



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

JUL 05 1979

FCTR:RHO
71-0231

Chem-Nuclear Systems, Inc.
ATTN: Mr. Louis E. Reynolds
P.O. Box 1866
Bellevue, WA 98009

Gentlemen:

This refers to your application dated December 21, 1978 requesting approval of your Quality Assurance (QA) program as meeting the QA program requirements of 10 CFR §71.51.

In connection with our review, we need the information identified in the enclosure to this letter. Please revise document No. QA-AD-001, "Quality Assurance Program" and submit seven copies of your response to the enclosed request for additional information within 30 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
Charles E. MacDonald, Chief
Transportation Branch
Division of Fuel Cycle and
Material Safety, NMSS

Enclosure:
Request for Additional
Information

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CHEM-NUCLEAR SYSTEMS, INC. (71-0231)

Request for Additional Information

1. Describe the qualification requirements for the position of Quality Assurance Manager.
(1.0)
2. 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.
(1.0)
3. Provide a statement that provisions are established to control the distribution of the QA manual and revisions thereto.
(2.0)
4. Provide a matrix of the QA procedures cross referenced to each criterion of Appendix E to 10 CFR Part 71.
(2.0)
5. Identify the safety-related components controlled by the QA program.
(2.0)
6. Provide a statement that an indoctrination and training program is established such that:
(2.0)
 - 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.
7. Provide a statement that quality-related activities are performed with specified equipment and under suitable environmental conditions, and prerequisites have been satisfied prior to inspection and test.
(2.0)
8. Provide a statement that suitable design controls are applied to such activities as stress, thermal, hydraulic, radiation, and accident analysis; compatibility of materials; and accessibility for inservice inspection, maintenance, and repair.
(3.0)
9. Provide a statement 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.
(3.0)

10. (3.0) 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.
11. (12.0) 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."
12. (15.0) Identify those individuals or groups delegated the responsibility and authority for the disposition and approval of nonconforming items.
13. (15.0) 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 Chem-Nuclear for review and assessment.
14. (15.0) Provide a statement that nonconformance reports are periodically analyzed to show quality trends, and the results are reported to management for review and assessment.
- 15.0 (16.0) Provide a statement that significant conditions adverse to quality, the cause of the conditions, and the corrective action taken are reported to cognizant levels of management for review and assessment.
16. (17.0) Provide a statement that inspection and test records contain the following where applicable:
 - a. A description of the type of observation.
 - b. Evidence of completing and verifying a manufacturing, inspection, or test operation.
 - c. Information related to conditions adverse to quality.
 - d. Evidence as to the acceptability of the results.
17. (17.0) Provide a statement that record storage facilities are constructed, located, and secured to prevent destruction of the records by fire, flooding, theft, and deterioration by environmental conditions such as temperature or humidity.