

QUALITY ASSURANCE PROGRAM
FOR RADIOACTIVE MATERIAL PACKAGES NUMBERS - 0474

FOR THE

NAVAL SURFACE WARFARE CENTER
DAHLGREN, VIRGINIA, 22448-5000

U. S. NAVY RADIOACTIVE MATERIALS PERMITS
45-60921-EINP, 45-60921-AINP, 45-60921-LINP

AND

UNITED STATES NUCLEAR REGULATORY COMMISSION
SPECIAL NUCLEAR MATERIALS LICENSE NUMBER
SNM-1147

FOR COMPLIANCE WITH APPLICABLE REQUIREMENTS OF
PART 71, SUBPARTS A, G, AND H
TITLE 10, CHAPTER 1, CODE OF FEDERAL REGULATIONS

MARCH 1989

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QUALITY ASSURANCE PROGRAM

1. ORGANIZATION

The final responsibility for this Quality Assurance (QA) Program to meet the Requirements of 10CFR, Part 71, rests with the Commander, Naval Surface Warfare Center (NAVSWC). All elements of this program will be implemented at the NAVSWC Dahlgren Laboratory, Dahlgren, VA 22448-5000; the NAVSWC White Oak Laboratory, 10901 New Hampshire Avenue, Silver Spring, MD 20903-5000, and NAVSWC temporary job sites anywhere in the United States.

Design and fabrication of shipping containers or packages shall not be conducted under this Quality Assurance Program. The Quality Assurance Program is implemented as shown on the attached organizational chart (enclosure (1)).

The Radiation Safety Office (RSO) is responsible for overall administration of the program, training and certification, document control and auditing the program. The RSO is assisted by Assistant RSO (ARSO) at the NAVSWC Dahlgren Laboratory and NAVSWC White Oak Laboratory.

The Radiation Safety Officer is responsible for handling, storing, shipping, inspection, test and operating status of packages and record keeping.

2. THE QUALITY ASSURANCE PROGRAM

The Commander of the Naval Surface Warfare Center establishes and implements this Quality Assurance Program. Training, prior to engagement for all QA functions, is required according to written procedures. QA Program revisions will be made according to written procedures with the approval of the Radiation Safety Committee and the Command. The QA Program will emphasize control of the characteristics of the package which are critical to safety.

The Radiation Safety Officer shall assure that all radioactive material shipping packages are designed and manufactured under a QA program approved by the Nuclear Regulatory Commission for all packages designed or fabricated after 1 July 1978. This requirement can be satisfied by receiving a certification to this effect from the manufacturer.

3. DOCUMENT CONTROL

All documents related to a specific shipping package will be controlled through the use of written procedures. All document changes will be performed according to written procedures approved by the Radiation Safety Committee and the Command.

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The Radiation Safety Officer shall insure that all QA functions are conducted in accordance with the latest applicable changes to these documents.

4. HANDLING, STORAGE, AND SHIPPING

Written safety procedures concerning the handling, storage shipping, cleaning, preservation of materials and equipment to be used in packaging to prevent damage or deterioration for certain special form radioactive material will be followed. Shipments will not be made unless all tests, certifications, acceptances, and final inspections have been completed. Work instructions will be provided for handling, storage and shipping operations.

Radiation Safety personnel shall perform or oversee the critical handling, storage and shipping operations.

5. INSPECTION, TEST AND OPERATING STATUS

Inspection, tests and operating status of packaging for certain special form radioactive material will be indicated and controlled by written procedures. Status of packaging will be indicated by tag, label, marking, or log entry. Status of non-conforming parts of packaging will be positively maintained by written procedures.

A Radiation Safety Officer will perform the required inspections and tests of packaging in accordance with written procedures and the regulations. The Naval Surface Warfare Center Radiation Safety Officer will authenticate the above functions.

6. QUALITY ASSURANCE RECORDS

Records of packaging 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 10 CFR 71.135. The records will be easily identified and retrievable. A list of these records, with their storage location, will be maintained by the Radiation Safety Officer.

