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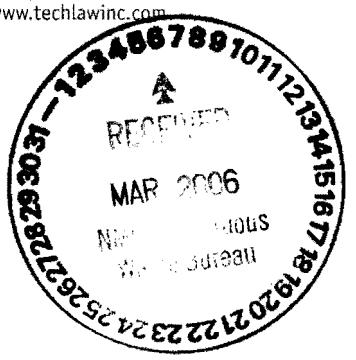

March 1, 2006

Mr. David Cobrain
State of New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East
Building One
Santa Fe, New Mexico 87505-6303

Reference: Work Assignment No. 06110.270; State of New Mexico Environment Department, Santa Fe, New Mexico; Support for the LANL Order of Consent; Review of the Remedy Completion Report for the Investigation and Remediation of Area of Concern 03-001(i) and Solid Waste Management Units 03-029 and 61-002, Los Alamos National Laboratory, New Mexico, Task 3 Deliverable.

Dear Mr. Cobrain:

Attached please find a deliverable for the above-referenced work assignment. The deliverable addresses the completeness and technical review of the "Remedy Completion Report for the Investigation and Remediation of Area of Concern 03-001(i) and Solid Waste Management Units 03-029 and 61-002," Los Alamos National Laboratory, New Mexico.

The review consisted of two steps. First, the technical completeness of the report was evaluated against several sections of the New Mexico Environmental Department/Los Alamos National Laboratory (NMED/LANL) Compliance Order on Consent, dated March 1, 2005. Specifically, the completeness review was conducted against the following:

- Section VII.E.6.a, Remedy Completion Report,
- Section VII.E.6.b, Certificate of Completion,
- Section VII.F.4, Accelerated Corrective Action (ACA) Implementation,
- Section XI.C, Investigation Report – applicable requirements, and
- Section XI.F, Corrective Measures Implementation (CMI) Report – applicable requirements.

Second, a technical review of the information and data provided in the report was conducted. A Work Plan was not provided to TechLaw for review; therefore, the Remedy Completion Report was not reviewed to determine whether the methodology and actions outlined in the Work Plan for conducting the ACA activities were followed.

The attached deliverable has been formatted to allow easy review of the two steps of the review. The first section of the deliverable addresses the administrative completeness and comparison to

the Order. In order to aid this part of the review, a brief summary of applicable sections and key elements of the Order was provided. The second section of the deliverable addresses any miscellaneous technical comments not previously addressed in the first section of the deliverable.

Based on the title of the document, the Remedy Completion Report appears, at least on the surface, to address completion of ACA activities for Area of Concern (AOC) 03-001(i) and Solid Waste Management Units (SWMUs) 03-029 and 61-002. However, corrective action was completed only for AOC 03-001(i). The site investigation for SWMU 61-002 is not complete at this time and the investigation at SWMU 03-029 will be deferred to the Upper Sandia Canyon Aggregate Area investigation work plan. Therefore, a Certificate of Completion is requested only for AOC 03-001(i) only and not for all of the SWMUs. Thus, it appears that the inclusion of SWMUs 61-002 and 03-029 in the Remedy Completion Report is premature since neither SWMU is ready for issuance of a Certificate of Completion. TechLaw has drafted a comment requesting clarification for the inclusion of SWMUs 61-002 and 03-029 in the Report when their ACA activities are not completed.

The screening assessment conducted for the risk analysis incorporated August 2005 NMED Soil Screening Levels (SSLs). A check against the revised SSL data was conducted, and using the most current SSLs, risk and hazard were not exceeded for the industrial scenario. For the construction worker and residential scenario, slightly higher risk/hazard would be expected, although the overall conclusions would be the same. The risk assessment shows that AOC 03-001(i) SWMU 61-002 meet the criteria for a non-intrusive industrial scenario only. The risk assessment indicates that both residential and construction activities must be restricted and this restriction must be enforced using land use controls, or another designation of a limited risk-based closure. A risk assessment was not conducted for SWMU 03-029., as this site will be addressed under the Upper Sandia Canyon Aggregate Investigation Report.

