



Reply to 6E-Q
(Q-91-028)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6

1445 ROSS AVENUE, SUITE 1200

DALLAS, TEXAS 75202-2733

June 21, 1991

MEMORANDUM

SUBJECT: Generic Quality Assurance Project Plan for Research Conservation and Recovery Act. (RCRA) Facility Investigations for the Los Alamos National Laboratory Environmental Restoration Program.

FROM: Alva Smith, P.E.
Chief,
Office of Quality Assurance (6E-Q)

TO: William Honker
Chief,
RCRA Permits Branch (6H-P)

We have reviewed the Generic Quality Assurance Project Plan for RCRA Facility Investigations for the Los Alamos National Laboratory Environmental Restoration Program. This is a very good plan and will serve the Los Alamos National Laboratory (LANL) well. There are some recommendations that we would offer to strengthen the plan as follows:

- . Section 5.0: Comparability and Representativeness should be included in the summary.
- . Section 5.4.1 Inorganic Analysis: The use of Analyte spike has a slightly different connotation than described. The analyte spike is to the prepared sample (digested sample or dilution) to determine matrix effects that may become apparent when dilutions are made.
- . Section 5.5, Completeness: To be complete all samples required by the Data Quality Objective (DQO) must be considered.
- . Section 5.5, Comparability: Generally EPA methods are required or EPA approved methods are used. This serves to establish comparability.
- . Section 6.2, Sample Preservation During Shipment: A table showing preservatives, containers and holding times should be added to this section.



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- . Section 7.4.3 Sample Storage: A log of the temperature of the storage refrigerator must be maintained. A recording thermometer could be used and an alarm is recommended.
- . Section 8.1, Calibration Overview: It is important to stress the requirement for documentation of calibrations, calibration checks and other evidence that instruments are operating within control limits.
- . Section 9.0, Analytical Procedures: The analytical procedures (standard operating procedures, i.e., (SOP's) must be reviewed at least annually and approved for use by the Supervisor. Revisions may be required on a more frequent basis; when required, the Supervisor must indicate the appropriate SOP that is to be used by means of his/her signature and date of approval. This principle applies to field sampling, analytical procedures or any SOP used in the project.
- . Section 10.1.2. Laboratory Data Reduction: All data sheets, chromatograms, print outs, etc. that have pertinent data must be signed by the operator and dated.
- . Section 10.2, Data Validation: The reference for criteria could be given as it might be useful to reiterate some of these criteria in this part of the plan.
- . Section 10.2.2 Non-Radiological Analytical Data: Chain of custody should be included.
- . Section 10.2.2 Radiological Data: Holding time could be included.
- . Section 11.1.1 Soil Sampling: If samples are to be split in the field, specific procedures must be used.
- . Section 12.0 Performance and System Audits: The nature of what is to be accomplished with these audits, how they are carried out, and by whom and what frequency could be explained in some detail.
- . Section 13.0 Preventive Maintenance: The need to document preventive and restorative maintenance on all equipment, field and laboratory could be stressed here.

- . Section 14.4 Completeness: This could be rephrased to state that the data had met the criteria of the Data Quality Objectives. This becomes inclusive of the requirement of representative data, both in numbers of samples, and the spacial and temporal requirements as well.
- . Section 15.0 Corrective Action: Requirement for a follow-up report of corrective action taken to ensure that the action taken was or was not effective. This provides the opportunity to use successful corrective measure to prevent future failure and to more readily identify what action is effective for resolution of the same problem when it occurs again.
- . Section 15.1 Overview: Data not reported should be documented for reasons of failure. This data may be vital to the Data Quality Objectives (DQO) and could require changes in the project plan.
- . Appendix A, Data Quality Objective (DQO): The process of creating the DQO must be a collaborative process utilizing the expertise of various disciplines, e.g., engineers, chemists, hydrologists, statisticians, lawyers, etc. The need to incorporate these disciplines early in planning, will better assure the decisions about the data required to meet the primary objective of the project.

Questions regarding this review can be directed to Kendall Young or Randall Romig (214)-655-2217 or FTS 255-2217.

cc: Larry Massen LANL