

RETURN TO 396-SS

DEPARTMENT OF THE NAVY  
NAVAL SEA SYSTEMS COMMAND DETACHMENT  
RADIOLOGICAL AFFAIRS SUPPORT OFFICE (RASO)  
YORKTOWN, VA 23691-5098

71-0447  
71-9032  
71-9033

IN REPLY REFER TO  
5104/52903  
Ser 11/ 00721  
16 JUN 1989

U. S. Nuclear Regulatory Commission  
Division of Safeguards and Transportation  
Transportation Branch  
Washington, DC 20555

Gentlemen:

Enclosure (1) requests Shore Intermediate Maintenance Activity, Charleston, SC be registered as a user for the Model 660 exposure device, Package ID No. USA/9033/B(u) and Model 650 source changer, Package ID No. USA/9032/B(u) and requests amendment of NRC Quality Assurance Program Approval No. 0447.

Sincerely,

*J. W. Malinoski*  
J. W. MALINOSKI

Enclosure:

(1) SIMA Charleston ltr 9000  
Ser 03/0750 of 25 Apr 89  
w/endorsement

Copy to:  
CNO (OP-45)  
COMNAVSURFLANT (N421N)  
SIMA Charleston

FEE NOT REQUIRED

B907100173 B90616  
PDR ADDCK 07100447  
C PNU

1/1  
DF03



DEPARTMENT OF THE NAVY

COMMANDER NAVAL SURFACE FORCE  
UNITED STATES ATLANTIC FLEET  
NORFOLK, VIRGINIA 23511-6292

9000  
Ser N421N/05804  
19 MAY 1989

FIRST ENDORSEMENT on SIMA Charleston ltr 9000 Ser 03/0750  
of 25 Apr 89

From: Commander, Naval Surface Force, U.S. Atlantic Fleet  
To: Officer in Charge, Naval Sea Systems Command Detachment  
RASO, Yorktown

Subj: REQUESTING REGISTRATION AS A USER AND AN AMENDMENT TO  
EXISTING QUALITY ASSURANCE PROGRAM

1. Readdressed and forwarded recommending approval.

*James P. Gruber*  
J. P. GRUBER  
By direction

Copy to:  
SIMA Charleston



DEPARTMENT OF THE NAVY

COMMANDING OFFICER

NAVAL SURFACE FORCE ATLANTIC

READINESS SUPPORT GROUP CHARLESTON

CHARLESTON, SOUTH CAROLINA 29408-6850

9000

Ser 03/ 0750

25 APR 1989

From: Commanding Officer, Shore Intermediate Maintenance Activity, Charleston  
To: Commander, Radiological Affairs Support Office, Naval Weapons Station,  
Yorktown, VA 23691-5098  
Via: Commander, Naval Surface Force, U.S. Atlantic Fleet (N421N)  
Subj: REQUESTING REGISTRATION AS A USER AND AN AMENDMENT TO  
EXISTING QUALITY ASSURANCE PROGRAM  
Ref: (a) Code of Federal Regulations  
(b) RASO Yorktown, VA ltr 5104 Ser 455/8U586632 of 9 Nov 88  
Encl: (1) Revised Quality Assurance Program Instruction 9091.2A

1. In accordance with reference (a), it is requested that Shore Intermediate Maintenance Activity, (SIMA), Charleston be registered as a user of AMERSHAM Model 660 exposure device docket number 71-9033 and AMERSHAM Model 650 source changer docket number 71-9032. Reference (b) provides approval to utilize this exposure device and source changer at this facility.
2. To reflect this change requested by paragraph (1) in the current Quality Assurance Program, it is requested that SIMA Charleston's Quality Assurance Program be modified as shown in enclosure (1). Request review and reply at your earliest convenience.
3. For further information regarding this matter, contact HT1 (SW) Schacht or HT1 (SW) Gammell at ext. (803) 743-3991 or Autovon ext. 563-3991. Your assistance is greatly appreciated.

