TA-00

Darlene Goering

From: krich@lanl.gov
Sent: Thursday, April 24, 2003 4:00 PM
To: Darlene Goering
Subject: RE: LAPSAR Outline

Darlene

Please find attached the LAPSAR outline as requested. I will ensure that any changes to this outline will be sent to you prior to being implemented.

Thanks - Kent

At 4/23/2003, you wrote:

> Kent,
>
> We approve of the attached report outline for LAPSAR. However, we request that LANL no longer refer to it as a draft version because that implies that it may change after it becomes part of our administrative record. We acknowledge that changes may occur but will need prior written approval before they are incorporated. Could you resend the attachment with the word "draft" removed? Thanks.
>
> Darlene
>
> > -----Original Message-----
> > From: krich@lanl.gov [mailto:krich@lanl.gov]
> > Sent: Thursday, April 17, 2003 3:38 PM
> > To: darlene_goering@nmenv.state.nm.us
> > Cc: Alison Dorries; Dave McInroy
> > Subject: LAPSAR Outline
> >
> > Darlene
> >
> > Please find attached the outline for the Los Alamos/Pueblo Canyons Surface Aggregate Report (LAPSAR) with modifications as discussed at the meeting on Tuesday 4/15/02. We acknowledge that approval of the LAPSAR outline does not extend to future Canyons reports which will be structured according to the format agreed to as part of the ongoing report negotiations. Additionally, the LAPSAR will not include intermediate and deep groundwater characterization data. Future investigation reports for the remaining watersheds will incorporate sediment, surface water, alluvial groundwater, intermediate and deep groundwater results.
> >
> > The Canyons team appreciated the opportunity to meet with you to discuss the outline, and look forward to your involvement during the ongoing development of the report. Could you please respond with your approval of the LAPSAR outline?
> >
> > Regards - Kent

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LOS ALAMOS/PUEBLO CANYONS SURFACE AGGREGATE REPORT OUTLINE

EXECUTIVE SUMMARY

1. INTRODUCTION
   - Purpose: Report that presents the results of investigations conducted by the Canyons Focus Area (1996-2003) in Los Alamos, Pueblo, DP, and Acid Canyons. Update the conceptual model, calculate inventories, evaluate trends in contaminant distribution and migration, and assess potential risk to human health and the environment. Provide support to PRS decisions. Report will identify areas requiring mitigation in the canyon bottom based on the potential for unacceptable risk and make recommendations for monitoring.
   - Overview of the problem being addressed with the report and watershed description.
   - What this document does, what came before this document, what is likely to come after this document.
   - Site usage and status
   - Type of investigation conducted (geomorphic characterization and sediment sampling; surface and alluvial groundwater characterization and sampling; biota characterization and sampling)

2. BACKGROUND
   - Discuss sources and history of contaminant releases: PRSs and other
   - Known extent of contamination
   - Reference previous investigations
     - Surveillance and Misc. Non-ER (FUSRAP, Graf, NMED, EPA, etc.)
     - ER sampling before 1996

3. SCOPE OF ACTIVITIES
   - Narrative explaining the implementation of the LA/Pueblo Work Plan and addendums, post-reach report data gaps, surface water & alluvial water sampling, and biota sampling (record of communication)
   - Provide overview of how the Cerro Grande fire effect was evaluated

4. FIELD INVESTIGATIONS AND RESULTS
   - Sediment: Canyons investigations; post-Cerro Grande fire investigations
     - Summary of field investigation methods
       - Geomorphic approach as documented in core document, work plan, and reach reports
     - Field screening results are provided in Appendix B
   - Water: Canyons investigations; post-Cerro Grande fire investigations
     - Summary of field investigation methods
       - Field surveys of persistent water
       - Summarize surface water & alluvial water sampling addendum
   - Biota: Canyons investigations

- Summarize the approach and methods from the "record of communication"

5. REGULATORY CRITERIA
- Regulatory Context: RCRA, HWSA, DOE Order 5400.5, ARARs
- Human health risk-based screening levels (LANL SALs: main sources – NMED SSLs, EPA Reg 6 RBCs)
- Ecological risk-based screening levels (LANL ESLs)
- Water screening levels (sources include EPA Reg 6, EPA, WQCC, DOE)

6. CANYONS CONTAMINATION (SITE CONTAMINATION)
- Objective: develop COPC list for conceptual model and risk assessments.
- Summarize analytical results, but reference Appendix C for comprehensive data tables
- Sediment screening process: background comparisons for inorganics/radionuclides; detect frequency for organics; SAL and ESL comparisons
- Apply sediment screening process to refine COPCs
- Water screening process: detect frequency for organics; standards comparisons; SAL and ESL comparisons; background comparisons for inorganics/radionuclides
- Apply water screening process to refine COPCs

7. PHYSICAL SYSTEM CONCEPTUAL MODEL
- Contaminant sources, nature and extent, fate and transport, hydrology
  - Associate water/sediment contamination to sources (PRSs and other)
  - Contaminant inventories and vulnerability to transport (reference appendix for details)
- Evaluate model uncertainty.

8. RISK ASSESSMENTS
- Baseline ecological risk assessment: Problem formulation, exposure assessment and conceptual model; risk characterization; uncertainty analysis
  - Key information: ecological risk assessment endpoints, measurement receptors, and lines of evidence
- Baseline risk assessment (human health): Problem formulation, exposure assessment and conceptual model; risk characterization; uncertainty analysis
  - Key assumptions: Land use, time frame for assessments

9. CONCLUSIONS
- Integrate ecological and human health risk assessment findings
- Integrate risk and conceptual model to project trends in contaminant concentrations, inventories, and potential impacts
- Decision framework: Are there unacceptable risks in the present day or the potential for unacceptable risks in the future, under various exposure scenarios, for different portions of the canyon?

10. RECOMMENDATIONS
- Consider monitoring to reduce uncertainty in assessments or conceptual model
  - Media: biota, sediment, surface water, alluvial groundwater, storm water
  - Propose sampling locations; frequency; analytical suites
- Discuss opportunities for potential mitigations in canyon bottoms that will reduce risk and/or contaminant transport uncertainties

APPENDICES

A. ACRONYMS

B. FIELD INVESTIGATION METHODS AND RESULTS
- Field screening results (post-reach report only)
- Reach report sediment data gaps (documentation of new reaches, etc.)
- Post-Cerro Grande fire data collection – sediment and water
- Water – four quarters of sampling to characterize different hydrological conditions, including field parameters
- Biota

C. ANALYTICAL RESULTS
- Sediment
- Water
- Biota

D. CONTAMINANT TRENDS AND INVENTORY
- Sediment
- Water

E. STATISTICS AND RISK INFORMATION
- Background comparisons
- Representative concentrations [95UCLs]
- Ecological scooping checklists
- Ecorisk supporting studies
- Human health risk and dose supporting materials