This deliverable was emailed to you on March 1, 2006 at David.Cobrain@state.nm.us to Ms. Darlene Goering at Darlene.Goering@state.nm.us. A formalized hard (paper) copy of this letter deliverable will be sent via mail. If you have any questions, please call me at (303) 763-7188 or Ms. Paige Walton at (801) 451-2978.

Sincerely,

June K Dreith

June K. Dreith
Program Manager

Enclosure
cc: Darlene Goering, NMED
Ms. Paige Walton, TechLaw
Mr. Gary Walvatne, TechLaw

TASK 3 DELIVERABLE

REVIEW OF THE REMEDY COMPLETION REPORT FOR THE INVESTIGATION AND REMEDIATION OF AREA OF CONCERN 03-001(i) AND SOLID WASTE MANAGEMENT UNITS 03-029 AND 61-002

Support for the LANL Order of Consent

Submitted by:

TechLaw, Inc.
560 Golden Ridge Road
Suite 130
Golden, CO 80401-9532

Submitted to:

Mr. David Cobrain
State of New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East
Building One
Santa Fe, New Mexico 87505

In response to:

Work Assignment No. 06110.270

March 1, 2006

REVIEW OF THE REMEDY COMPLETION REPORT FOR THE INVESTIGATION AND REMEDIATION OF AREA OF CONCERN 03-001(i) AND SOLID WASTE MANAGEMENT UNITS 03-029 AND 61-002

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REVIEW OF THE REMEDY COMPLETION REPORT FOR THE INVESTIGATION AND REMEDIATION OF AREA OF CONCERN 03-001(i) AND SOLID WASTE MANAGEMENT UNITS 03-029 AND 61-002

COMPLETENESS REVIEW

A completeness review was conducted of the Remedy Completion Report (the Report) against the New Mexico Environment Department/Los Alamos National Laboratory (NMED/LANL) Order on Consent (herein referred to as the Order), dated March 1, 2005. Section VII.E.6 of the Order presents the requirements for Remedy Completion, while Section VII.F presents the requirements for the accelerated corrective action (ACA) activities documented by the Report. In particular, Sections VII.E.6.b and VII.F.4 of the Order require submittal of a report that addresses the appropriate requirements of Section XI.

The ACA activities documented by the report include both site investigation and corrective measures. Therefore, the completeness review was conducted against the following:

- Section VII.E.6.a, Remedy Completion Report,
- Section VII.E.6.b, Certificate of Completion,
- Section VII.F.4, Accelerated Corrective Action Implementation,
- Section XI.C, Investigation Report – applicable requirements, and
- Section XI.F, Corrective Measures Implementation (CMI) Report – applicable requirements.

The completeness review consisted of evaluating whether the basic elements of a Remedy Completion Report were included in the Report, as specified under Section VII.E.6.a of the Order. Section VII.E.6.a provides for six general requirements for a Remedy Completion Report:

- A summary of the work completed;
- A statement, signed by a registered professional engineer, that the remedy has been completed in accordance with the Department approved work plan for the remedy;
- As-built drawings and specifications signed and stamped by a registered professional engineer;
- Copies of the results of all monitoring, including sampling and analysis, and other data generated during the remedy implementation, if not already submitted in a progress report;
- Copies of all waste disposal records, if not already submitted in a progress report; and
- A certification, signed by a responsible official of both DOE and the co-operator.

Report requirements of Sections VII.E.6.b and VII.F.4 are applicable since a Certificate of Completion is requested for ACA activities. Therefore, the Section XI report requirements are considered in the completeness review. Since Sections XI.C and XI.F include requirements for reporting that are applicable, but not in their entirety, to the ACA activities, only the applicable elements of an investigation report and CMI report were considered in the completeness review.

