

RECEIPT, HANDLING AND SHIPMENT

OF

RADIOACTIVE MATERIALS

1738 188

OMAHA NONDESTRUCTIVE AND METALLURGICAL TESTING, INC.



8001110036

RECEIPT, HANDLING AND SHIPMENT

OF

RADIOACTIVE MATERIALS

1738 189

14963

OMAHA NONDESTRUCTIVE AND METALLURGICAL TESTING, INC.

QA/QC SUB MANUAL - RECEIPT, HANDLING AND SHIPMENT OF RADIOACTIVE MATERIALS

TABLE OF CONTENTS

The provisions of this quality assurance and control sub manual treat the following criterion contained in Appendix E of 10CFR71.

Paragraph	Criterion	Page
I	Organizational Structure	11/100.01
II	Quality Assurance Program	11/100.03
III	Document Control	11/100.05
IV	Handling, Storage and Shipping	11/100.06
V	Inspection, Test and Operating Status	11/100.08
VI	Quality Assurance Records	11/100.10
VII	Audits	11/100.11

I. ORGANIZATION OF OMAHA NONDESTRUCTIVE AND METALLURGICAL TESTING, INC.

2917 Douglas Street, Omaha, Nebraska 68131
402/341-5181

CORPORATE OFFICERS

CHAIRMAN OF THE BOARD AND TECHNICAL CONSULTANT	-	L. R. Mertz
PRESIDENT	-	R. D. Johnson
VICE PRESIDENT	-	L. G. Erickson, Jr.
VICE PRESIDENT AND SECRETARY	-	T. J. Behrens

RADIOGRAPHY PROGRAM

RADIATION SAFETY OFFICER	-	L. R. Mertz
ASSISTANT RADIATION SAFETY OFFICER	-	R. D. Johnson
ASSISTANT RADIATION SAFETY OFFICER	-	L. G. Erickson, Jr.
ASSISTANT RADIATION SAFETY OFFICER	-	D. R. Senner
ASSISTANT RADIATION SAFETY OFFICER	-	R. J. Allmon
DIRECTOR OF QUALITY ASSURANCE	-	L. G. Erickson

I. ORGANIZATION: (Continued)

The final responsibility for the Quality Assurance Program for Part 71 Requirements rests with Omaha Nondestructive and Metallurgical Testing, Inc.

The Radiation Safety Officer is designated as the responsible individual for the overall administration of the program, training and certification, document control and record keeping. He is also responsible for the Part 71 QA Requirements.

The listed Assistant Radiation Safety Officers are responsible for handling, storing, shipping, inspection, test and operating status.

The Director of Quality Assurance shall be responsible for performing annual audits and reporting to the management of the results of the audits.

Transportation packages for radioactive material shall not be designed or fabricated by Omaha Nondestructive and Metallurgical Testing, Inc.

II. QUALITY ASSURANCE PROGRAM

This Quality Assurance Program is established and implemented by the Management of Omaha Nondestructive and Metallurgical Testing, Inc. to provide assurance that proper control of the Receipt, Handling and Shipment of Radioactive Materials is obtained.

All Radiation Safety and Assistant Radiation Safety Officers who participate in this Quality Assurance Program shall be properly trained in accordance with Omaha Nondestructive and Metallurgical Testing, Inc.'s written procedures as presented in the "Radiographer's Manual", Section III, pages 3.9 through 3.18.

Although the radioactive material shipping packages are designed and fabricated by others, the Radiation Safety Officer shall verify that these packages are designed and fabricated in accordance with a Quality Assurance Program approved by the U. S. Nuclear Regulatory Commission. This verification shall be satisfied by receiving a manufacturer's certification of compliance with an approved Quality Assurance Program.

Packages currently being utilized for shipping radioactive materials have been approved by the U. S. Nuclear Regulatory Commission and Compliance Certificate Numbers 9032 and 9039, Revision No. 2, are on file. Omaha Nondestructive and Metallurgical Testing, Inc. has been registered as users of these packages under the general license provisions of 10CFR71.12(b) or 40CFR173.393a. All packages designed or fabricated for the shipment of radioactive materials after the effective date of this Quality Assurance Program shall be verified by manufacturer's certification as having been designed or fabricated in accordance with a Quality Assurance Program approved by the U. S. Nuclear Regulatory Commission.

II. QUALITY ASSURANCE PROGRAM: (Continued)

All receiving, handling and shipping procedures will emphasize definitive control of those package characteristics that are critical to safety.

All revisions to this Quality Assurance Program will be made in accordance with management approved written procedures.

1738 194

III. DOCUMENT CONTROL

The Radiation Safety Officer shall be responsible for all documents related to a specific shipping package, and these documents will be controlled through the use of written procedures.

All document revisions will be made in accordance with procedures established for review and revision of programs, forms and procedures, as described in Parts I and IV of our "Quality Assurance Plan and Control System".