  
C. E. CARROLL



# DRAFT

SIMACHASNINST 9091.2A  
03:jec

## SIMA CHARLESTON INSTRUCTION 9091.2A

Subj: QUALITY ASSURANCE PROGRAM REQUIREMENTS FOR SHIPMENT OF  
RADIOACTIVE SOURCES USED IN GAMMA RADIOGRAPHY

- Ref: (a) Navy Radioactive Materials Permit Number 39-52903-AINP Amendment # 0  
issued to Shore Intermediate Maintenance Activity, Charleston on 8 Dec 88  
(b) SIMACHASNINST 5100.6A  
(c) U.S. Nuclear Regulatory Commission Rules and Regulations, Code of Federal  
Regulations, Transportation (Parts 100 to 199)  
(d) U.S. Nuclear Regulatory Commission Rules and Regulations, Title 10 -  
Energy, Part 71, Packaging of Radioactive Material for Transport and  
Shipment of Radioactive Material under Certain Conditions  
(e) COMNAVSURFLANTINST 9091.2

- Encl: (1) Checklist for Packaging and Shipment of Radiographic Sources  
(2) Instructions for Internal Inspections and Controls of Radiographic Operations  
(3) Audit Forms I, II and III

1. Purpose. To promulgate the minimum precautionary measures to be utilized in the shipment of Radioactive Sources used in Gamma Radiography from Shore Intermediate Maintenance Activity (SIMA), Charleston to a vendor licensed by the U.S. Nuclear Regulatory Commission to receive Radioactive Materials, in accordance with references (a) through (e). This instruction is a complete rewrite of the superseded instruction. Individual changes, additions and deletions have not been indicated.

2. Cancellation. SIMACHASNINST 9091.2.

3. Discussion.

a. Radioactive Isotopes are capable of inflicting serious bodily harm if used improperly or without regard to safety.

b. All shipments or transfers of radioactive materials over public areas, including shipments made with private or government vehicles, must comply with the appropriate federal, state and local transportation requirements. This instruction is provided to ensure SIMA Charleston complies with references (a) through (e), with regards to the shipment of Radioactive Sources.

c. When questions arise concerning this instruction or referenced instructions, clarification may be obtained from the Radiographic Safety Officer.

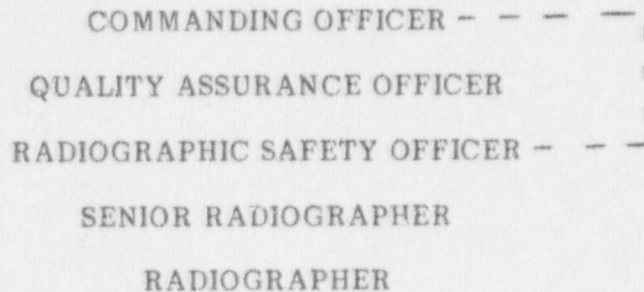
4. Organization. The final responsibility for the Quality Assurance (QA) Program for compliance with this instruction and references (a) through (e) rests with SIMA

DRAFT

# DRAFT

SIMACHASNINST 9091.2A

Charleston. Design and fabrication will not be conducted under this program. The QA Program is implemented using the Chain of Command as shown below:



The broken lines indicate a provision for direct access up the chain of command in matters involving safety.

## 5. Quality Assurance Program.

a. The Commanding Officer shall establish and implement this program upon approval.

b. The Radiographic Safety Officer is responsible through the chain of command for the overall administration of the QA program including training and certification of Radiographers, document control and conducting audits as required by reference (b). The Senior Radiographer is responsible for completion of all required documentation and maintenance of all required records. The Radiographers are responsible for the handling, storage, shipping, inspections, test and operating status, and record keeping of radioactive sources.

c. Training of all radiographic personnel on radiation safety and the requirements of the U.S. Nuclear Regulatory Commission will be conducted, at a minimum, annually. All radiographic personnel will be required to be tested on the above training. The training and examination are to be administered by the ARSO/RSO.

6. Document Control. The Certificate of Compliance for the Radiographic Exposure Device, Radiographic Source Changer/Shipping Container and the Special Form Encapsulated Source used by the radiographic personnel at SIMA Charleston will be maintained by the Radiographic Safety Officer. Modifications or alterations to this equipment will not be accomplished by this command.

## 7. Handling, Storage and Shipping:

a. The procedures contained in reference (b) concerning the handling, storage and shipping of Radiographic Sources will be strictly adhered to. Shipments will not be made until all tests, certifications, acceptances and final inspections have been completed.

b. Use Checklist for Packaging and Shipment of Radiographic Sources, enclosure (1) of this instruction.

# DRAFT

SIMACHASNINST 9091.2A

c. Only qualified Radiographers, as defined in reference (b), will accomplish the required handling, storage and shipping operations.

## 8. Inspection, Test and Operating Status.

a. Inspection, test and operating status of packages of Radiographic Sources will be indicated and controlled by the written procedures contained in reference (b), and documented on the forms contained therein.

b. Only qualified Radiographers will perform the required inspections and tests, in accordance with references (a) through (e). The Senior Radiographer will supervise the performance of the required inspections and tests. The Radiographic Safety Officer will ensure compliance.