As there are duplicative requirements in Sections XI.C and XI.F, a single comment is provided where it is noted that a minimum requirement was not complete. The following basic elements of Sections XI.C and XI.F were evaluated in the completeness review of the Report:

- Sections XI.C.1 and XI.F.1, Title Page,
- Sections XI.C.2 and XI.F.2, Executive Summary,
- Sections XI.C.3 and XI.F.3, Table of Contents,
- Sections XI.C.4 and XI.F.4, Introduction,
- Sections XI.C.5 and XI.F.5, Background,
- Section XI.C.6, Scope of Activities (for an investigation),
- Section XI.C.7, Field Investigation Results (applicable requirements only),
- Sections XI.C.8 and XI.F.8, Regulatory Criteria (for cleanup standards and risk-based screening/cleanup),
- Section XI.C.9, Site Contamination,
- Section XI.C.10, Conclusions (for an investigation),
- Section XI.C.11, Recommendations (for further investigation, corrective measures, etc.),
- Section XI.F.7, Potential Receptors,
- Section XI.F.9, Identification of Corrective Measures Options,
- Section XI.F.10, Evaluation of Corrective Measures Options,
- Section XI.F.11, Selection of Preferred Corrective Measure,
- Sections XI.F.12, Design Criteria,
- Sections XI.F.13, Schedule,
- Sections XI.C.12 and XI.F.14, Tables,
- Sections XI.C.13 and XI.F.15, Figures,
- Sections XI.C.14 and XI.F.16, Appendices,
- Sections XI.C.1 and XI.F.1, and
- Sections XI.C.1 and XI.F.1.

COMPLETENESS REVIEW COMMENTS

1. **Section VII.E.6.a.3, Remedy Completion Report, As-built Drawings and Specifications.** Section VII.E.6.a.3 requires that drawings and specifications must be signed and stamped by a registered professional engineer. Drawings depicting the excavation of contaminated soil and tuff are not provided in the Report. In addition, specifications for clean backfill are not provided. Provide these drawings and specifications, which must be signed and stamped by a registered professional engineer licensed in the State of New Mexico.

2. **Sections XI.C.1 and XI.F.1, Title Page, TA Designation.** The Title Page must include the technical area (TA) designations for the sites. Although the TA number is included as the prefix of the area of concern (AOC) and solid waste management unit (SWMU) identifiers, it is not apparent until the reviewer reads Section 1.1, Location of ACA Activities, that the prefix is the TA designation. Revise the Title Page to clearly indicate the TA designations for the AOC and both SWMUs.

3. **Sections XI.C.2 and XI.F.2, Executive Summary, TA Designation.** As required in Section XI.C.2 of the Order, the Executive Summary must contain the TA designations for the sites. Although the TA number is included as the prefix of the AOC and SWMU identifiers, it is not apparent until the reviewer reads Section 1.1, Location of ACA Activities, that the prefix is the TA designation. Revise the Executive Summary to clearly indicate the TA designations for the AOC and both SWMUs.

4. **Section XI.C.5, Background, Known Extent of Contamination.** As required in Section XI.C.5 of the Order, the Background Section must contain a brief discussion of the known extent of contamination. This section summarizes the release history and any previous sampling and removal efforts, but the known extent of contamination is not discussed or illustrated in a figure for Section 2. Revise the Background Section to include a brief discussion of the known extent of contamination.

5. **Section XI.C.5, Background, Site Plan Providing Summary Data Tables.** As required in Section XI.C.5 of the Order, the Background Section must contain a site plan providing summary data tables. Figures 4.1-1 through 4.1-5 appear to present the appropriate site plan maps and summary data tables for all three sites, but they are not referenced in the Background Section. Tables 4.1-1 through Tables 4.1-5 also provide a summary presentation of investigative data. Revise the Background Section to include references to Figures 4.1-1 through 4.1-5 and Tables 4.1-1 through 4.1-5.