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

1738 195

IV. HANDLING, STORAGE AND SHIPPING

The steps outlined in Procedures 11.04 and 11.05 for the receipt, transfer and shipment of radioactive sources shall be taken in order to assure safe handling and storage of sources.

Inasmuch as all radioactive sources received and shipped from this Company are the property of others, each shipment shall be made in only those containers which, when provided by others, have certifications and/or approval for their use by the Nuclear Regulatory Commission. Upon receipt of equipment and source, the Radiation Safety Officer shall review Form 1190 to verify receipt of authorized radioactive materials and equipment and must maintain on file certifications of each item received or shipped. Only those containers authorized for use and obtained from Technical Operations, Inc. may be utilized for shipment of sources from this Company.

The provisions of Procedure 11.05 having been completed and any incidences of nonconformance having been corrected as described on Page 11/100.08 of this program, the inspection and preparation of radioactive materials and equipment may be deemed to be complete. However, it is necessary that final approval for shipment be made by the Radiation or Assistant Radiation Safety Officer on Form 1191.

The Radiation Safety Officer or an Assistant Radiation Safety Officer are solely responsible for procurement of sources and equipment and will, upon notification of receipt of such sources and/or equipment, verify the receipt of the package and shall perform the handling and storage operations. Form 1190 shall be utilized by the responsible Safety Officer to document the proper receipt of sources and equipment.

Replacement and transfer operations shall be performed by the Radiation Safety Officer or an Assistant Radiation Safety Officer. Form 1121 shall be utilized by the responsible Safety Officer to document the proper replacement and transfer of radioactive sources.

IV. HANDLING, STORAGE AND SHIPPING (Continued)

The return shipment operation of radioactive sources shall be performed by the Radiation Safety Officer or an Assistant Radiation Safety Officer. Form 1191 shall be utilized by the responsible Safety Officer to document the proper handling and final inspection of radioactive sources and equipment for shipment.

1738 197

V. INSPECTION, TEST AND OPERATING STATUS

The Radiation Safety Officer or an Assistant Radiation Safety Officer is solely responsible for performing the inspection and tests of the sources and equipment.

Procedure 11.05 prescribes steps to be taken should any item received not be accompanied by proper documentation or supplementary items. Should any item not be received which would cause cessation of further handling of the shipment, as noted in Procedure 11.05, the incidence of nonconformance must be documented by the Radiation Safety Officer on Form 1190 and corrective action as prescribed in that Procedure shall be taken before further operations may resume.

During replacement or transfer of sources, should acts or items found to be not in compliance with established procedures, the corrective action prescribed in the license application and Operating Procedures of this Company shall be taken.

The final inspection, survey and preparation of equipment containing radioactive sources shall be completed, documented on Form 1191 by the individual responsible for such preparation, and submitted to the Radiation Safety Officer or, as assigned, to an Assistant Radiation Safety Officer prior to actual shipment and preparation of shipping papers for review. Should any item or instance of nonconformance exist, the Radiation Safety Officer or Assistant Radiation Safety Officer must document such nonconformance on Form 1191 and take immediate corrective action to ensure proper completion of preparation for shipment.

Shipping papers may be prepared by the person who prepares the equipment and source for shipment, but the shipping papers must be submitted to the Radiation Safety Officer or Assistant Radiation Safety Officer for review prior to notification of the carrier that a shipment of radioactive material is to be picked up.

V. INSPECTION, TEST AND OPERATING STATUS: (Continued)

Any items of nonconformance found to exist by others after delivery to a carrier is made must be documented on Form 1195 by the Radiation Safety Officer or Assistant Radiation Safety Officer. Any and all steps necessary to correct nonconformance must be immediately taken and documented on Form 1195. If the incident requires special steps for possible exposure of others monitored or not monitored, or should the isotope be lost, the provisions of Part I of the Operating Manual shall be followed.

1738 199

VI. QUALITY ASSURANCE RECORDS

All records of package approvals (including references and drawings), procurement, inspection, tests, operating logs, audit results, personnel training and qualification, and records of shipments shall be maintained by the Radiation Safety Officer. Descriptions of equipment and written procedures will also be maintained.

Forms 1121, 1190, 1191 and 1195 and all other records shall be maintained in accordance with the written procedures in the Radiographer's Manual.

These records will be appropriately identified, maintained and rendered readily retrievable by the Radiation Safety Officer.

1738 200

VII. AUDIT:

Audits of each activity of the Quality Assurance Program are performed at least once a year by the Director of Quality Assurance. The Director of Quality Assurance does not have any responsibility in the activity of receiving, handling, and shipping radioactive material. The audit will be performed by using written check lists, and the results of the audit will be maintained and reported to management. The audit reports will be evaluated and areas of nonconformance will be documented and corrected. The records of such audits shall be maintained by both the Radiation Safety Officer and the Director of Quality Assurance.

1738 201