## 9. Quality Assurance Records.

a. Records of package approval, procurement, inspection, test, operating logs, audit results, personnel training and qualification, and record of shipment will be maintained in accordance with references (b) and (d). The Radiographer is responsible for maintenance of the records.

b. The records will be maintained in an auditable manner so as to be readily identified and retrieved. The Radiographic Safety Officer will maintain a list of the records and storage locations.

10. Audits. Established schedules of audits of the QA Program will be performed utilizing enclosure (2) and documented on prepared audit forms of enclosure (3). Results of the audits will be maintained and reported to the Quality Assurance Officer. Audit reports will be conducted yearly unless otherwise required. Audit reports will be maintained as part of the Quality Assurance records. Members of the audit team will have no responsibility to the Nondestructive Laboratory.

C. E. CARROLL

Distribution:  
SIMACHASNINST 5216.1C  
List I



# DRAFT

SIMACHASNINST 9091.2A

## CHECK LIST FOR PACKAGING AND SHIPMENT OF RADIOGRAPHIC SOURCES

1. Ensure source leak test has been conducted in accordance with reference (b). Comp. \_\_\_\_\_
2. Utilizing the inspection sheet contained in reference (b) (encl 10) complete appropriate sections for source changer. Comp. \_\_\_\_\_
3. Compare unit with Certificates of Compliance and supporting documentation to ensure correct package is being utilized. Compare packaged ID No. USA/9032/B (U). Comp. \_\_\_\_\_
4. Verify that the organization to which material is being shipped is authorized to receive radioactive material. Comp. \_\_\_\_\_
5. Place material for transport in package in accordance with procedures set forth in reference (b). Comp. \_\_\_\_\_
6. Description of shipment in accordance with reference (b) (encl 11). Comp. \_\_\_\_\_
7. Take and record radiation levels: 1 meter \_\_\_\_ mr/hr 6" \_\_\_\_ mr/hr and contact \_\_\_\_ mr/hr. Comp. \_\_\_\_\_
8. Prepare requisition and invoice/shipping document (DD-1149)
  - a. Fill out parts 1, 2, 3, 5, 6, 8 and 10 as with a normal shipment.
  - b. Parts (a) through (k) will consist of the following statements in this sequence:
    - (1) Shipping Name
    - (2) Shipping Class
    - (3) Total quantity of material in curies, millicuries or microcuries as appropriate
    - (4) Type of packaging
    - (5) Name of radionuclide
    - (6) Description of physical and chemical form and serial number if applicable
    - (7) Transport index
    - (8) Category of label applied
    - (9) The statement "Package requires radiological controls for unpacking. Return receipt required."

DRAFT

Encl (1)

# DRAFT

SIMACHASNINST 9091.2A

(10) The statement "This is to certify that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to applicable regulations of the Department of Transportation."

(11) A statement of receipt.

- c. DD-1149 form filled out as specified above. Comp. \_\_\_\_\_
9. Utilize emergency procedures when government owned vehicle is to be used. Comp. \_\_\_\_\_
10. Place copy of DD-1149 and source decay chart in container. Comp. \_\_\_\_\_
11. If shipment is transferred via Navy supply-for future receipt by authorized organization, enter shipment on tickler sheet in front of Action Pending File held by Senior Radiographer. Send copy of shipping papers together with letter to receiving organization to inform them of shipment. Serial Number and date of letter \_\_\_\_\_. Comp. \_\_\_\_\_
12. If shipment is being carried by a SIMA Charleston driver and vehicle for future receipt:
- Note: Hazardous materials are not allowed on public bridges and tunnels unless approval is granted by higher authority; therefore, routes chosen for transport should not include the use of bridges or tunnels if possible.
- a. Driver must be designated by the Commanding Officer.
- b. Provide driver with copy of the emergency procedures designating the actions he shall take in case of an accident and whom must be notified.
- c. Provide driver with three copies of DD-1149 to be signed as receipts by receiving organization.
- d. Ensure placards are placed on vehicle as described in reference (b). Comp. \_\_\_\_\_
13. Assemble all documents produced during the completion of the enclosure and file in Action Pending File of Senior Radiographer. Comp. \_\_\_\_\_
14. Upon receipt of confirmation of receipt of shipment by licensed addressee, remove pending documents and file in Completed Source Shipment File, along with this completed enclosure. Comp. \_\_\_\_\_
15. Enclosure complete.

