

DOCUMENT D-19

NMRI NMRP, No. 19-64223-41NP (December 1997)

**FILE**  
DEPARTMENT OF THE NAVY  
OFFICE OF THE CHIEF OF NAVAL OPERATIONS  
2000 NAVY PENTAGON  
WASHINGTON, D.C. 20350-2000

IN REPLY REFER TO  
6470  
Ser N455C/7U595337  
15 Dec 97

From: Chairman, Navy Radiation Safety Committee  
To: Commanding Officer, Naval Medical Research Institute,  
8901 Wisconsin Avenue, Bethesda, MD 20889-5607

Subj: NAVY RADIOACTIVE MATERIAL PERMIT (NRMP) RENEWAL

Ref: (a) Your ltr 6470 Ser 09A/35818 of 11 Mar 97  
(b) Your ltr 6470 Ser 09A/35524 of 5 Dec 96

Encl: (1) NRMP Number 19-64223-41NP

1. As requested by reference (a), your NRMP Number 19-64223-41NP has been renewed, with a new expiration date of 31 December 2002.

2. The following revisions are made to your permit by this renewal:

a. Based on statements contained in references (a) and (b), you are authorized to possess and use radioactive materials authorized by this NRMP for in-vitro laboratory research in Room 337, Nicholson Research Building A, 5516 Nicholson Lane, Kensington, Maryland 20895.

b. Permit Condition 13 revises the radiation safety staff members responsible for supervising use of the gamma irradiators.

c. Permit Condition 19 is added to stipulate that experimental animals administered radioactive materials shall not be used for human consumption.

d. Permit Condition 21 is revised to authorize disposal of radioactive material with a physical half-life of less than 100 days by decay-in-storage.

e. This NRMP renewal deletes the previous authorization to dispose of iodine-125 waste by decay-in-storage for five half-lives. That authorization has been determined to be inconsistent with current Nuclear Regulatory Commission policies. Therefore, all waste being disposed of by decay-in-storage procedures must be held for a minimum of ten half-lives.

f. Permit Condition 23 is added to require a six month physical inventory of all radioactive sources, sealed and unsealed.

**FILE**

Subj: NAVY RADIOACTIVE MATERIAL PERMIT (NRMP) RENEWAL

g. Permit Condition 24 is added to require the Radiation Safety Officer or qualified designee to approve all transfers of radioactive material.

3. I am forwarding enclosure (1) as your new authorization for the use of radioactive material. Please review the enclosed NRMP carefully and be sure that you understand all conditions. For additional information, please contact Paul Tveten, Navy Environmental Health Center, at (757)363-5584, DSN 864-5584, Fax (757)444-3672, or E-mail at tvetenp@nehc.med.navy.mil.



P. K. BLAKE  
By direction

copy to:  
BUMED (MED-211)  
NRC Region II Atlanta GA  
NAENVIRHLTHCEN Norfolk VA

**NAVY RADIOACTIVE MATERIALS PERMIT**

Pursuant to the authority stated in OPNAVINST 6470.3, Navy Radiation Safety Committee, and in reliance on statements made by the applicant, permission is hereby granted for the acquisition, receipt, possession, use, storage and disposal of radioactive materials listed below subject to the conditions listed in this permit.

SIGNED 15 DEC 97

<b>1 - COMMAND</b>  COMMANDING OFFICER NAVAL MEDICAL RESEARCH INSTITUTE 8901 WISCONSIN AVENUE BETHESDA, MD 20889-5607	<b>2 - PERMIT NO.</b> 19-64223-41NP
	<b>3 - AMENDMENT NO.</b>
	<b>4 - DOCKET NO.</b>
	<b>5 - EXPIRATION DATE</b> 31 DECEMBER 2002

6 - RADIOACTIVE MATERIAL	7 - CHEMICAL/ PHYSICAL FORM	8 - MAXIMUM QUANTITY AUTHORIZED
a. Hydrogen-3	Any	3 Curies
b. Carbon-14	Any	500 Millicuries
c. Phosphorus-32	Any	200 Millicuries
d. Phosphorus-33	Any	70 Millicuries
e. Sulfur-35	Any	200 Millicuries
f. Calcium-45	Any	150 Millicuries
g. Chromium-51	Any	150 Millicuries
h. Iodine-125	Any	500 Millicuries
i. Cesium-137	Sealed Sources	9000 Curies
j. Cesium-137	Sealed Sources	2600 Curies
k. Cesium-137	Sealed Sources	300 Curies

## 9. Authorized Use:

a.- h. Laboratory research, including animal studies.

