

AUG 26 1996

2755 General

Mr. Benito Garcia, Chief
Hazardous and Radioactive
Materials Bureau
New Mexico Environment Department
2044A Galisteo Street
Santa Fe, NM 87505

**Re: Review of Quality Assurance Project Plan
Los Alamos National Laboratory (NM0890010515)**

Dear Mr. Garcia:

The Environmental Protection Agency (EPA) has reviewed the March 1996, version of Los Alamos National Laboratory's Quality Assurance Project Plan. EPA has found the document to be deficient and enclosed is a list of deficiencies.

Should you have any questions, please feel free to contact me at (214) 665-6785.

Sincerely,

David W. Neleigh, Chief
New Mexico and Federal
Facilities Section

Enclosure

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**QUALITY ASSURANCE PROJECT PLAN REQUIREMENTS
FOR SAMPLING AND ANALYSIS
LOS ALAMOS NATIONAL LABORATORY
List Of Deficiencies**

General Comments:

1. Although LANL prepared the QAPjP to be consistent with "Interim Draft Final Requirements for QAPjPs," (U.S. EPA 1994), the QAPjP does not appear to meet its intended purpose. The QAPjP is not project-specific, and it does not include specific DQOs. Instead, it discusses only the general criteria that will be used to select and establish DQOs while preparing SAPs for each project. This QAPjP omits most of the details regarding analytical methods and procedures which will be included in the project-specific SAPs. It also fails to discuss field and laboratory quality control (QC) procedures associated with the data collection activities.

Specific Comments:

2. Section A1. Approvals and Appendix I. Overview. The QAPjP refers to contractor personnel and contractor laboratories. However, the tasks and responsibilities of the contractors are not illustrated in the project organization structure and in the descriptions of data collection and the management process. Also, Figure 1-1 (Appendix I), which shows the project organizational structure, does not show the responsibilities, and the lines of communication, of the contractors. The QAPjP should be revised to include these items in the project management sections.
3. Section A5. Problem Definition.
 - a. This section does not present clear and complete descriptions of the environmental projects for which this QAPjP is intended. Also, the problem definition is very generic and does not provide an adequate historical background. The QAPjP should include this information and also provide the sources of existing information to evaluate and define the problems.
 - b. In this section, on page A-11, the second paragraph states that "the core team will contact others, as necessary, to provide historical, technical, and regulatory information." The QAPjP should be revised to identify the "others."
4. Section A6. Project/Task Description. Project and task descriptions items were taken directly from the EPA QAPjP requirements document (U.S. EPA 1994). However, it omits the item concerning applicable technical, regulatory, or program-specific quality standards criteria or objectives which should be evaluated in this section.
5. Section B3.3. Sample Volume, Containers, Holding Time, and Preservatives. This section refers to LANL-ER-SOP-01.02 for requirements for selecting sample volumes, containers, holding times, and preservatives for samples subjected to routine analysis. However, such information has not been provided for nonroutine analytical measurements listed in Table III-7 of Appendix III. A table containing this information may be included in the QAPjP to aid in the preparation the project-specific SAPs.

6. Section B5. Quality Control Requirements. This section is a detailed listing of factors that must be considered in preparing site-specific SAPs. However, it does not specify the QC samples required for each type of analysis, and the required acceptance criteria for QC check for each analysis. This information should be summarized in a table. This section also fails to provide numerical precision and accuracy objectives for (1) all analytes measured in the laboratory and field, and (2) all matrices. The QAPJP must either state or reference these items.
7. Section B10. Data Management. Because it is generic, the QAPJP lacks project-specific information on data management. However, it should address the procedures that will be followed to demonstrate acceptability and performance of the hardware and software configuration for the process, as required by the EPA QAPJP requirements document.
8. Section C1.1.1. Field Unit Assessments. This section states that the environmental restoration project uses self assessments and formal, independent field assessments to assess compliance with SOPs in various plans and associated documents. However, it specifies neither the participants in the independent field assessments nor the frequency at which these assessments will be conducted.
9. Appendix III. In Tables III-1, III-2, III-3, and III-4a, the unit used to express estimated quantitation limits for all analytes in water is incorrectly given as milligrams per liter (mg/L). It should be corrected to micrograms per liter ($\mu\text{g/L}$).
10. Appendix IV. Appendix IV discusses factors that must be considered in determining whether routine or nonroutine analytical methods should be selected. Although Appendix IV discusses these factors thoroughly, it fails to specify criteria that can be strictly applied to this decision. Specifically, the criteria concerning precision, accuracy, representativeness, completeness, and comparability should be addressed to assess the effect of nonroutine analytical methods on data quality.

References used in review:

- U.S. Environmental Protection Agency (EPA). 1980. "Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans." Quality Assurance Management Staff—005/80. December.
- U.S. EPA. 1994. "Draft Interim Final EPA Requirements for Quality Assurance Project Plans for Environmental Data Operations." EPA QA/R-5. August.