6. **Section XI.C.6, Scope of Activities, Background Information Research.** As required in Section XI.C.6 of the Order, the Report section discussing the scope of activities "shall briefly describe all activities performed during the investigation event including background information research." Section 3.0 of the Report presents a bulleted list of ACA activities; however, the background information research is not listed. Also, Section 3.1.1 does not discuss how background information was used in planning the investigation event for AOC 03-001(i) Storage Area #1, including determination of sample locations, although this was done in Section 3.1.2 for AOC 03-001(i) Storage Area #2. Background information is marginally referenced in the first paragraph of Section 3.1.3 for SWMU 03-029. Section 3.1.4 explains how background information was used to correlate previous corrective action activities with the 2005 sampling at SWMU 61-002. Provide discussions for Sections 3.1.1 and 3.1.3 that describe how background information was integrated into the site characterization activities.

7. **Section XI.C.6, Scope of Activities, Implemented Health and Safety Measures.** The scope of activities presented in Section 3.0 of the Report does not include a discussion of the health and safety measures implemented during the investigation activities. Revise the Report to include a discussion of the health and safety measures used at each of the investigation locations, including a discussion regarding any impacts or limitations to completion of the investigation tasks that were attributed to health and safety measures.

8. **Section XI.C.6, Scope of Activities, IDW Storage or Disposal.** The Report indicates that truckloads of contaminated soil and tuff were excavated at both AOC 03-001(i) storage areas and SWMU 61-002, but there is insufficient discussion in the Report

regarding the disposition of other investigation-derived waste (IDW). The Appendix F waste management strategy presents some information, but it is inadequately referenced and discussed in the Report text. Provide a discussion in the Report text that explains how IDW was managed, stored, and disposed. This discussion should also address the disposition of soils removed during soil boring, potholing, and trenching.

9. **Section XI.C.7.a, Surface Conditions.** Section 2.0, Background, presents information regarding facility description and process, waste description, and previous investigations. This section, however, does not adequately discuss the surface conditions of the area, as required by Section XI.C.7.a of the Order, including "current site topography, features, and structures, including topographic drainages, man-made drainages, vegetation, and erosional features." The topographic maps provided with the Report should support this discussion. Also, Section XI.C.7.a requires "descriptions of features located in surrounding sites that may have an impact on the subject site regarding sediment transport, surface water runoff, or contaminant transport."

10. **Sections XI.C.9.b, Soil, Rock, and Sediment Field Screening Results; and, Section XI.C.9.c, Soil, Rock, and Sediment Analytical Results.** As required in Sections XI.C.9.b and XI.C.9.c of the Order, the limitations of field screening instruments, as well as any conditions that may have influenced the results of the field screening or analytical results, must be provided. Clarify where this information is provided in the Report, or revise the Report to include a discussion of the limitations of field screening instruments and any conditions that may have influenced the results of the field screening.

11. **Section XI.C.7.d, Subsurface Conditions, Cross Section.** As required in Section XI.C.7.d of the Order, the Report requires a description of known subsurface lithology and structures. Very general descriptions of the subsurface conditions are presented in the Report. A description of the subsurface lithology and soils in the areas of the ACA activities should be presented in Section 2.0, Background. Also, the site plan (e.g., Figure 2.1-4) for SWMU 61-002 requires revision to illustrate the locations of two underground pipelines that were removed. In addition, Section XI.C.7.d requires that cross sections shall be constructed (if appropriate) to provide additional visual presentation of the site or regional subsurface conditions. In order to present lithology changes and other subsurface features (e.g., paleochannel sediments at Storage Area #1), provide cross-sections for the AOC 03-001(i) storage areas. Since site investigation activities will continue for SWMUs 03-029 and 61-002, cross-sections for those sites may be provided in future Remedy Completion Reports.

12. **Section XI.F.9, Identification of Corrective Measures Options; Section XI.F.10, Evaluation of Corrective Measures Options; and Section XI.F.11, Selection of Preferred Corrective Measure.** As stated in Section VII.F, Accelerated Cleanup Process, "The accelerated cleanup process shall be used at sites to implement presumptive remedies at small-scale and relatively simple sites where groundwater contamination is not a component of the accelerated cleanup, where the remedy is considered to be the final remedy for the site, and where the field work will be accomplished within 180 days of the commencement of field activities." As soil removal

was the presumptive remedy for AOC 03-001(i), the requirements for the identification, evaluation, and selection of a corrective measure are not required for the Report. Further site investigation activities are required for SWMUs 03-029 and 61-002 prior to selection of their respective remedies.

