unfiltered pairs.

- SW - OK PER MD
- SPRINGS?

VG-97-000(4)

MD RECOMMENDED DO XPLG IN PARALLEL & MEET
* MD TO FOLLOWUP W/ ESH-18 & DISCUSS W/ SWQB

Phase III RFI

- Connectivity task - Br in trench
  - IN MESA OR
  - GONE ELSEWHERE } NOT COSTLY - FLD ANALYTICAL
  - * DO HAV EXTENT TO ESTIMATE MASS
  - ANION
- Residence time - Stable isotopes in springs and rainwater
  - SUPPLEMENT W/ TRITIUM ?
- Spring & seep dynamics - flow integrated spring samples, Peter Seep location & samples
- Alluvial water dynamics - discharge profiles
- "Reach investigations" - geomorphologic mapping

NMED Input Needed

LANL plans to proceed at risk

Ecorisk Activities

- Problem formulation
- Develop site-specific toxicity reference values
- Biota sampling (as needed)

NMED Input Needed

1) NMED and EPA input requested

CMS B&P Activities

- SWM passive barrier technology
- Anaerobic bioslurry
- Zero valent iron
- Stabilization methods
- Phytoremediation (?)

NMED Input Needed

LANL plans to proceed at risk

Interim Measure

- IM Plan scheduled for early summer 1999, removal scheduled to begin in August
- Several thousand cubic yards will be removed

NMED Input Needed

1) LANL may need help with permitting (RCRA, NOI, TU) depending on treatment option selected

2) LANL wants to work closely with NMED on IM Plan

Summary

- LANL would like to reduce analysis for ongoing monitoring. Is a letter to HRMB needed?

- LANL plans to proceed at risk on several CMS Plan activities. Is a letter to HRMB needed?

- LANL wants to continue to involve NMED in ongoing planning and data analysis activities. Frequency of meeting? Format of meetings?