

Goering, Darlene, NMENV

To: Becky-Coel Roback
Cc: chamberlain, kathryn, NMENV
Subject: RE: Proposed outline for Upper LA Aggregate Area work plan

Becky,

I have reviewed your proposed outline for this work plan and agree that it will be much more efficient to organize it by TA, recognizing that all of the Consent Order work plan elements will be included by TA.

Darlene

From: Becky-Coel Roback [mailto:becky_cr@lanl.gov]
Sent: Friday, February 17, 2006 1:42 PM
To: Goering, Darlene, NMENV
Cc: chamberlain, kathryn, NMENV
Subject: Proposed outline for Upper LA Aggregate Area work plan

Darlene--
Attached is the proposed outline for the Investigation Work Plan for Upper Los Alamos Aggregate Area. As we discussed, it covers all of the elements in the Consent Order, but breaks them down by TA and individual SWMU/AOC. The reason for this is the sheer number of SWMUs and AOCs in this aggregate. I think it is easier for the reader if we organize the previous investigation, data, and scope discussions by site, rather than discussing all of the previous investigations, followed by all of the data, and then all of the scope. Because these topics flow for each site (i.e., for a given SWMU/AOC, previous investigations yielded the data that in turn helped us identify additional scope), it saves the reader from jumping back and forth in the report and allows them to develop a better level of familiarity with a site before moving on to the next.

Additionally, because the sites are so diverse, we moved the "background" section into the individual TAs, rather than try to discuss the background of the aggregate as a whole.

Lastly, I just found out that we will be adding five AOCs to this work plan [00-031(a), 00-034(b), 01-003(c), 01-007(k), and 03-008 (a)]. They will be added to the investigation work plan in the appropriate sections, following the same organization.

Please let me know what you think...
Thanks,
Becky

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TA-1
TA-3
TA-32
TA-41
2/20/2006

TA-43
TA-61



Proposed Outline for the Upper Los Alamos Aggregate Area Investigation Work Plan

1.0 INTRODUCTION

- 1.1 Work Plan Overview
- 1.2 Work Plan Objectives
- 1.3 Phased Approach to Field Activities
- 1.4 Data Overview

2.0 SITE CONDITIONS

- 2.1 Surface Conditions
 - 2.1.1 Soils
 - 2.1.2 Surface Water
 - 2.1.3 Land Use
- 2.2 Subsurface Conditions
 - 2.2.1 Anticipated Stratigraphic Units
 - 2.2.2 Hydrogeology

3.0 TA-0, OUTSIDE OF LABORATORY

- 3.1 Background
 - 3.1.1 Operational History
 - 3.1.2 Summary of Releases, Transport Mechanisms, and Potential Receptors
 - 3.1.3 Current Site Usage and Status
- 3.2 SWMU 00-017, Waste Lines
 - 3.2.1 Summary of Previous Investigations for SWMU 00-017
 - 3.2.2 Data for SWMU 00-017
 - 3.2.3 Scope of Activities for SWMU 00-017
- 3.3 AOC 00-031(b), Soil Contamination Beneath Former Motorpool (two USTs)
 - 3.3.1 Summary of Previous Investigations for AOC 00-031(b)
 - 3.3.2 Data for AOC 00-031(b)
 - 3.3.3 Scope of Activities for AOC 00-031(b)
- 3.4 AOC C-00-042, Tank (formerly part of SWMU 00-032)
 - 3.4.1 Summary of Previous Investigations for AOC C-00-042
 - 3.4.2 Data for AOC C-00-042
 - 3.4.3 Scope of Activities for AOC C-00-042

4.0 TA-1, FORMER MAIN TECHNICAL AREA

- 4.1 Background
 - 4.1.1 Operational History
 - 4.1.2 Summary of Releases, Transport Mechanisms, and Potential Receptors
 - 4.1.3 Current Site Usage and Status
- 4.2 SWMU 01-001(a), Septic Tank 134
 - 4.2.1 Summary of Previous Investigations for SWMU 01-001(a)
 - 4.2.2 Data for SWMU 01-001(a)
 - 4.2.3 Scope of Activities for SWMU 01-001(a)
- 4.3 SWMU 01-001(b), Septic Tank 135
 - 4.3.1 Summary of Previous Investigations for SWMU 01-001(b)
 - 4.3.2 Data for SWMU 01-001(b)
 - 4.3.3 Scope of Activities for SWMU 01-001(b)