**UNITED STATES NAVY RADIATION SAFETY COMMITTEE**

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- i. For use in J. L. Shepherd and Associates MK1 Model 68 irradiator for irradiation of materials, including small animals.
- j. For use in Best Industries Gammaradiator 100 irradiator for irradiation of materials, including small animals.
- k. For use in Isomedix Gammator B irradiator for irradiation of materials, including small animals.

**PERMIT CONDITIONS**

10. The Command's Radioactive Material Permit is renewed and reprinted in its entirety. Changed conditions as a result of this renewal are denoted by (A for additions and (R for revisions. Your permit applications dated 5 December 1996 and 11 March 1997, along with submitted information and procedures, are considered an integral part of this Radioactive Material Permit and shall be maintained on file with the permit. (R
11. Radioactive material authorized by this Permit shall be stored and used only at Naval Medical Research Institute, Bethesda, MD; Naval Medical Research Institute, Rockville Annex, 12300 Washington Avenue, Rockville, MD; and Naval Medical Research Institute Bone Marrow Registry, 5516 Nicholson Lane, Kensington, MD. (R
12. The Radiation Safety Officer for the use of radioactive material authorized by this Permit is LCDR S. L. Gaiter, MSC, USN.
13. Radioactive material authorized by this permit shall be used by, or under the supervision of, individuals designated by the Command's Radiation Safety Committee. The gamma irradiators shall be used by, or under the supervision of, LCDR S. L. Gaiter, MSC, USN; HM1 J. Howe, USN; or HM3 S. A. Ahmad, USN. (R
14. a. Each sealed source containing more than 100 microcuries of beta and/or gamma emitting material or more than 10 microcuries of alpha emitting material shall be tested for leakage at intervals not to exceed six months. Any source received from another person which is not accompanied by a certificate indicating that a test was performed within 6 months before the transfer shall not be put into use until tested.
- b. Any source in storage and not being used need not be tested. When the source is removed from storage for use or transfer to another person, it shall be tested before use or transfer.

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- c. The test shall be capable of detecting the presence of 0.005 microcuries of radioactive material on the test sample. The test sample shall be taken from the source or from the surfaces of the device in which the sealed source is permanently mounted or stored on which one might expect contamination to accumulate. Records of leak test results shall be kept in units of microcuries and maintained for inspection by the Navy Radiation Safety Committee.
- d. If the test reveals the presence of 0.005 microcurie or more of removable contamination, the command shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired by a person appropriately licensed to make such repairs or to be disposed of in accordance with the Nuclear Regulatory Commission regulations. An immediate voice/message notification will be made by OPREP-3 NAVY BLUE report per OPNAVINST 3100.6 series with Chief, Bureau of Medicine and Surgery (MED-211) and Navy Environmental Health Center as information addressees.
- e. Tests for leakage and/or contamination shall be performed by the command or by other persons specifically licensed by the NRC or an Agreement State to perform such services.
15. This permit does not authorize repairs or alterations of the gamma irradiators involving the removal of shielding or access to the radioactive material. Removal, replacement and disposal of sealed sources in the irradiator shall be performed by the manufacturer or by a person specifically licensed by the NRC or an Agreement State to perform such services.
16. Written procedures submitted in the permit application for use of the gamma irradiators shall be followed and a copy of these procedures shall be made available to each individual using or having responsibility for use of the device.
17. The command shall comply with conditions of NRC "Order Modifying Certain Licenses" dated 3 July 1984 for the J. L. Shepherd Mark 1 irradiator.
18. Radioactive material shall not be used in or on human beings or in field applications where activity is released.
19. Experimental animals, or the products from experimental animals, that have been administered radioactive material shall not be used for human consumption. (A)