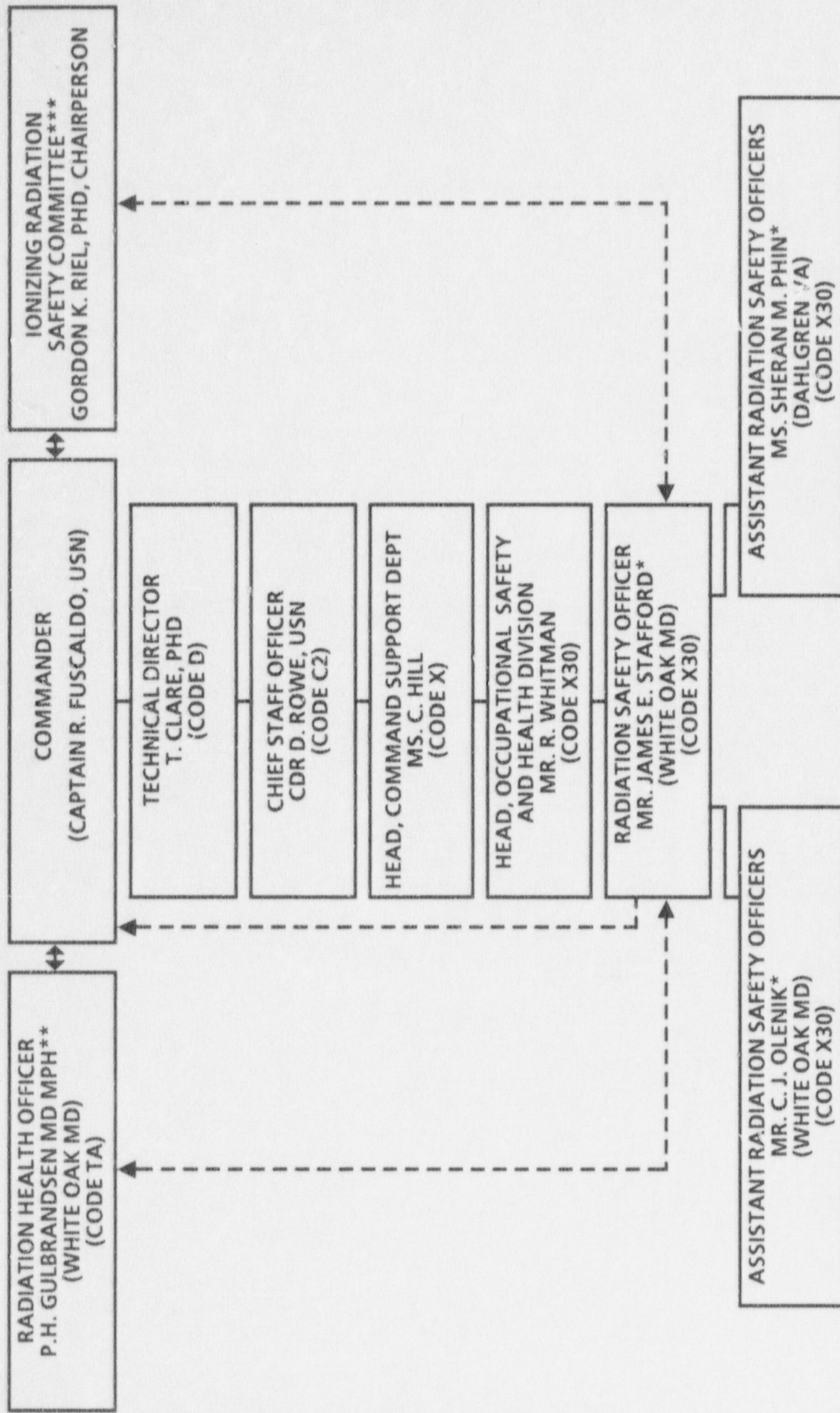
7. AUDITS

Established schedules of audits of the QA Program will be performed using written check lists. Results of audits will be

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maintained and reported to the Radiation Safety Committee. 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 maintained as part of the quality assurance records. Members of the audit team shall have no direct responsibility in the activity being audited. Follow-up action, including re-audit of deficient areas, will be taken where indicated.

NAVAL SURFACE WARFARE CENTER IONIZING RADIATION PROGRAM CHAIN OF COMMAND



— RADIATION SAFETY OFFICER CHAIN OF COMMAND FOR ROUTINE PROGRAM FUNCTIONS
 - - - RADIATION SAFETY OFFICER CHAIN OF COMMAND FOR STAFF ADVISOR FUNCTION

LEGEND: *PERSONNEL ON COMMAND LETTER OF APPOINTMENT/ **COAPPOINTMENT BY NAVMED CLINIC COMMAND AND COMMANDER NAVSWC/
 ***APPOINTMENT BY NAVSWC NOTICE

Endorsement