- 4.4 SWMU 01-001(c), Septic Tank 137
 - 4.4.1 Summary of Previous Investigations for SWMU 01-001(c)
 - 4.4.2 Data for SWMU 01-001(c)
 - 4.4.3 Scope of Activities for SWMU 01-001(c) and adjacent SWMUs 01-006(c,d) and 01-007(b)
- 4.5 SWMU 01-001(d), Septic Tank 138
 - 4.5.1 Summary of Previous Investigations for SWMU 01-001(d)
 - 4.5.2 Data for SWMU 01-001(d)
 - 4.5.3 Scope of Activities for SWMU 01-001(d) and adjacent SWMU 01-006(h)
- 4.6 SWMU 01-001(e), Septic Tank 139
 - 4.6.1 Summary of Previous Investigations for SWMU 01-001(e)
 - 4.6.2 Data for SWMU 01-001(e)
 - 4.6.3 Scope of Activities for SWMU 01-001(e)
- 4.7 SWMU 01-001(f), Septic Tank 140
 - 4.7.1 Summary of Previous Investigations for SWMU 01-001(f)
 - 4.7.2 Data for SWMU 01-001(f)
 - 4.7.3 Scope of Activities for SWMU 01-001(f)
- 4.8 SWMU 01-001(g), Septic Tank 141
 - 4.8.1 Summary of Previous Investigations for SWMU 01-001(g)
 - 4.8.2 Data for SWMU 01-001(g)
 - 4.8.3 Scope of Activities for SWMU 01-001(g)
- 4.9 SWMU 01-001(o), Sanitary Waste Line
 - 4.9.1 Summary of Previous Investigations for SWMU 01-001(o)
 - 4.9.2 Data for SWMU 01-001(o)
 - 4.9.3 Scope of Activities for SWMU 01-001(o)
- 4.10 SWMU 01-001(s) Western Sanitary Waste Line, Main Line
 - 4.10.1 Summary of Previous Investigations for SWMU 01-001(s)
 - 4.10.2 Data for SWMU 01-001(s)
 - 4.10.3 Scope of Activities for SWMU 01-001(s)
- 4.11 SWMU 01-001(t), Eastern Sanitary Waste Line
 - 4.11.1 Summary of Previous Investigations for SWMU 01-001(t)
 - 4.11.2 Data for SWMU 01-001(t)
 - 4.11.3 Scope of Activities for SWMU 01-001(t) and adjacent AOC 01-006(e)
- 4.12 SWMU 01-001(u), Western Sanitary Waste Line, Branch line
 - 4.12.1 Summary of Previous Investigations for SWMU 01-001(u)
 - 4.12.2 Data for SWMU 01-001(u)
 - 4.12.3 Scope of Activities for SWMU 01-001(u)
- 4.13 SWMU 01-002, Industrial Waste Line
 - 4.13.1 Summary of Previous Investigations for SWMU 01-002
 - 4.13.2 Data for SWMU 01-002
 - 4.13.3 Scope of Activities for SWMU 01-002 and adjacent SWMU 01-007(c)
- 4.14 SWMU 01-003(a), Bailey Bridge Landfill
 - 4.14.1 Summary of Previous Investigations for SWMU 01-003(a)
 - 4.14.2 Data for SWMU 01-003(a)
 - 4.14.3 Scope of Activities for SWMU 01-003(a)
- 4.15 SWMU 01-003(b), Surface Disposal Area
 - 4.15.1 Summary of Previous Investigations for SWMU 01-003(b)
 - 4.15.2 Data for SWMU 01-003(b)