13. **Section XI.F.12, Design Criteria.** The Report does not present any drawings illustrating the vertical and horizontal dimensions of the soil removal activities conducted at AOC 03-001(i) Storage Areas 1 and 2 and SWMU 61-002. The clean backfill specifications should be included in these designs. Provide these drawings.

REVIEW OF THE REMEDY COMPLETION REPORT FOR THE INVESTIGATION AND REMEDIATION OF AREA OF CONCERN 03-001(i) AND SOLID WASTE MANAGEMENT UNITS 03-029 AND 61-002

ADDITIONAL TECHNICAL COMMENTS

1. **Professional Engineer Certification.** As required by Section VII.E.6.a.2 of the Order, a professional engineer certification is provided for the Report. There are questions, however, regarding the certification provided for the Report. Two professional engineers have signed the report, one licensed in New Mexico and the other licensed in Alaska. Clarify why two professional engineers are required to sign the report and clearly describe the portions of the work for which each is responsible and is providing certification of completion.

   In addition, since the certification of the Report is required by a Compliance Order on Consent with the State of New Mexico, the State's requirements for licensure must be addressed when a professional engineer signs a document. Consequently, only a professional engineer licensed in the State of New Mexico may provide a certification for a remedy completion report. The Alaska-licensed professional engineer (AKPE) may not provide a certification for any portion of the Report, unless the AKPE is also licensed in New Mexico and uses that license as a signatory to the Report. The New Mexico-licensed professional engineer (NMPE) of signature at this time may provide a certification for all or a portion of the report; however, there may be no gaps in certification. An additional certification by another NMPE may be provided, as necessary, to complete a full certification of the Remedy Completion Report. Revise the professional engineer's certification accordingly.

2. **Owner-Operator Certification.** As required by Section VII.E.6.a.6 of the Order, an owner-operator certification is provided. Section VII.E.6.a.6 requires that the certification is "signed by a responsible official of both the [Department of Energy] DOE and the co-operator." Two signatories are provided on the owner-operator certification, but both appear to be DOE employees. Explain why a signatory of the Regents of the University of California, the LANL operator, is not provided. Alternatively, revise the certification to include a signatory from DOE and a signatory for the Regents of the University of California. Also, clearly indicate which signatory is the "owner" and which is the "operator."

   In addition, the wording of the certification does not match the exact wording required by Section VII.E.6.a.6:

   > "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the

information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Provide an owner-operator certification that matches exactly the required language of Section VII.E.6.a.6 of the Order.

3. **Section 1.1, Purpose of ACA Activities, page 2.** The first paragraph of Section 1.1 states that the purpose of the ACA activities described in the Report "was to complete investigation and remediation activities in support of obtaining Certificates of Completion for AOC 03-001(i) and SWMUs 03-029 and 61-002." On page 1 of the Report, however, the fourth paragraph of Section 1.0 indicates that corrective action was completed for Area of Concern (AOC) 03-001(i), but the site characterization for SWMU 61-002 is not completed at this time and the investigation at SWMU 03-029 will be deferred to the Upper Sandia Canyon Aggregate Area investigation work plan. A Certificate of Completion is requested for AOC 03-001(i) only and not for the SWMUs. Consequently, it appears that the inclusion of SWMUs 61-002 and 03-029 in the Remedy Completion Report is premature since neither SWMU is ready for issuance of a Certificate of Completion. Clarify why SWMUs 61-002 and 03-029 should be included in the Report when their ACA activities are not completed.

