PDR

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

JAN 31 1980

FCTC:RHO
71-0082

Kerr-McGee Nuclear Corporation
ATTN: Mr. W. J. Shelley
Kerr-McGee Center
Oklahoma City, OK 73125

Gentlemen:

We have evaluated your Shipping Package Quality Assurance Program Plan submitted with your June 27, 1978 letter to satisfy the requirements of 10 CFR §71.51.

Our review indicates that additional information is required to satisfy the applicable requirements of Appendix E to 10 CFR Part 71. Please address the enclosed request for additional information and submit seven copies of the revised program within 60 days following receipt of this letter.

If you have any questions regarding this request, please feel free to contact Mr. Jim Conway at (301) 492-7741.

Sincerely,

Charles E. MacDonald, Chief
Transportation Certification Branch
Division of Fuel Cycle and Material
Safety, NMSS

Enclosure:
Request for Additional
Information

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KERR-McGEE (71-0082)

Request for Additional Information

1. Describe the QA responsibilities of each organizational element shown on the chart in Appendix A.

2. Clarify the meaning of the dotted lines in Appendix A.

3. Describe how Kerr-McGee's QA organization interfaces with his contractors to ensure proper direction of the QA program and resolution of QA problems.

4. Identify the level of management responsible for establishing Kerr-McGee's QA policies, goals, and objectives.

5. Describe how the Manager-Quality Assurance is independent of undue influences and responsibilities for schedules and cost when he reports to the Manager of Manufacturing.

6. Describe the qualification requirements for the position Manager-Quality Assurance.

7. Provide a statement that designated QA individuals have the responsibility and authority, delineated in writing, to stop unsatisfactory work and control further processing, delivery, or installation of nonconforming material.

8. Identify the management level (i.e., above or outside the QA organization) that regularly assesses the scope, status, implementation, and effectiveness of the QA program.

9. Provide a statement that measures are provided by Kerr-McGee to assure that trained, qualified personnel within his organization are assigned to determine that functions delegated to his contractors are being properly accomplished.

10. Give a brief summary of Kerr-McGee's QA policies, goals, and objectives.

11. Provide a statement that provisions are established for communicating to all responsible organizations and individuals that quality policies, QA manuals, and procedures are mandatory requirements.

12. Provide a listing of the QA procedures plus a matrix of these procedures cross referenced to each criterion of Appendix E to 10 CFR Part 71.

13. Identify the safety-related structures, systems, and components controlled by the QA program.

14. Describe how disputes involving quality, arising from a difference of opinion between QA/QC personnel and other department (engineering, procurement, manufacturing, etc.) personnel are resolved.

15. Provide a statement that an indoctrination and training program is established such that:

    a. Personnel responsible for performing quality-affecting activities are instructed as to the purpose, scope, and implementation of the quality-related manuals, instructions, and procedures.

    b. Personnel performing quality-affecting activities are trained and qualified in the principles and techniques of the activity being performed.

    c. The scope, the objective, and the method of implementing the indoctrination and training program are documented.

    d. Proficiency of personnel performing quality-affecting activities is maintained by retraining, reexamining, and/or recertifying.

16. Clarify that when a test program is used to verify the adequacy of a design, a qualification test of a prototype unit under adverse design conditions shall be used.

17. Provide a statement that individuals or groups responsible for design verification are other than the original designer and designer's immediate supervisor.

18. Provide a statement that design and specification changes are subject to the same design controls and approvals that were applicable to the original design unless Kerr-McGee designates another qualified responsible organization.

19. Provide a statement that materials, parts, and equipment which are standard, commercial (off the shelf) or which have been previously approved for a different application are reviewed for suitability prior to selection.

20. Provide a statement that measures are established for the selection of suitable materials, parts, equipment and processes for safety-related structures, systems, and components which include the use of valid industry standards and specifications.

21. Provide a statement that the supplier's QA program or portions thereof shall be reviewed and concurred with by qualified personnel in QA prior to initiation of activities affected by the program.

22. Provide a statement that procurement documents identify those records to be retained, controlled, and maintained by the supplier, and those delivered to Kerr-McGee prior to use or installation of the hardware.

23. Provide a statement that procurement documents for spare or replacement parts of safety-related structures, systems, and components are subject to controls at least equivalent to those used for the original equipment.

24. Provide a statement that methods for complying with each of the 18 criteria of 10 CFR Part 71, Appendix E are specified in instructions, procedures, and drawings.

25. Provide a statement that instructions, procedures, and drawings include quantitative (such as dimensions, tolerances, and operating limits) and qualitative (such as workmanship samples) acceptance criteria to verify that important activities have been satisfactorily accomplished.

26. Provide a statement that the QA organization reviews and concurs with inspection plans; test, calibration, and special process procedures; drawings and specifications; and changes thereto or acceptable alternatives are described.

27. Identify those individuals or groups responsible for reviewing, approving, and issuing documents and revisions thereto.

28. Provide a statement that documents are available at the location where the activity will be performed prior to commencing the work.