- 4.15.3 Scope of Activities for SWMU 01-003(b)
- 4.16 SWMU 01-003(d), Surface Disposal Site - Can Dump Site
 - 4.16.1 Summary of Previous Investigations for SWMU 01-003(d)
 - 4.16.2 Data for SWMU 01-003(d)
 - 4.16.3 Scope of Activities for SWMU 01-003(d)
- 4.17 SWMU 01-003(e), Surface Disposal Site Southeast of Los Alamos Inn
 - 4.17.1 Summary of Previous Investigations for SWMU 01-003(e)
 - 4.17.2 Data for SWMU 01-003(e)
 - 4.17.3 Scope of Activities for SWMU 01-003(e)
- 4.18 SWMU 01-006(a), Cooling Tower Drainline and Outfall
 - 4.18.1 Summary of Previous Investigations for SWMU 01-006(a)
 - 4.18.2 Data for SWMU 01-006(a)
 - 4.18.3 Scope of Activities for SWMU 01-006(a)
- 4.19 SWMU 01-006(b), Drainline and Outfall
 - 4.19.1 Summary of Previous Investigations for SWMU 01-006(b)
 - 4.19.2 Data for SWMU 01-006(b)
 - 4.19.3 Scope of Activities for SWMU 01-006(b)
- 4.20 SWMU 01-006(c), Drainlines and Outfalls
 - 4.20.1 Summary of Previous Investigations for SWMU 01-006(c)
 - 4.20.2 Data for SWMU 01-006(c)
 - 4.20.3 Scope of Activities for SWMU 01-006(c)
- 4.21 SWMU 01-006(d), Drainline and Outfall
 - 4.21.1 Summary of Previous Investigations for SWMU 01-006(d)
 - 4.21.2 Data for SWMU 01-006(d)
 - 4.21.3 Scope of Activities for SWMU 01-006(d)
- 4.22 AOC 01-006(e), Drainlines and Outfalls to Ashley Pond
 - 4.22.1 Summary of Previous Investigations for AOC 01-006(e)
 - 4.22.2 Data for AOC 01-006(e)
 - 4.22.3 Scope of Activities for AOC 01-006(e)
- 4.23 SWMU 01-006(g), Storm Water Drainage System
 - 4.23.1 Summary of Previous Investigations for SWMU 01-006(g)
 - 4.23.2 Data for SWMU 01-006(g)
 - 4.23.3 Scope of Activities for SWMU 01-006(g)
- 4.24 SWMU 01-006(h), Storm Water Drainage System
 - 4.24.1 Summary of Previous Investigations for SWMU 01-006(h)
 - 4.24.2 Data for SWMU 01-006(h)
 - 4.24.3 Scope of Activities for SWMU 01-006(h)
- 4.25 SWMU 01-006(n), Storm Water Drainage System
 - 4.25.1 Summary of Previous Investigations for SWMU 01-006(n)
 - 4.25.2 Data for SWMU 01-006(n)
 - 4.25.3 Scope of Activities for SWMU 01-006(n)
- 4.26 SWMU 01-006(o), Storm Water Drainage System
 - 4.26.1 Summary of Previous Investigations for SWMU 01-006(o)
 - 4.26.2 Data for SWMU 01-006(o)
 - 4.26.3 Scope of Activities for SWMU 01-006(o)
- 4.27 SWMU 01-007(a), Suspected Subsurface Soil Radiological Contamination
 - 4.27.1 Summary of Previous Investigations for SWMU 01-007(a)
 - 4.27.2 Data for SWMU 01-007(a)

