

Goering, Darlene, NMENV

From: Danny Katzman [katzman@lanl.gov]
Sent: Thursday, March 30, 2006 1:26 PM
To: Goering, Darlene, NMENV
Subject: Re: Approval of South Canyons Draft HIR Outline

Thanks Darlene- We'll accommodate your comments into the report.
- Danny

At 07:47 AM 3/30/2006, you wrote:

>Danny,
>
>In reviewing the proposed outline for the HIR for the South Canyons, I
>only had a few comments.
>
>1) In Section 2.3 (Source of Potential Contaminants), the SWMU/AOC
>information should be organized by watershed. It is not clear from the
>proposal how it would be organized (by TA?) but it would be easier to
>follow if it were organized like the other sections.
>
>2) As a reminder, all tables and figures should be included in a tables
>section and a figures section.
>
>In the future, please don't label the outline as draft. This implies it
>may change in the future. I recognize you anticipated making changes
>based on my comments but it is inappropriate for me to approve a draft
>document. Most everyone else sends these to us officially (letters with
>signatures). I personally prefer e-mail (less paper) but it is still
>considered an official submittal and shouldn't be a draft. Thanks.
>
>Darlene
>
>-----Original Message-----
>From: Danny Katzman [mailto:katzman@lanl.gov]
>Sent: Tuesday, February 21, 2006 6:33 PM
>To: Goering, Darlene, NMENV
>Subject: S Cyn Draft HIR outline_content reccomendation_2-21-06.doc
>
>Darlene- Attached at last is the proposed outline for the South
>Canyons HIR. There's also a section included that addresses the 15 "paragraphs"
>in Section IV.B of the Order. To remind you of the phone discussion of
>a few weeks ago, we are proposing to focus the review of data to
>canyons media rather than each SWMU/AOC in the watershed. The
>specifics of each SWMU will be covered in Aggregate Area HIRs and, with
>the Canyons approach, those details don't affect our sampling design.
>Feel free to give a call if you have any questions.

>Thanks.
>- Danny

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DRAFT ANNOTATED OUTLINE
HISTORICAL INVESTIGATION REPORT
Work Plan for the South Canyons

1.0 INTRODUCTION

Purpose and scope of document

2.0 BACKGROUND

This section presents a summary of Laboratory operational use and potential contaminant sources within the South Canyons investigation area.

2.1 Site Description

- 2.1.1 Water Canyon Watershed**
- 2.1.2 Cañon de Valle Watershed**
- 2.1.3 S-Site Canyon Watershed**
- 2.1.4 Potrillo Canyon Watershed**
- 2.1.5 Fence Canyon Watershed**
- 2.1.6 Indio Canyon Watershed**
- 2.1.7 Ancho Canyon Watershed**
- 2.1.8 Chaquehui Canyon Watershed**

2.2 Operational History

This section presents a brief summary discussion of historical laboratory operations by TA

2.3 Sources of Potential Contaminants

This section presents a high-level introduction to the individual SWMUs and AOCs within the South Canyons investigation area.

3.0 Water Canyon Watershed - summarize previous investigations and present data, data quality discussion, by media

- 3.1 Sediment Investigations**
- 3.2 Surface Water Investigations**
- 3.3 Subsurface Investigations**
- 3.4 Biological Investigations**

4.0 Cañon de Valle Watershed

5.0 S-Site Canyon Watershed

6.0 Potrillo Canyon Watershed

7.0 Fence Canyon Watershed

8.0 Indio Canyon Watershed

9.0 Ancho Canyon Watershed

10.0 Chaquehui Canyon Watershed

11.0 References

APPENDICES

Acronyms and Abbreviations

Plate(s) of Watershed, showing SWMUs/AOCs, Wells, Surface Water Stations, Springs, Stormwater Gaging Stations, Sediment Sampling Locations

Status of SWMUs/AOCs, other discharge locations

Sample Collection Methods

Field and Laboratory Analyses

Well, Borehole, and Excavation Data

**LANL proposed content for the Historical Investigation Report
for the South Canyons Work Plan**

The fifteen specific requirements for the Historical Investigation Report for the South Canyons are addressed below. The requirements are those listed in Section IV.B (pp. 54-56) in the Consent Order. Each requirement is written below in italics followed by LANL's comments and proposal for how to address each requirement.

The Respondents shall submit to the Department a historical investigation report for each canyon watershed, which shall be included as a separate submittal in conjunction with the canyon investigation work plan. If the Department determines that an investigation work plan is not required for a canyon watershed, the Respondents shall not be required to submit a historical investigation report. The report shall contain the following historical information:

1. A list of all past or present SWMUs, AOCs, and other sites in or bordering the canyon watershed that may have contributed contaminants to the canyon drainages.

LANL will include as an Appendix.

2. A list of all discharge locations that may have contributed contaminants to the canyon drainages.

LANL interprets "discharge locations" to be associated with outfalls not otherwise identified as a SWMU/AOC, e.g. NPDES outfalls – will include list in same Appendix as SWMU/AOC list.