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20. Containers holding more than 0.1 millicurie of I-125 shall be opened initially within laboratory hoods having adequate face velocities of 0.5 m/sec or more. Operations involving the routine use of I-125 should be performed in a hood. Individuals handling unsealed quantities of I-125 greater than 1 millicurie, in a volatile or dispersible form, shall have their thyroid burden measured at least quarterly.
21. The command is authorized to hold radioactive material with a physical half-life of less than 100 days for decay-in-storage before disposal as ordinary trash in accordance with the procedures of 10 CFR 35.92. (R)
22. The notifications specified in subparagraphs (a) and (b) will be made in lieu of Nuclear Regulatory Commission reporting requirements of 10 CFR.
- a. Immediate voice/message notification by OPREP-3 NAVY BLUE report per OPNAVINST 3100.6 series with the Bureau of Medicine and Surgery (MED-21) and Navy Environmental Health Center (NAVENVIRHLTHCEN) as information addressees for the following:
- (1) Excessive radiation levels or contamination on packages (10 CFR 20.1906).
  - (2) Theft or loss of radioactive material (10 CFR 20.2201).
  - (3) Radiation incidents as defined by 10 CFR 20.2202 and 10 CFR 30.50.
  - (4) Defect or failure to comply (10 CFR 21).
- b. Written notification to Chief of Naval Operations (N45) within 15 days with an information copy to Navy Environmental Health Center. An advance copy and/or telephone report to N45 should also be made to ensure notification within 15 days for the following:
- (1) Overexposure and excessive levels and concentrations (10 CFR 20.2203).
23. The command shall conduct a physical inventory every six months to account for all sources (sealed and unsealed) and/or devices received and possessed under this permit. Records shall be maintained for five years from the date of the inventory and shall include the quantities and kinds of radioactive material, manufacturer's name and model/lot number, location of use or

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storage and the date of the inventory and shall be signed by the  
Radiation Safety Officer. (A)

24. The Radiation Safety Officer or a qualified designee will personally approve all transfers of radioactive material covered by this Permit. This includes a review of the packaging, labeling, and documentation of each outgoing shipment as well as the receipt process for each incoming shipment. (A)
25. Except as specifically provided otherwise by this Permit, the command shall possess and use radioactive material described in this Permit in accordance with:
- a. Statements, representations, and procedures contained in the Command's applications dated 5 December 1996 and 11 March 1997. (R)
- b. Code of Federal Regulations, BUMEDINST 6470.20, OPNAVINST 6470.3 and NAVMED P-5055.
- c. The Command shall maintain records for review by the Navy Radiation Safety Committee sufficient to document operational compliance with the above requirements and other conditions of this Permit.

DATE:

15 Dec 97P. K. Blake

P. K. BLAKE  
Captain, MSC, USN  
Executive Secretary  
Navy Radiation Safety Committee



DOCUMENT D-20

NMRI NMRP, No. 19-64223-41NP, Amendment 01  
(August 1993)

## NAVY RADIOACTIVE MATERIALS PERMIT

*Pursuant to the authority stated in OPNAVINST 6470.3, Navy Radiation Safety Committee, and in reliance on statements made by the applicant, permission is hereby granted for the acquisition, receipt, possession, use, storage and disposal of radioactive materials listed below subject to the conditions listed in this permit.*

SIGNED 24 AUG 93

<b>1 - COMMAND</b>  Commanding Officer Naval Medical Research Institute Bethesda, MD 20889-5055	<b>2 - PERMIT NO.</b>  19-64223-41NP
	<b>3 - AMENDMENT NO.</b>  01
	<b>4 - DOCKET NO.</b>  
	<b>5 - EXPIRATION DATE</b>  31 March 1997

6 - RADIOACTIVE MATERIAL	7 - CHEMICAL/ PHYSICAL FORM	8 - MAXIMUM QUANTITY AUTHORIZED
a. Hydrogen-3	Any	3 Curies
b. Carbon-14	Any	500 Millicuries
c. Phosphorus-32	Any	200 Millicuries
d. Phosphorus-33	Any	70 Millicuries
e. Sulfur-35	Any	200 Millicuries
f. Chromium-51	Any	150 Millicuries
g. Iodine-125	Any	500 Millicuries
h. Cesium-137	Sealed Sources	9000 Curies
i. Cesium-137	Sealed Sources	2600 Curies
j. Cesium-137	Sealed Sources	300 Curies