\_\_\_\_\_  
Senior Radiographer

\_\_\_\_\_  
Radiographic Safety Officer



# DRAFT

SIMACHASNINST 9091.2A

## INSTRUCTIONS FOR INTERNAL INSPECTIONS AND CONTROLS OF RADIOGRAPHIC OPERATIONS

1. The Radiographic Safety Officer is responsible for ensuring that NRC regulations, license provisions, operating and emergency procedures are complied with by the Radiographers. The duties of the Radiographic Safety Officer are as follows:

- a. Serve as the licensee's liaison officer with the NRC on license matters.
- b. Review and inspect operating and emergency procedures.
- c. Maintain control of procurement and licensed by-product material and disposal of licensed by-product material.
- d. Supervise the personnel monitoring program for NDT.
- e. Assume control and institute corrective action in emergency situations.
- f. Supervise quarterly inventories.
- g. Investigate causes of incidents and determine necessary preventative action.
- h. Supervise radioactive source replacement and tagging operations.
- i. Conduct a quarterly audit of radiographic operations and facilities on announced or unannounced basis, utilizing Forms I, II, and III at enclosure (3).

(1) Results of quarterly audit will be forwarded to Commanding Officer, SIMA Charleston on Form II at enclosure (3).

(2) Correction of audit findings will be noted on Form III at enclosure (3) and forwarded to Commanding Officer, SIMA Charleston.

### NOTE

Items of noncompliance involving safety of personnel or Radiographic source security will be corrected immediately.

(3) Forms I, II and III when filled out, will be maintained on file by the Radiographic Safety Officer for three years.

DRAFT

Encl (2)

DRAFT

SIMACHASNINST 9091.2A

AUDIT FORM I

QUARTERLY AUDIT REPORT OF ISOTOPE RADIOGRAPHIC FACILITIES

	SAT	UNSAT
1. UTILIZATION LOG	_____	_____
2. ISOTOPE RECEIPT AND TRANSFER LOG	_____	_____
3. POCKET DOSIMETER LOG	_____	_____
4. RADIOGRAPHIC EQUIPMENT MAINTENANCE RECORDS	_____	_____
5. QUARTERLY SOURCE INVENTORY LOG	_____	_____
6. RADIOGRAPHIC SOURCE MOVEMENT SHEETS	_____	_____
7. RADIATION SURVEY RECORDS	_____	_____
8. RADIAC CALIBRATION RECORDS	_____	_____
9. SOURCE LEAK TEST RECORDS	_____	_____
10. PROPER POSTING OF RADIATION AREAS AND FORM NRC-3	_____	_____
11. TRAINING RECORDS OF RADIOGRAPHERS	_____	_____
12. GENERAL MATERIAL CONDITION OF EQUIPMENT AND FACILITIES	_____	_____
13. REMARKS:	_____	
	_____	
	_____	
	_____	

\_\_\_\_\_  
RADIOGRAPHIC SAFETY OFFICER

Copy to:  
QA Officer  
Senior Radiographer

DRAFT

Encl (3)

D R A F T

SIMACHASNINST 9091.2A

AUDIT FORM II

\_\_\_\_\_  
DATE

From: Radiographic Safety Officer

To: Commanding Officer, Shore Intermediate Maintenance Activity, Charleston

Subj: QUARTERLY AUDIT FOR ISOTOPE RADIOGRAPHIC FACILITIES

Ref: (a) SIMACHASNINST 9091.2A

1. A quarterly audit, as required by reference (a), was conducted on NDT Isotope Radiographic Facilities and the following conditions were noted: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
RADIOGRAPHIC SAFETY OFFICER

Copy to:

CO

QA Officer

Senior Radiographer



DRAFT

SIMACHASNINST 9091.2A

AUDIT FORM III

\_\_\_\_\_  
DATE

From: Radiographic Safety Officer

To: Commanding Officer, Shore Intermediate Maintenance Activity, Charleston

Subj: CORRECTION OF DISCREPANCIES NOTED WHILE CONDUCTING QUARTERLY  
AUDIT OF ISOTOPE RADIOGRAPHIC FACILITIES ON \_\_\_\_\_

Ref: (a) SIMACHASNINST 9091.2A

1. In accordance with reference (a), the following discrepancies were noted while conducting subject audit and have been corrected as discussed below:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
RADIOGRAPHIC SAFETY OFFICER

Copy to:  
QA Officer