3. A description of the location, operational history, and present status of each such SWMU, AOC, and other site listed under Paragraph 1 and each discharge location listed under Paragraph 2. The Respondents shall depict all such locations in one or more figures.

LANL will include a brief description and present status for each SWMU, AOC, and NPDES outfall listed under Paragraphs 1 and 2 above and will depict all such locations on a large plate to be included in the HIR.

4. A description of the known disposal history of each SWMU, AOC, and other site listed under Paragraph 1 and each discharge location listed under Paragraph 2. This description shall include all known and suspected material disposed, contaminants discharged or released; the volume of each discharge or release, if known; the flow rate of each discharge or release, if known; and the contaminants present in each discharge or release, if known. The Respondents shall report whether the disposal history of any SWMU, AOC, or other unit is unknown or incomplete and the source of the information.

LANL proposes a partial deviation from this requirement for the following reasons:

1. The details included in paragraph #4 will be presented in individual scheduled or pending SWMU or Aggregate Area Historical Investigation Reports.

2. While the detailed information included in paragraph #4 is appropriate for guiding sampling design for an Aggregate Area or SWMU/AOC-specific investigation, the initial phase of Canyons investigations do not rely on those details. The technical approach to the investigation strategy does not rely on previous investigation data to guide the number or location of sediment investigation reaches, surface water or groundwater monitoring

locations, or analyte suites. The Canyon's strategy assumes that all SWMUs/AOCs and other discharge locations are potential sources of contamination. The sampling design is driven by the spatial distribution of potential sources of contamination and the nature of releases (e.g., large volume discharges, MDAs, or small localized sites), and will conservatively begin with full-suite analyses at all sampled or monitored locations.

5. A description of each previous investigation of the sources, extent, or characteristics of contamination in each canyon watershed, regardless of whether or not such investigation was completed.

Based on the same rationale presented for paragraph #4, LANL proposes to limit the content of the HIR to a presentation of the extent and characteristics of contamination within the canyons media (sediment, surface water, stormwater, and groundwater) in the South Canyons.

6. A summary of any results and conclusions of each previous investigation described in Paragraph 5, including the known or suspected dates of waste disposal, discharge, or release, and the circumstances related to the discharge or release of contamination.

Based on the same rationale presented for paragraph #4, LANL proposes to limit the content of the HIR to a presentation of the extent and characteristics of contamination within the canyons media (sediment, surface water, stormwater, and groundwater) in the South Canyons.

7. A description of the location, construction details, history, and present status of each investigation well, boring, and excavation in each canyon watershed. The Respondents shall depict all such locations in one or more figures and may reference existing documents for this information. The results of historical aquifer characterization, surface water study, and all sampling events shall be included, if available. A site map encompassing the watershed and pertinent regional investigation locations shall be included in the summary.

LANL interprets the well, boring, and excavation information to be presented as series of tables that would include summary and status, coordinates, casing construction, and screen interval data. The groundwater and surface water information would be addressed in the presentation of canyons media data, as proposed in the response to paragraphs 5 and 6. Well, boring, and excavation locations will also be shown on a large plate.

8. A description of the sample collection methods and the types of field and laboratory analyses performed on each medium during the previous investigations.

LANL interprets this as a list or high-level summary of methods and analyses performed during the investigation of canyons media, as previously proposed. Because the period of record for canyons media is long, available documentation may be incomplete for early investigations.

9. Tables summarizing the data collected during investigation activities for each investigation well, boring, and excavation. The results shall present only analyte detections and data quality exceptions reported by the analytical laboratory that may mask analyte detections.

This would be included in the presentation of canyons media as proposed in the response to paragraphs 5 and 6.

10. A summary of data quality exceptions and interpretations of all compromised data reported under paragraph #9.

LANL will include the summary as required.

11. A summary of all contradictory investigation results and the rationale for acceptance or rejection of selected investigation results.

LANL will include the summary for those data presented for canyons media as described in the response to paragraphs 5 and 6.

12. A list of general chemistry and metal background concentrations, including references to the documents that provide the methods for establishing the background values.

LANL will present the information for paragraph #12.

13. A table summarizing the field and laboratory analytical results obtained from the four most recent groundwater monitoring and sampling events. The results shall include groundwater monitoring and sampling conducted in each canyon watershed. A site plan presenting the locations of all wells and piezometers shall be included with the summary.

LANL will present the information for paragraph #13.

14. A table summarizing the field and laboratory analytical results obtained from the four most recent surface water monitoring and sampling events. The results shall include surface water monitoring and sampling conducted in each canyon watershed. A site plan presenting the locations of all surface-water monitoring and sampling stations shall be included with the summary.

LANL will present the information for paragraph #14.

15. A table summarizing the known hydraulic properties, including groundwater flow direction and velocity estimates, of the alluvial, intermediate, and regional aquifers based on testing results obtained at locations within each canyon watershed, if available. Groundwater flow directions and elevations may be presented on a map. Existing documents may be referenced for this information in lieu of inclusion in the historical investigation reports, providing that specific document titles and page numbers are cited.

LANL will present the information for paragraph #15.