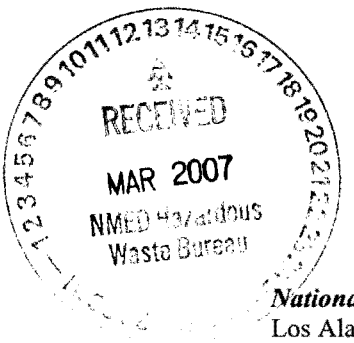
TA16

Los Alamos
NATIONAL LABORATORY
EST.1943



ENTERED

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Date: March 9, 2007
Refer To: EP2007-0131

Mr. James Bearzi
NMED-Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6303

Subject: Request for Concurrence with Document Outlines Associated with the Consolidated Unit 16-021(c)-99 Corrective Measures Evaluations/Corrective Measures Implementations

Dear Mr. Bearzi:

Los Alamos National Laboratory (LANL) and the Department of Energy (DOE) request concurrence with the outlines for three documents associated with the corrective measures evaluations/corrective measures implementations (CME/CMI) for Consolidated Unit 16-021(c)-99, the 260 Outfall. These documents are:

(1) Evaluation of the Suitability of Wells Near Technical Area-16 for Monitoring Contaminant Releases from Consolidated Unit 16-021(c)-99, due April 30, 2007;

(2) CMI Plan for Consolidated Unit 16-021(c)-99, due May 13, 2007;

(3) CME Report for Intermediate and Regional Groundwater Associated with Consolidated Unit 16-021(c)-99, due August 31, 2007.

The outlines are included as Attachments 1 to 3 of this letter. Draft versions of these outlines were discussed with your staff in a meeting on February 12, 2007. Comments from this meeting were incorporated into these outlines.


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If you have any questions please contact John McCann at (505) 665-1091 or (jmccann@lanl.gov) or Lance Woodworth at (505) 665-5820 or (lwoodworth@doeal.gov).

Sincerely,

Carolyn A. Mangeng, Acting Associate Director
Environmental Programs
Los Alamos National Laboratory

Sincerely,

George J. Rael, Assistant Manager
Department of Energy
Los Alamos Site Office

CAM/GJR/DH:ew

Attachments: (1) Outline for the "Evaluation of the Suitability of Wells Near Technical Area-16 for Monitoring Contaminant Releases from Consolidated Unit 16-021(c)-99"
(2) Outline for the "Corrective Measures Implementation Plan for Consolidated Unit 16-021(c)-99"
(3) Outline for the "Corrective Measures Evaluations Report for Intermediate and Regional Groundwater Associated with Consolidated Unit 16-021(c)-99"

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Attachment 1

Outline for "Evaluation of the Suitability of Wells Near Technical Area-16 for Monitoring Contaminant Releases from Consolidated Unit 16-021(c)-99"

Evaluation of the Suitability of Wells Near Technical Area-16 for Monitoring Contaminant Releases from Consolidated Unit 16-021(c)-99

Executive Summary
Table of Contents

1.0 Introduction

1.1 Purpose and Objectives of Report

2.0 Background

3.0 Conditions of Wells near TA-16
- 3.1 Candidate Monitoring Wells
- 3.2 Analysis of Well Screen Conditions
- 3.3 Contaminants of Concern for TA-16-260 Outfall
- 3.4 Other Well Issues

4.0 Analysis of Saturated Flow and Transport at TA-16
- 4.1 Hydrogeologic Conceptual Model
- 4.2 Interpretation of Head Data
- 4.3 Saturated Zone Modeling
- 4.4 Uncertainty Analysis

5.0 Influence of Geologic Structures

6.0 Summary and Recommendations

7.0 References Cited and Map Data Sources

Appendix A – Acronyms and Abbreviations
Appendix B – 2006 Analytical Data for TA-16 Wells (CD)
Appendix C – Detailed Evaluation of Water-Quality Data from TA-16 Wells
Appendix D – Graphical Plots Comparing Water-Quality Data Against Criteria for TA-16 Wells
Appendix E – Other Supporting Information

Attachment 2

Outline for "Corrective Measures Implementation Plan for Consolidated Unit 16-021(c)-99"

Corrective Measure Implementation Plan for
Consolidated Unit 16-021(c)-99

Executive Summary
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1.0 Introduction

- 1.1 General Site Information
- 1.2 Corrective Measure Implementation Plan Overview

2.0 Background

- 2.1 Site Description and Operational History
- 2.2 Current and Future Land Use
- 2.2 Historical Investigations
  - 2.2.1 Results of Historical Investigations

3.0 260 Outfall Drainage Channel

- 3.1 Remedial Objectives
- 3.2 Removal Plan
- 3.3 Waste Handling
- 3.4 Post-Remediation Sampling
- 3.5 Former Settling Pond Cap Maintenance
- 3.6 Health and Safety

4.0 SWSC Soil Investigation

- 4.1 Investigation Objectives
- 4.2 Investigation Design

5.0 Former Settling Pond Surge Bed

- 5.1 Remedial Objectives
- 5.2 Development of Grouting Plan
- 5.3 Grouting Implementation
- 5.4 Health and Safety
- 5.5 Operations and Maintenance Plan

