

March 31, 1981

ATLANTIC RICHFIELD COMPANY

10 CFR 71 QUALITY ASSURANCE PROGRAM FOR THE
USE OF A CONTAINER FOR SHIPPING SPECIAL FORM CO-60

1. This program is established for the use of a General Electric 700 series shipping container, identification number: USA/5942/B()F, for shipping special form CO-60.
2. Organization

The final responsibility for this Q.A. program for part 71 requirements rests with ARCO Petroleum Products Co. (a division of Atlantic Richfield Co.). The Q.A. program is implemented using the following organization:

Byron W. Turnquest - Manager, Research & Development
Robert R. Edison - Manager, Process Research & Development
Martin P. Grosboll - Manager, Engineering Research
George A. Uhl - Radiation Safety Officer (R.S.O.)

The R.S.O. reports to M. P. Grosboll who in turn reports to R. R. Edison.

The specific responsibilities of the R.S.O. are delineated in writing (see attachment). These specific responsibilities are intended to assure that an appropriate Q.A. program is established and implemented along with sufficient authority to identify and correct any problems associated with shipping a special form Cobalt-60 radiation source.

The R.S.O. is responsible for overall administration of the program, training and certification, document control and auditing. He is also responsible for handling, storing, shipping, inspection, test and operating status, and record keeping.

3. Quality Assurance Program

The management of ARCO Petroleum Products Co. establishes and implements this Q.A. program. Training, prior to engagement, for all Q.A. functions is required according to written procedures. Q.A. program revisions will be made according to written procedures with management approval. The Q.A. program will ensure that all defined Q.A. procedures, engineering procedures, and specific provisions of the package design approval are satisfied. The Q.A. program will emphasize control of the characteristics of the package which are critical to safety.

The R.S.O. shall assure that all radioactive material shipping packages procured since January 1, 1979 are designed and manufactured under

a Q.A. program approved by the Nuclear Regulatory Commission. This requirement can be satisfied by receiving a certification to this effect from the package owners. The Q.A. program and any changes thereto shall be approved by management.

To assure that the five criterion listed in Section 2, Appendix D, in Part 71, Packaging of Radioactive Material for Transportation, the R.S.O. shall require written certification from the owner of any packaging material to be used that such material has been prepared under a Q.A. program.

4. Document Control

Issuance of documents, such as instructions, procedures and drawings, including changes thereto, which prescribe all activities affecting quality and use of shipping containers shall be approved by management.

The R.S.O. shall insure that all Q.A. functions are conducted in accordance with the latest applicable changes to these documents.

5. Handling, Storage and Shipping

Written safety procedures concerning the handling, storage and shipping of special form Cobalt-60 will be followed. Shipments will not be made unless all tests, certifications, acceptances, and final inspections have been completed. Work instructions will be provided prior to shipment for handling, storage, and shipping operations. The R.S.O. shall perform the critical handling, storage and shipping operations.

6. Inspection, Test and Operating Status

Inspection, Test and Operating Status of the GE 700 shipping cask will be performed in accordance with written procedures. The R.S.O. shall perform the regulatory required inspections and tests in accordance with written procedures. Operating status shall also be controlled by written procedures.

7. Quality Assurance Records

Records of package approvals (including references and drawings), procurement, inspections, tests, operating logs, audit results, personnel training and qualifications and records of shipments will be maintained. Descriptions of equipment and written procedures will also be maintained.

These records will be maintained in accordance with written procedures. The records will be identified and retrievable. A list of these records, with their storage locations, will be maintained by the R.S.O.

8. Audits

Established schedules of audits of the Q.A. program will be performed using written check lists. Results of audits will be maintained and reported to management. Audit reports will be evaluated and deficient areas corrected. The audits will be dependent on the safety significance of the activity being audited, but each activity will be audited at least once per year. Audit reports will be maintained as part of the quality assurance records. Members of the audit team shall have no responsibility in the activity being audited.

GAU:jah
3/31/81

ARCO PETROLEUM PRODUCTS - HARVEY TECH CENTER
RADIATION SAFETY OFFICER

Administer radiation protection program as required by 10 CFR.

Responsible for setting up procedures for, and keeping records of:

1. Training and Testing of Personnel
2. Ordering and Receipt of Radioisotopes
3. Storage of Radioisotopes
4. Handling & Use of Radioisotopes
5. Waste Storage & Disposal
6. Safety Surveys
7. Personnel Monitoring (Film and Ring Badges)
8. Reports to NRC and State Agencies
9. Procuring & Renewing Licenses
10. Inventory of Radioisotopes
11. Instrument Calibration and Maintenance
12. Leak Testing of Sealed Sources