4. **Section 3.1.1, AOC 03-001(i), Storage Area #1, page 8.** The second paragraph of Section 3.1.1 indicates that the range of values for headspace measurement of volatile organic compounds (VOCs) was from no detectable activity (NDA) to a maximum reading of 48 parts per million (ppm). The background value (BV) was measured as 1 ppm. Since the VOCs are anthropogenic and not naturally occurring, the BV would be expected to be NDA, rather than 1 ppm. Provide details regarding the determination of the BV as 1 ppm. Also, define the acronym "BV" in Section 3.1.1 since this appears to be the location of its first use in the Report.

   The second paragraph indicates that headspace measurement of VOCs was conducted after the sample was in a closed container for 10 minutes. In Table 3.0-1, the section entitled "Headspace Vapor Screening" indicates the sample was allowed to equilibrate for 5 minutes prior to headspace measurement of VOCs. Explain why there appears to be a difference in equilibration time between the two discussions of the headspace screening methodology.

5. **Section 3.1, Investigation Activities, page 7; Section 3.1.1, AOC 03-001(i), Storage Area #1, page 9; Section 3.1.2, AOC 03-001(i), Storage Area #2, page 10; and Section 3.1.4, SWMU 61-002, Former Equipment and Materials Storage Area, page 11.** Section 3.1 (page 7) indicates that Standard Operating Procedure SOP-01.08, Field Decontamination of Drilling and Sampling Equipment, was used during sampling. The descriptions of decontamination activities presented in Sections 3.11, 3.1.2, and 3.1.4, however, raise questions regarding the exact protocol used during each sampling event. The last paragraph of Section 3.1.1 states that a dry decontamination procedure was used

to clean the core barrel, associated sampling equipment, and hollow-stem auger section, but no further discussion or reference is provided. Section 3.1.2 indicates that the decontamination was conducted in accordance with Standard Operating Procedure SOP-1.08, but it is not clear whether a dry decontamination protocol was followed. Section 3.1.4 states that all sampling equipment was decontaminated after each use, but the procedure is not discussed or referenced. Also, Table 3.0-1 provides a description of a dry decontamination procedure, but it does not reference SOP-01.08 and it discusses optional activities that allow for inconsistencies in the decontamination procedure. Provide a detailed description of the exact protocol for the decontamination procedure used at AOC 03-001(i) (both storage areas) and SWMU 61-002.

6. **Section 4.1.1, Data Quality Review, page 19.** The last paragraph of Section 4.1.1 states, "A total of 100 analytical results from 17 investigation samples were qualified as rejected (R) because the analytical results did not meet quality-control criteria." Of the 100 analytical results, four were Aroclor-1260 analyses, six were barium analyses, and 90 were volatile and semivolatile results. The last sentence of the paragraph states, "However, since the percentage of rejected results is less than 0.5% of all results obtained during the ACA, the adequacy of the dataset is not compromised." This assessment, however, combines the data from all analytes for soil samples collected at various depths at three investigation sites. Dataset adequacy for each distinct soil investigation can not be evaluated using this global approach. Revise Section 4.1.1 to evaluate the adequacy of the dataset for each specific analyte, at each sampling depth, at each of the three investigation sites where soil sampling was performed [i.e., AOC 03-001(i), Storage Area #1; AOC 03-001(i), Storage Area #2; and SWMU 61-002].

7. **Section 4.1.2, AOC 03-001(i), Storage Area #1, page19.** The second paragraph of Section 4.1.2 states, "Post-excavation samples were not analyzed for inorganic chemicals since the results obtained from pre-excavation samples indicated that the inorganic chemicals were not COPCs [chemicals of potential concern] (see section 4.1.2.1 below)." In reviewing the referenced Section 4.1.2.1, barium was noted to exceed background concentrations and a decrease in concentration with depth was not noted. Lead concentrations were noted to decrease with depth. Section 4.1.2.1 states that neither barium nor lead were carried forward as a COPC because they were detected at 1.5 to 3 feet (ft) below ground surface (bgs) and "the area where the inorganic chemicals were detected was excavated to 10 ft bgs." Since post-excavation boreholes were not analyzed for inorganics, clarify how a depth of 10 feet was determined to be adequate for contaminant removal. In addition, clarify how confirmation of inorganic contaminant removal was determined.