6.0 Springs Carbon Filters

- 6.1 Remedial Objectives
- 6.2 Design Basis
- 6.3 Design for Carbon Filters
- 6.4 Operations and Maintenance Plan

7.0 Cañon de Valle Pilot PRB

- 7.1 Remedial Objectives
- 7.2 Design Basis
- 7.3 Results of Laboratory Tests
- 7.4 Design for the Pilot PRB
- 7.5 Construction Quality Assurance Plan
- 7.6 Operations and Maintenance Plan

8.0 Summary and Schedule for Implementation

9.0 References and Map Data Sources

Appendix A Acronyms, Glossary, and Metric Conversion Table

Appendix B Field and Laboratory PRB Test Reports
- B1 Media Laboratory Testing Results Report
- B2 Slug Test Report

Appendix C Outfall Drainage Channel Photographs and Maps
- C1 Map of Soil Requiring Removal
- C2 Photographs of Area
- C3 Volume Estimate of Soil for Removal

Appendix D Former Settling Pond Boring Report

Appendix E Burning Ground Spring Carbon Filter Design Drawings and Specifications
- E.1 Design Drawings
- E.2 Specifications

Appendix F Cañon de Valle Pilot PRB Design Drawings and Specifications
- F.1 Design Drawings
- F.2 Design Specifications

Appendix G Pilot PRB Construction Quality Assurance Plan

Attachment 3

Outline for "Corrective Measures Evaluation Report for Intermediate and Regional Groundwater Associated with Consolidated Unit 16-021(c)-99"

Corrective Measures Evaluation Report for
Intermediate and Regional Groundwater
Associated with Consolidated Unit 16-021(c)-99

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- 1.1 Purpose and Regulatory Context
- 1.2 Site Location
- 1.3 Corrective Measure Evaluation Report Overview

2.0 Site History
- 2.1 Site History and Description
- 2.2 Adjacent SWMUs
- 2.3 Current and Future Land Use
- 2.4 Previous Environmental Investigations

3.0 Current Site Conditions
- 3.1 Intermediate and Regional Groundwater COPCs
- 3.2 Current Site Conceptual Model
- 3.3 Contaminant Characteristics and Environmental Fate
- 3.4 Site Conceptual Model Uncertainties

4.0 Media Cleanup Standards and Remedial Action Objectives
- 4.1 Identification of ARARs
- 4.2 Intermediate and Regional Groundwater MCSs
- 4.3 Points of Compliance
- 4.4 Compliance Time Frame

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- 5.1 Identification of corrective measures options
  - 5.1.1 Sources for Technology Information
  - 5.1.2 Overview of Technology Types
  - 5.1.3 Standard Remediation Technologies
  - 5.1.4 Innovative Remediation Technologies
- 5.2 Screening of Standard and Innovative Technologies
  - 5.2.1 HE Working Group Screening of Technologies
  - 5.2.2 Recent Technology Pilot and Field Studies
  - 5.2.3 Screening of All Technologies

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- 6.1 Assembly of Remediation Technologies into Corrective Measure Alternatives
- 6.2 Criteria for Evaluation of Corrective Measure Alternatives
  - 6.2.1 Performance and Reliability

6.2.2 Reduction of Toxicity, Mobility, or Volumes of Contaminants
6.2.3 Effectiveness of Remedy in Achieving Target Concentrations
6.2.4 Time Required for Implementation
6.2.5 Ease of Installation
6.2.6 Long-Term Reliability
6.2.7 Institutional Constraints
6.2.8 Mitigation of Human Health and Environmental Exposures
6.2.9 Cost
6.2.10 Other Considerations
6.3 Evaluation of Alternatives for Intermediate Groundwater
6.3.1 Groundwater Recovery (Alternative I.1)
6.3.2 Monitored Natural Attenuation (Alternative I.2)
6.3.3 No Action (Alternative (I.3)
6.3.4 Uncertainties and Additional Data Requirements
6.4 Evaluation of Alternatives for Regional Groundwater
6.4.1 Groundwater Recovery (Alternative II.1)
6.4.2 Monitored Natural Attenuation (Alternative II.2)
6.4.3 No Action (Alternative (II.3)
6.4.4 Uncertainties and Additional Data Requirements

7.0 Summary of the Preferred Alternatives
7.1 Intermediate Groundwater
7.2 Regional Groundwater
7.3 Schedule
7.4 Public Involvement Plan

8.0 References and Map Data Sources

Appendix A: List of Acronyms and Glossary

Appendix B: Corrective Measure Alternatives Cost Estimates

Appendix C: Modeling Reports (Source term, Capture Zone and Contaminant Fate)

Appendix D: Public Involvement Plan

Appendix E: Schedule

Appendix F: LANL Current Sitewide GW Monitoring Plan

Appendix G: Previous Reports (Well Screen Analysis; Intermediate and Regional Groundwater IR on CD)