

ITEM #3



August 24, 1982

0301928f

Director of Inspection & Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Gentlemen:

Per 10CFR 20.407(b) requirements, NDE Services, Inc. is submitting the following statistical analysis data:

<u>ESTIMATED WHOLE BODY EXPOSURE RANGE (Rems)</u>	<u>NUMBER OF INDIVIDUALS IN RANGE</u>
No Measurable Exposure.....	3
Less than 0.1 .....	2
0.1 to 0.25 .....	7
0.25 to 0.5 .....	7
0.5 to 0.75 .....	2
0.75 to 1.0 .....	1
1.0 to 2.0 .....	3

Sincerely,

*Edward J. Briggs*  
EDWARD J. BRIGGS  
Radiation Protection Officer

8210220391 820928  
NMS LIC30  
05-19821-01 PDR



8775 East Orchard Road • Suite 809 • Englewood, Colorado 80111 • (303) 741-0518

ITEM #4



SOURCE RECEIPT, TRANSFER, DISPOSAL  
AND LEAK TEST

Source Material \_\_\_\_\_ Capsule Number \_\_\_\_\_

RECEIPT

Received From \_\_\_\_\_

Curies \_\_\_\_\_ Changer: Model No. \_\_\_\_\_ S/N \_\_\_\_\_

Installed in Camera: Model \_\_\_\_\_ Serial No. \_\_\_\_\_

Survey at one meter from Source Changer \_\_\_\_\_ MR/HR. METER S/N \_\_\_\_\_

Source change and survey completed by: \_\_\_\_\_ Date \_\_\_\_\_  
Safety report completed. \_\_\_\_\_

TRANSFER

From Location: \_\_\_\_\_ To Location: \_\_\_\_\_

From Camera: Model \_\_\_\_\_ Serial Number \_\_\_\_\_

To Camera: Model \_\_\_\_\_ Serial Number \_\_\_\_\_

Changer: Model \_\_\_\_\_ Serial Number \_\_\_\_\_ Curies \_\_\_\_\_

Transfer and Safety Report completed by: \_\_\_\_\_ Date \_\_\_\_\_

DISPOSAL

Sent To: \_\_\_\_\_

Changer: Model \_\_\_\_\_ Serial No. \_\_\_\_\_ Curies \_\_\_\_\_

Survey at one meter from Source Changer \_\_\_\_\_ MR/HR. Meter S/N \_\_\_\_\_

Source change and survey completed by: \_\_\_\_\_ Date \_\_\_\_\_  
Safety report completed. \_\_\_\_\_

LEAK TEST

Leak Test Due: \_\_\_\_\_ Leak Test Completed: \_\_\_\_\_

Survey of envelope \_\_\_\_\_ MR/HR. Performed by: \_\_\_\_\_



ITEM 5a.



10CFR71 QA PROGRAM  
FOR INDUSTRIAL RADIOGRAPHY LICENSEES

1. Organization

The final responsibility for the Quality Assurance Program for Part 71 Requirements rests with NDE Services, Incorporated. Design and fabrication of radioactive material shipping packages shall not be conducted under this Quality Assurance Program. The Quality Assurance Program is implemented using the following organization:

Note: The Organizational Chart as used in the license application should be presented. It may be advisable to designate the Radiation Safety Officer as the responsible individual for the Part 71 Quality Assurance Requirements.

The Radiation Safety Officer is responsible for overall administration of the program, training and certification, document control, and auditing.

The Radiographers are responsible for handling, storing, shipping, inspection, test, operating status and record keeping.

2. Quality Assurance Program

The management of NDE Services, Inc. establishes and implements the Quality Assurance Program. Training for all QA functions, prior to engagement in these functions, is required according to written procedures. QA Program revisions will be made according to written procedures with management approval. The QA Program will ensure that all defined QC procedures, engineering procedures and specific provisions of the package design approval are satisfied. 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 Quality Assurance Program approved by the Nuclear Regulatory Commission for all packages designed or fabricated after 1 January 1979. This requirement can be satisfied by receiving a certification to this effect from the manufacturer.

**NDE SERVICES, INC.**

8775 East Orchard Road • Suite 809 • Englewood, Colorado 80111 • (303) 741-0518

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 management.

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 and shipping of packages 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.

Radiography personnel shall perform the critical handling, storage and shipping operations.

5. Inspection, Test and Operating Status

Inspection, test and operating status of packages for certain special form radioactive material will be indicated and controlled by written procedures. Status will be indicated by tag, label, marking or log entry. Status of nonconforming parts or packages will be positively maintained by written procedures.

Radiography personnel shall perform the regulatory required inspections and tests in accordance with written procedures. The Radiation Safety Officer shall ensure that these functions are performed.

6. Quality Assurance Records

Records of package approvals (including refereneses and drawings), 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 identifiable and retrievable. A list of these records, with their storage locations, will be maintained by the Radiation Safety Officer.

7. Audits

Established schedules of audits of the Quality Assurance Program will be performed using written checklists. Results of audits will be maintained and reported to management. Audit reports will be evaluated and deficient areas corrected. The audits will be dependent of 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.



NRC FORM 311  
(12-78)

U.S. NUCLEAR REGULATORY COMMISSION

1. APPROVAL NUMBER  
0040  
REVISION NUMBER  
0

QUALITY ASSURANCE PROGRAM APPROVAL  
FOR RADIOACTIVE MATERIAL PACKAGES

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, as amended, and Title 10, Code of Federal Regulations, Chapter 1, Part 71, and in reliance on statements and representations heretofore made in Item 5 by the person named in Item 2, the Quality Assurance Program identified in Item 5 is hereby approved. This approval is issued to satisfy the requirements of Section 71.51 of 10 CFR Part 71. This approval is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

2. NAME Technical Operations, Inc.			3. EXPIRATION DATE October 31, 1984	
STREET ADDRESS Northwest Industrial Park			4. DOCKET NUMBER 71-0040	
CITY Burlington	STATE MA	ZIP CODE 01803		

5. QUALITY ASSURANCE PROGRAM APPLICATION DATE(S)

July 9, 1979

6. CONDITIONS

Activities conducted under applicable criteria of Appendix E of 10 CFR Part 71 to be executed with regard to transportation packages by October 1, 1979.

*pdr-7910010409*

FOR THE U.S. NUCLEAR REGULATORY COMMISSION	
SIGNATURE <i>Charles E. MacDonald</i> Charles E. MacDonald, Chief, Transportation Certification Branch, Division of Fuel Cycle and Material Safety, NMSS	DATE AUG 03 1979

ITEM 5.b



August 25, 1982

U.S. Nuclear Regulatory Commission  
Division of Materials Licensing  
Washington, D.C. 20555

Per 49 CFR 173.393a (1) is registering the use of Technical Operations  
Model 660 Exposure devices and Model 650 shipping containers.

Shipper:

NDE Services, Inc.  
8775 E. Orchard Rd.  
Suite 809  
Englewood, CO 80111

U.S.N.R.C. Approval Designation:  
Technical Operations, Inc.  
Northwest Industrial Park  
Burlington, Mass. 01803

U.S.N.R.C. Approval Numbers:  
T/O 660 USA/9033/B ( )  
T/O 650 USA/9032/B ( )

Sincerely,

A handwritten signature in cursive script that reads "Edward J. Briggs".

Edward J. Briggs  
Radiation Protection Officer

**NDE SERVICES, INC.**

8775 East Orchard Road • Suite 809 • Englewood, Colorado 80111 • (303) 741 0518