8. **Section 4.1.3, AOC 03-001(i), Storage Area #2, pages21-23.** The post-excavation sampling confirmed elevated concentrations of inorganics in the tuff (e.g., barium and nickel). Only four feet of surface soil was removed at Storage Area #2, which was reportedly to the grade of the road that will be constructed through the area. Clearly explain how the depth of soil removal was determined, particularly when confirmation sampling indicated the continued presence of inorganic COPCs at Storage Area #2.

Appendix B, Field Forms

9. **Attachment B-1, Field Forms.** Some of the field forms include only the first or last name of the technician who filled in the form or provided data for the form. The full names of these individuals may be determined from other forms where their complete names appear to be provided, however, this is not acceptable for data quality purposes. In the future, ensure that all field forms include full names of the individual(s) who filled in the form or provided data to the form.

Appendix D, Risk Assessment

10. **General Comment.** An evaluation of the potential for contaminants to migrate to groundwater was not provided with this report. In reviewing the exposure point concentrations for AOC 03-001(i) Storage Areas 1 and for SWMU 61-002, it was noted that several constituents had concentrations greater then the soil screening level (SSL) based on a dilution attenuation factor (DAF) of 20. For example, 2-methylnaphthalene, naphthalene, and 1,3,5-trimethylbenzene exceeded the DAF 20 SSL at Storage Area 1. At SWMU 61-002, 2-methylnaphthalene, naphthalene, toluene, 1,3,5-trimethylbenzene, and 1,2,4-trimethylbenzene exceeded the DAF 20 SSLs. Please discuss the potential for migration of site contaminants to groundwater and include a comparison to the DAF 20 SSLs as appropriate.

11. **D-1.0, Human Health Screening Assessment, page D-1.** Inorganic constituents of potential concern (COPCs) were excluded from the risk analysis if they were only detected in a few samples and at concentrations slightly greater than background. The rationale provided was that these constituents were not reflective of site contamination. While this assumption is most likely valid and the inclusion of these metals would most likely not impact the overall conclusion of the risk assessment, a site attribution analysis comparing the background dataset to the site dataset (e.g., Wilcoxon Rank Sum Test) should have been conducted to verify this assumption. Please include a site attribution analysis in the Report to justify exclusion of COPCs in the risk assessment.

12. **D-1.1, Screening Evaluation, page D-1.** A depth of 20 feet below ground surface was applied as the exposure interval for the construction scenario. This depth was assumed as it was not known how deep excavations may be in the construction of the perimeter road. However, it seems unlikely that a 20-foot excavation would be required for construction of the road. There is also concern that use of a larger soil interval results in a lower exposure point concentration, and thus a less conservative assessment of risk to the construction worker. Although it is noted in Section D-1.3.2 of the Report that this interval represents a conservative approach. Please discuss the trend of contaminant concentrations with depth and discuss why the 20-foot exposure interval is considered conservative.

13. **Table D-1.1-10, Noncarcinogenic Hazards for Construction Worker at SWMU 61-002, page D-21.** A hazard quotient (HQ) was calculated for lead and this HQ was incorporated in to the hazard index (HI). This is not technically correct. Lead is

evaluated relating soil lead intake to blood level concentrations. As such, lead should be evaluated individually and a HQ should not be calculated for this constituent. Please revise the risk table to remove the calculation of a HQ for lead and revise all subsequent HIs.

Appendix F, Waste Management Data

14. **Table F.1-1, Summary of Waste Volumes Derived During the 2005 Security Perimeter Road Remediation, pages F1-1 to F1-4.** The waste volumes for both storage areas of AOC 03-001(i) are whole cubic yard values, while the waste volumes for SWMU 61-002 are provided as measurements down to the one-hundredth of a cubic yard. Clarify how the volume measurement for each truckload of SWMU 61-002 waste could be two orders of magnitude more precise than those of the AOC 03-001(i) truckloads.