- 4.27.3 Scope of Activities for SWMU 01-007(a) and adjacent SWMUs 01-06(b,n)
- 4.28 SWMU 01-007(b), Suspected Subsurface Soil Radiological Contamination
 - 4.28.1 Summary of Previous Investigations for SWMU 01-007(b)
 - 4.28.2 Data for SWMU 01-007(b)
 - 4.28.3 Scope of Activities for SWMU 01-007(b)
- 4.29 SWMU 01-007(c), Suspected Subsurface Soil Radiological Contamination
 - 4.29.1 Summary of Previous Investigations for SWMU 01-007(c)
 - 4.29.2 Data for SWMU 01-007(c)
 - 4.29.3 Scope of Activities for SWMU 01-007(c)
- 4.30 SWMU 01-007(d), Suspected Subsurface Soil Radiological Contamination
 - 4.30.1 Summary of Previous Investigations for SWMU 01-007(d)
 - 4.30.2 Data for SWMU 01-007(d)
 - 4.30.3 Scope of Activities for SWMU 01-007(d)
- 4.31 SWMU 01-007(e), Suspected Subsurface Soil Radiological Contamination
 - 4.31.1 Summary of Previous Investigations for SWMU 01-007(e)
 - 4.31.2 Data for SWMU 01-007(e)
 - 4.31.3 Scope of Activities for SWMU 01-007(e)
- 4.32 SWMU 01-007(j), 12 Areas of Suspected Subsurface Soil Radiological Contamination
 - 4.32.1 Summary of Previous Investigations and Current Status for SWMU 01-007(j)
 - 4.32.2 Data for SWMU 01-007(j)
 - 4.32.3 Scope of Activities for SWMU 01-007(j)
- 4.33 SWMU 01-007(l), Suspected Subsurface Soil Contamination
 - 4.33.1 Summary of Previous Investigations for SWMU 01-007(l)
 - 4.33.2 Data for SWMU 01-007(l)
 - 4.33.3 Scope of Activities for SWMU 01-007(l)

5.0 TA-3, SOUTH MESA SITE

- 5.1 Background
 - 5.1.1 Operational History
 - 5.1.2 Summary of Releases, Transport Mechanisms, and Potential Receptors
 - 5.1.3 Current Site Usage and Status
- 5.2 SWMU 03-009(j), Surface Disposal Site
 - 5.2.1 Summary of Previous Investigations for SWMU 03-009(j)
 - 5.2.2 Data for SWMU 03-009(j)
 - 5.2.3 Scope of Activities for SWMU 03-009(j)
- 5.3 SWMU 03-038(a), Acid Tank
 - 5.3.1 Summary of Previous Investigations for SWMU 03-038(a)
 - 5.3.2 Data for SWMU 03-038(a)
 - 5.3.3 Scope of Activities for SWMU 03-038(a)
- 5.4 SWMU 03-038(b), Acid Tank
 - 5.4.1 Summary of Previous Investigations for SWMU 03-038(b)
 - 5.4.2 Data for SWMU 03-038(b)
 - 5.4.3 Scope of Activities for SWMU 03-038(b)
- 5.5 SWMU 03-055(c), Outfall
 - 5.5.1 Summary of Previous Investigations for SWMU 03-055(c)
 - 5.5.2 Data for SWMU 03-055(c)
 - 5.5.3 Scope of Activities for SWMU 03-055(c)

6.0 TA-32, MEDICAL RESEARCH LABORATORY

- 6.1 Background
 - 6.1.1 Operational History
 - 6.1.2 Summary of Releases, Transport Mechanisms, and Potential Receptors
 - 6.1.3 Current Site Usage and Status
- 6.2 SWMU 32-001, Incinerator (former location)
 - 6.2.1 Summary of Previous Investigations for SWMU 32-001
 - 6.2.2 Data for SWMU 32-001
 - 6.2.3 Scope of Activities for SWMU 32-001
- 6.3 SWMU 32-002(a), Septic Tank (former location); Drainlines
 - 6.3.1 Summary of Previous Investigations for SWMU 32-002(a)
 - 6.3.2 Data for SWMU 32-002(a)
 - 6.3.3 Scope of Activities for SWMU 32-002(a)
- 6.4 SWMU 32-002(b), Septic System
 - 6.4.1 Summary of Previous Investigations for SWMU 32-002(b)
 - 6.4.2 Data for SWMU 32-002(b)
 - 6.4.3 Scope of Activities for SWMU 32-002(b)
- 6.5 AOC 32-003, Transformer Site (former location)
 - 6.5.1 Summary of Previous Investigations for AOC 32-003
 - 6.5.2 Data for AOC 32-003
 - 6.5.3 Scope of Activities for AOC 32-003
- 6.6 AOC 32-004, Drainline and Outfall
 - 6.6.1 Summary of Previous Investigations for AOC 32-004
 - 6.6.2 Data for AOC 32-004
 - 6.6.3 Scope of Activities for AOC 32-004