*United States Navy Radiation Safety Committee*

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k. Cesium-137

Sealed Sources

5 Millicuries per Source  
(not to exceed 20  
Millicuries total)

## 9. AUTHORIZED USE:

a. - g. Laboratory research, including animal studies.

h. For use in J. L. Shepard and Associates MK1 Model 68 irradiator for irradiation of materials, including small animals.

i. For use in Best Industries Gammaradiator 100 irradiator for irradiation of materials, including small animals.

j. For use in Isomedix Gammator B irradiator for irradiation of materials, including small animals.

k. For use in Ohmart Corporation Model SR-A level gauge source holder.

## PERMIT CONDITIONS:

10. The Command's Radioactive Material Permit is reprinted in its entirety. The permit application dated 26 March 1992, letter dated 9 June 1992, and amendment application dated 2 June 1993, including submitted information and procedures, are considered an integral part of this Radioactive Material Permit and shall be maintained on file with the permit. (R)

11. Radioactive material authorized by this Permit shall be used only at Naval Medical Research Institute, Bethesda, MD and Naval Medical Research Institute, Rockville Annex, 12300 Washington Avenue, Rockville, MD.

12. The Radiation Safety Officer for the use of radioactive material authorized by this Permit is LT B. K. Holland, MSC, USNR. Assistant Radiation Safety Officer is John J. Ryan, Ph. D.

*United States Navy Radiation Safety Committee*

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United States Navy Radiation Safety Committee

**RADIOACTIVE MATERIALS PERMIT**

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13. Radioactive material authorized by this Permit shall be used by or under the supervision of personnel designated by the Command's Radiation Safety Committee. The gamma irradiators shall be used by or under the supervision of Dr. J. J. Ryan or LT B. K. Holland.

14. Each sealed source containing more than 100 microcuries of beta and/or gamma emitting material or more than 10 microcuries of alpha emitting material shall be tested for leakage and/or contamination at intervals not to exceed 6 months. Any source received from another person which is not accompanied by a certificate indicating that a test was performed within 6 months before the transfer shall not be put into use until tested.

A. Any source in storage and not being used need not be tested. When the source is removed from storage for use or transfer to another person, it shall be tested before use or transfer.

B. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. The test sample shall be taken from the sealed source or from the surfaces of the device in which the sealed source is permanently mounted or stored on which one might expect contamination to accumulate. Records of leak test results shall be kept in units of microcuries and maintained for inspection by the Navy Radiation Safety Committee.

C. If the test reveals the presence of 0.005 microcurie or more of removable contamination, the command shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with NRC regulations. An immediate voice/message notification will be made by OPREP-3 NAVY BLUE report per OPNAVINST 3100.6 series with Bureau of Medicine and Surgery (MED-211) and Navy Environmental Health Center as information addresses.

D. Tests for leakage and/or contamination shall be performed by the command or by other persons specifically licensed by the NRC or an Agreement State to perform such services.

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*United States Navy Radiation Safety Committee*

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15. This Permit does not authorize repairs or alterations of the gamma irradiator involving the removal of shielding or access to the radioactive material. Removal, replacement and disposal of sealed sources in the irradiator shall be performed by the manufacturer or by a person specifically licensed by the NRC or an Agreement State to perform such services.

16. Written procedures submitted in the Permit application for use of the gamma irradiators shall be followed and a copy of these procedures shall be made available to each individual using or having responsibility for use of the device.

17. Command shall comply with conditions of NRC "Order Modifying Certain Licenses" dated 3 July 1984 for the J. L. Shepherd Mark I irradiator.