29. Provide a statement that a master list or equivalent is established to identify the current revision number of instructions, procedures, specifications, drawings, and procurement documents. This list is updated and distributed to predetermined, responsible personnel to preclude use of superseded documents.

30. Provide a statement that the QA and engineering groups participate in the pre-award evaluation of those suppliers providing critical components.

31. Provide a statement that the evaluation of suppliers is based on one or more of the following:

    a. The supplier's capability to comply with the elements of 10 CFR Part 71, Appendix E that are applicable to the type of material, equipment, or service being procured.

    b. A review of previous records and performance of suppliers who have provided similar articles of the type being procured.

    c. A survey of the supplier's facilities and QA program to determine his capability to supply a product which meets the design, manufacturing, and quality requirements.

32. Provide a statement that the results of supplier evaluations are documented and filed.

33. Provide a statement that surveillance of suppliers during fabrication, inspection, testing, and shipment of materials, equipment, and components is planned and performed in accordance with written procedures to assure conformance to the purchase order requirements. These procedures provide for:

a. Instructions that specify the characteristics or processes to be witnessed, inspected or verified, and accepted; the method of surveillance and the extent of documentation required; and those responsible for implementing these instructions.

b. Audits and surveillance which assure that the supplier complies with the quality requirements. Surveillance is performed on those items where verification of procurement requirements cannot be determined upon receipt.

34. Provide a statement that the supplier furnishes the following records as a minimum to Kerr-McGee:

a. Documentation that identifies the purchased material or equipment and the specific procurement requirements (e.g., codes, standards, and specifications) met by the items.

b. Documentation that identifies any procurement requirements which have not been met together with a description of those nonconformances dispositioned "accept as is" or "repair."

The review and acceptance of these documents shall be described in the purchaser's QA program and as a minimum shall be undertaken by a responsible QA individual.

35. Provide a statement that supplier's certificates of conformance are periodically evaluated by audits, independent inspections, or tests to assure they are valid.

36. Provide a statement that the effectiveness of the control of quality by suppliers is assessed by Kerr-McGee at intervals consistent with the importance, complexity, and quantity of the item.

37. Provide a statement that identification requirements are determined during generation of specifications and design drawings.

38. Provide a statement that identification of materials and parts important to the function of safety-related structures, systems, and components can be traced to the appropriate documentation such as drawings, specifications, purchase orders, manufacturing and inspection documents, deviation reports, and physical and chemical mill test reports.

39. Provide a statement that the location and the method of identification do not affect the fit, function, or quality of the item being identified.

40. Provide a statement that inspection procedures, instructions, and check lists provide for the following:

a. Identification of characteristics and activities to be inspected.

b. Identification of the individuals or groups responsible for performing the inspection operation.

c. Acceptance and rejection criteria.

d. A description of the method of inspection.

e. Recording evidence of completing and verifying a manufacturing, inspection, or test operation.

f. Recording inspector or data recorder and the results of the inspection operation.

41. Provide a statement that inspection procedures or instructions are used with necessary drawings and specifications when performing inspection operations.

42. Provide a statement that modifications, repairs, and replacements are inspected in accordance with the original design and inspection requirements or acceptable alternatives.

43. Provide a statement that written test procedures incorporate or reference:

a. Mandatory inspection hold points for witness by owner, contractor, or inspector.

b. Acceptance and rejection criteria.

c. Methods of documenting or recording test data and results.

44. Provide a statement that calibrating standards have an uncertainty (error) requirement of no more than 1/4th of the tolerance of the equipment being calibrated. A greater uncertainty may be acceptable when limited by the "state-of-the-art."

45. Provide a statement that bypassing of required inspections, tests, and other critical operations is procedurally controlled under the cognizance of the QA organization.

46. Identify those individuals or groups delegated the responsibility and authority for the disposition and approval of nonconforming items.

47. Provide a statement that nonconforming items are segregated from acceptable items and identified as discrepant until properly dispositioned.

48. Provide a statement that nonconformance reports dispositioned "accept as is" or "repair" are made part of the inspection records and forwarded with the hardware to Kerr-McGee for review and assessment.

49. Provide a statement that nonconformance reports are periodically analyzed to show quality trends, and the results are reported to management for review and assessment.

50. Provide a statement that requirements and responsibilities for record transmittals, retention (such as duration, location, fire protection, and assigned responsibilities), and maintenance subsequent to completion of work are consistent with applicable codes, standards, and procurement documents.

51. Provide a statement that deficient areas are reaudited on a timely basis to verify implementation of corrective actions which minimize recurrence of deficiencies.

52. Provide a statement that audits include an objective evaluation of quality-related practices, procedures, and instructions and the effectiveness of implementation.

53. Provide a statement that audits include the objective evaluation of work areas, activities, processes, and items, and the review of documents and records.

54. Provide a statement that audits to assure that procedures and activities are meaningful and comply with the overall QA program are performed by:

    a. The QA organization, to provide a comprehensive independent verification and evaluation of quality-related procedures and activities.

    b. Kerr-McGee and his contractors, to verify and evaluate their suppliers' QA programs, procedures, and activities.