7.0 TA-41, W SITE

- 7.1 Background
 - 7.1.1 Operational History
 - 7.1.2 Summary of Releases, Transport Mechanisms, and Potential Receptors
 - 7.1.3 Current Site Usage and Status
- 7.2 SWMU 41-001, Septic System
 - 7.2.1 Summary of Previous Investigations for SWMU 41-001
 - 7.2.2 Data for SWMU 41-001
 - 7.2.3 Scope of Activities for SWMU 41-001
- 7.3 SWMUs 41-002(a), SWMU 41-002(b), and SWMU 41-002(c), TA-41 Sewage Treatment Plant
 - 7.3.1 Summary of Previous Investigations for SWMUs 41-002(a, b, c)
 - 7.3.2 Data for SWMUs 41-002(a, b, c)
 - 7.3.3 Scope of Activities for SWMUs 41-002(a, b, c)
- 7.4 AOC 41-003, Sump
 - 7.4.1 Summary of Previous Investigations for AOC 41-003
 - 7.4.2 Data for AOC 41-003
 - 7.4.3 Scope of Activities for AOC 41-003
- 7.5 AOC C-41-004, Storm Drains
 - 7.5.1 Summary of Previous Investigations for AOC C-41-004
 - 7.5.2 Data for AOC C-41-004
 - 7.5.3 Scope of Activities for AOC C-41-004

8.0 TA-43, HEALTH RESEARCH LABORATORY

- 8.1 Background
 - 8.1.1 Operational History
 - 8.1.2 Summary of Releases, Transport Mechanisms, and Potential Receptors
 - 8.1.3 Current Site Usage and Status
- 8.2 SWMU 43-001(a1), Waste Lines (pre-1981)
 - 8.2.1 Summary of Previous Investigations for SWMU 43-001(a1)
 - 8.2.2 Data for SWMU 43-001(a1)
 - 8.2.3 Scope of Activities for SWMU 43-001(a1)
- 8.3 AOC 43-001(a2), Waste Lines (post-1981)
 - 8.3.1 Summary of Previous Investigations for AOC 43-001(a2)
 - 8.3.2 Data for AOC 43-001(a2)
 - 8.3.3 Scope of Activities for AOC 43-001(a2)
- 8.4 AOC 43-001(b2), Outfall
 - 8.4.1 Summary of Previous Investigations for AOC 43-001(b2)
 - 8.4.2 Data for AOC 43-001(b2)
 - 8.4.3 Scope of Activities for AOC 43-001(b2)
- 8.5 SWMU 43-002, Incinerator
 - 8.5.1 Summary of Previous Investigations for SWMU 43-002
 - 8.5.2 Data for SWMU 43-002
 - 8.5.3 Scope of Activities for SWMU 43-002
- 8.6 AOC C-43-001, Outfall
 - 8.6.1 Summary of Previous Investigations for AOC C-43-001
 - 8.6.2 Data for AOC-43-001
 - 8.6.3 Scope of Activities for AOC C-43-001

9.0 TA-61, EAST JEMEZ SITE

- 9.1 Background
 - 9.1.1 Operational History
 - 9.1.2 Summary of Releases, Transport Mechanisms, and Potential Receptors
 - 9.1.3 Current Site Usage and Status
- 9.2 SWMU 61-007, Transformer Site – Systematic Leak – PCB Only Site
 - 9.2.1 Summary of Previous Investigations for SWMU 61-007
 - 9.2.2 Data for SWMU 61-007
 - 9.2.3 Scope of Activities for SWMU 61-007

10.0 INVESTIGATION METHODS

- 10.1 Establish Sampling Locations
- 10.2 Sampling
- 10.3 Equipment Decontamination
- 10.4 Waste Management

11.0 MONITORING AND SAMPLING PROGRAM

12.0 SCHEDULE

13.0 REFERENCES

Tables

Figures

Appendixes

Appendix A Acronyms and Abbreviations, Glossary, and Metric Conversion Table

Appendix B Upper Los Alamos Canyon Analytical Data (CD included with this report)

Appendix C Management Plan for Investigation-Derived Waste