18. Radioactive material shall not be used in or on human beings or in field applications where activity is released.

19. Containers holding more than 0.1 millicurie of I-125 shall be opened initially within laboratory hoods having adequate face velocities of 0.5 m/sec or more. Operations involving the routine use of I-125 should be performed in a hood. Individuals handling unsealed quantities of I-125 greater than 1 millicurie, in a volatile or dispersible form, shall have their thyroid burden measured at least quarterly. (R)

20. The Command is authorized to hold radioactive material with a physical half-life of less than 65 days for decay-in-storage before disposal as ordinary trash in accordance with the procedures in 10 CFR 35.92.

21. Radioactive waste containing Iodine-125 may be disposed of in ordinary trash after being held for decay for a minimum of five (5) half-lives. Prior to disposal, these wastes must be monitored in accordance with procedures described in 10 CFR 35.92.

22. The notifications specified in subparagraphs (a) and (b) will be made in lieu of Nuclear Regulatory Commission reporting requirements of 10 CFR.

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*United States Navy Radiation Safety Committee*

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United States Navy Radiation Safety Committee

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a. Immediate voice/message notification by OPREP-3 NAVY BLUE report per OPNAVINST 3100.6 series with Bureau of Medicine and Surgery (MED-211) and Navy Environmental Health Center as information addresses for the following:

- (1) Excessive radiation levels or contamination on packages (10 CFR 20.1906). (R)
- (2) Theft or loss of radioactive material (10 CFR 20.2201). (R)
- (3) Radiation incidents as defined by 10 CFR 20.2202 and 10 CFR 30.50. (R)
- (4) Defect or failure to comply (10 CFR 21).

b. Written notification to Chief of Naval Operations (N45) within 15 days with an information copy to Navy Environmental Health Center. An advance copy and/or telephone report to N45 should also be made to ensure notification within 15 days for the following:

Overexposure and excessive levels and concentrations (10 CFR 20.2203). (R)

23. The Command may make minor changes in radiation safety procedures after obtaining approval of the Command's Radiation Safety Officer, as long as compliance with NRC regulations is maintained. No formal amendment request is required but an information copy of any such approval should be forwarded to the Navy Environmental Health Center. An amendment request to this Permit is required for a change in Radiation Safety Officer, additional types of use of radioactive material, or changes in location of use of radioactive material.

24. Except as specifically provided otherwise by this Permit, the command shall possess and use radioactive material described in this Permit in accordance with:

- a. Statements, representations, and procedures contained in the command's application dated 29 March 1992, letter dated 9 June 1992, and amendment request dated 2 June 1993. (R)

*United States Navy Radiation Safety Committee*

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United States Navy Radiation Safety Committee

## RADIOACTIVE MATERIALS PERMIT

PERMIT NO.

19-64223-41NP

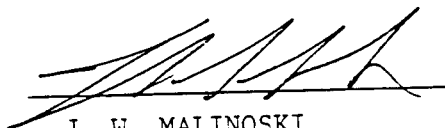
AMENDMENT NO.

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b. Code for Federal Regulations, BUMEDINST 6470.20, OPNAVINST 6470.3 and NAVMED P-5055.

c. The command shall maintain records for review by the Navy Radiation Safety Committee sufficient to document operational compliance with the above requirements and other conditions of this Permit.

Date 24 Aug 93



J. W. MALINOSKI

By direction

*United States Navy Radiation Safety Committee*

DOCUMENT D-21

NMRI NMRP, No. 19-64223-41NP (August 1992)





DEPARTMENT OF THE NAVY  
OFFICE OF THE CHIEF OF NAVAL OPERATIONS  
WASHINGTON, DC 20350-2000

IN REPLY REFER TO  
6470  
Ser 455C/2U602089  
18 Aug 92

From: Chairman, Navy Radiation Safety Committee  
To: Commanding Officer, Naval Medical Research Institute, Bethesda,  
MD 20889-5055


Subj: NAVY RADIOACTIVE MATERIAL PERMIT RENEWAL

Ref: (a) NAVMEDRSCHINSTITUTE Bethesda ltr 6470 OSHO of 26 Mar 92  
(b) NAVMEDRSCHINSTITUTE Bethesda ltr 6470 OSHO of 9 Jun 92

Encl: (1) Navy Radioactive Material Permit Number 19-64223-41NP

1. As requested by reference (a) and modified by reference (b), your Navy Radioactive Material Permit has been renewed, with a new expiration date of 31 March 1997.

2. Enclosure (1) is forwarded as your new authorization to use radioactive material. All previous correspondence pertaining to your Navy Radioactive Material Permit shall be kept on file until disposition is authorized by the Navy Radiation Safety Committee.

  
J. W. MALINOSKI  
By direction

Copy to:  
BUMED (MED-211)  
NRC Region II  
NAVENVIRHLTHCEN Norfolk VA

## NAVY RADIOACTIVE MATERIALS PERMIT

*Pursuant to the authority stated in OPNAVINST 6470.3, Navy Radiation Safety Committee, and reliance on statements made by the applicant, permission is hereby granted for the acquisition, receipt, possession, use, storage and disposal of radioactive materials listed below subject to the conditions listed in this permit.*

<p><b>1 - COMMAND</b></p> <p>Naval Medical Research Institute Bethesda, MD 20889-5055</p>	<p><b>2 - PERMIT NO.</b></p> <p style="text-align: center;">19-64223-41NP</p>
	<p><b>3 - AMENDMENT NO.</b></p>
	<p><b>4 - DOCKET NO.</b></p>
	<p><b>5 - EXPIRATION DATE</b></p> <p style="text-align: center;">31 March 1997</p>

6 - RADIOACTIVE MATERIAL	7 - CHEMICAL/PHYSICAL FORM	8 - MAXIMUM QUANTITY AUTHORIZED
a. Any byproduct or accelerator produced material with atomic number 3-83 inclusive	Any	100 millicuries of each radionuclide, total not to exceed 2 curies
b. Hydrogen - 3	Any	2 curies
c. Carbon - 14	Any	500 millicuries
d. Phosphorus - 32	Any	200 millicuries
e. Iodine - 125	Any	500 millicuries
f. Xenon - 127 or 133	Free gas or solution	4 curies

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g. Cesium - 137	Sealed Sources	9000 curies
h. Cesium - 137	Sealed Sources	2600 curies
i. Cesium - 137	Sealed Sources	300 curies
j. Krypton - 85m	Free gas or solution	200 millicuries
k. Krypton - 83m	Free gas or solution	4 curies
l. Molybdenum-99	any	3.5 curies
m. Technetium-99M	any	3.5 curies
n. Sulfur-35	any	150 millicuries
o. Chromium-51	any	150 millicuries

## 9. Authorized use:

- a. - f. Laboratory research including animal studies
- g. For use in J. L. Shepherd and Associates MKI Model 68 irradiator for irradiation of materials including small animals.
- h. For use in Best Industries Gammaradiator 100 irradiator for irradiation of materials including small animals.
- i. For use in Isomedix Gammator B irradiator for irradiation of materials including small animals.
- j. - o. Laboratory research including animal studies

PERMIT CONDITIONS:

The Command's Radioactive Material Permit is reprinted in its entirety. The permit application dated 26 March 1992 and letter dated 9 June 1992 including

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submitted information and procedures, are considered an integral part of this Radioactive Material Permit and shall be maintained on file with the permit.

11. Radioactive material authorized by this Permit shall be used only at Naval Medical Research Institute, Bethesda, MD and Naval Medical Research Institute, Rockville Annex, 12300 Washington Avenue, Rockville, MD.

12. The Radiation Safety Officer for the use of radioactive material authorized by this Permit is LTJG B. K. Holland, MSC, USNR. Assistant Radiation Safety Officer is John J. Ryan, Ph. D.

Radioactive material authorized by this Permit shall be used by or under the supervision of personnel designated by the Command's Radiation Safety Committee. The gamma irradiators shall be used by or under the supervision of Dr. J. J. Ryan or LTJG B. K. Holland.

14. Each sealed source containing more than 100 microcuries of beta and/or gamma emitting material or more than 10 microcuries of alpha emitting material shall be tested for leakage and/or contamination at intervals not to exceed 6 months. Any source received from another person which is not accompanied by a certificate indicating that a test was performed within 6 months before the transfer shall not be put into use until tested.

A. Any source in storage and not being used need not be tested. When the source is removed from storage for use or transfer to another person, it shall be tested before use or transfer.

B. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. The test sample shall be taken from the sealed source or from the surfaces of the device in which the sealed source is permanently mounted or stored on which one might expect contamination to accumulate. Records of leak test results shall be kept in units of microcuries and maintained for inspection by the Navy Radiation Safety Committee.

C. If the test reveals the presence of 0.005 microcurie or more of removable contamination, the command shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with NRC regulations. An immediate voice/message notification will be made by OPREP-3 NAVY BLUE report per OPNAVINST 3100.6 series with Bureau of Medicine and Surgery (MED-211) and Navy Environmental Health Center as information addresses.

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D. Tests for leakage and/or contamination shall be performed by the command or by other persons specifically licensed by the NRC or an Agreement State to perform such services.

15. This Permit does not authorize repairs or alterations of the gamma irradiator involving the removal of shielding or access to the radioactive material. Removal, replacement and disposal of sealed sources in the irradiator shall be performed by the manufacturer or by a person specifically licensed by the NRC or an Agreement State to perform such services.

16. Written procedures submitted in the Permit application for use of the gamma irradiators shall be followed and a copy of these procedures shall be made available to each individual using or having responsibility for use of the device.

17. Command shall comply with conditions of NRC "Order Modifying Certain Licenses" dated 3 July 1984 for the J. L. Shepherd Mark I irradiator.

18. Radioactive material shall not be used in or on human beings or in field applications where activity is released.

19. Containers holding more than 0.1 millicurie of I-125 or I-131 shall be opened initially within laboratory hoods having adequate face velocities of 0.5 m/sec or more. Operations involving the routine use of I-125 or I-131 should be performed in a hood. Individuals handling unsealed quantities of I-125 or I-131 greater than 1 millicurie, in volatile or dispersible form, shall have their thyroid burden measured at least quarterly.

20. The Command is authorized to hold radioactive material with a physical half-life of less than 65 days for decay-in-storage before disposal as ordinary trash in accordance with the procedures in 10 CFR 35.92.

21. Radioactive waste containing Iodine-125 may be disposed of in ordinary trash after being held for decay for a minimum of five (5) half-lives. Prior to disposal, these wastes must be monitored in accordance with procedures described in 10 CFR 35.92.

22. The notifications specified in subparagraphs (a) and (b) will be made in lieu of Nuclear Regulatory Commission reporting requirements of 10 CFR.

a. Immediate voice/message notification by OPREP-3 NAVY BLUE report per OPNAVINST 3100.6 series with Bureau of Medicine and Surgery (MED-211) and Navy Environmental Health Center as information addresses for the following:

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(1) Excessive radiation levels or contamination on packages (10 CFR 20.205).

(2) Theft or loss of radioactive material (10 CFR 20.402).

(3) Radiation incidents as defined by 10 CFR 20.403 and 10 CFR 30.50.

(4) Defect or failure to comply (10 CFR 21).

b. Written notification to Chief of Naval Operations (OP-45) within 15 days with an information copy to Navy Environmental Health Center. An advance copy and/or telephone report to OP-45 should also be made to ensure notification within 15 days for the following:

Overexposure and excessive levels and concentrations (10 CFR 20.405).

23. The Command may make minor changes in radiation safety procedures after obtaining approval of the Command's Radiation Safety Officer, as long as compliance with NRC regulations is maintained. No formal amendment request is required but an information copy of any such approval should be forwarded to the Navy Environmental Health Center. An amendment request to this Permit is required for a change in Radiation Safety Officer, additional types of use of radioactive material, or changes in location of use of radioactive material.

24. Except as specifically provided otherwise by this Permit, the command shall possess and use radioactive material described in this Permit in accordance with:

a. Statements, representations, and procedures contained in the command's application dated 29 March 1992 and letter dated 9 June 1992.

b. Code for Federal Regulations, BUMEDINST 6470.20, OPNAVINST 6470.3 and NAVMED P-5055.

c. The command shall maintain records for review by the Navy Radiation Safety Committee sufficient to document operational compliance with the above requirements and other conditions of this Permit.

Date

17 Aug 92

  
 J. W. MALINOSKI  
 By direction