FORM AEC-374A

U.S. ATOMIC ENERGY COMMISSION

BYPRODUCT MATERIAL LICENSE

Supplementary Sheet

License Number 4-1039-3
(F62)

Amendment No. 1

Department of the Navy
Production Department
San Francisco Naval Shipyard
San Francisco, California

License No. 4-1039-3 is hereby amended as follows:

Condition 12 is amended to read:

12. Byproduct material shall be used by, or under the supervision of, Charles E. Campbell.

Condition 15 is amended to read:

15. Except as otherwise specifically provided for in the license, the licensee shall possess and use byproduct material described in Items 6, 7 and 8 of this license in accordance with statements, representations, and procedures contained in his application dated June 3, 1960, and in related documents as follows:

A. "Use of Radioactive Sources in AN/UDM-1A Calibrator, Shop 67, Safety Procedures", dated November 23, 1960.

Add the following condition:

18. Pursuant to Section 20.105(a), 10 CFR 20, the licensee may permit radiation levels in unrestricted areas outside Building 253 in excess of those specified in Section 20.105, 10 CFR 20 provided that no person shall receive a dose to the whole body in any period of one calendar year in excess of 0.5 rem.

For the U.S. Atomic Energy Commission

by Chief, Isotopes Branch
Division of Licensing and Regulation
Washington 25, D. C.

Date 8 Sep 1961

Enclosure (2) to Business Letter No. 362-545

FORM AEC-374
12-57

U. S. ATOMIC ENERGY COMMISSION
BYPRODUCT MATERIAL LICENSE

Pursuant to the Atomic Energy Act of 1954 and Title 10, Code of Federal Regulations, Chapter 1, Part 30, Licensing of Byproduct Material, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, own, possess, transfer and import byproduct material listed below and to use such byproduct material for the purpose(s) and at the place(s) designated below. This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, and is subject to all applicable rules, regulations, and orders of the Atomic Energy Commission now or hereafter in effect and to any conditions specified below.

Licensee	
1. Name: Department of the Navy, Production Department	3. License number: 4-1039-3 (F62)
2. Address: Mare Island Naval Shipyard, San Francisco, California	4. Expiration date: June 30, 1962
	5. Reference No.

6. Byproduct material (element and mass number)	7. Chemical and/or physical form	8. Maximum amount of radioactivity which licensee may posses at any one time
A. Cesium 137 (See page 2)	A. Oak Ridge National Laboratory Sealed Sources. (See page 2)	A. One source of 128 curies. (See page 2)

9. Authorized use:

A. For use in AN/ADM-1A Radiac Calibrator for calibration of radiation detection equipment. (See page 2)

CONDITIONS

10. Unless otherwise specified, the authorized place of use is the licensee's address stated in Item 2 above.

11. The licensee shall comply with the provisions of Title 10, Part 20, Code of Federal Regulations, Chapter 1, "Standards for Protection Against Radiation".

12. Byproduct materials shall be used by, or under the direct personal supervision of, Charles E. Campbell.

13. Byproduct material as sealed sources shall not be opened.

14. Sealed sources shall be tested for leakage and/or contamination in accordance with the following:

A. Leak tests shall be performed by persons specifically licensed by the Commission to perform such tests.

(See page 2)

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(12-57)

U. S. ATOMIC ENERGY COMMISSION
YPRODUCT MATERIAL LICENSE
Supplementary Sheet

License Number 4-1039-[illegible]
(P62)

CONTINUED

6. Byproduct material (element and mass number)	7. Chemical and/or physical form	8. Maximum amount of radioactivity which licensee may possess at any one time
A. Cobalt 60	B. Oak Ridge National Laboratory Sealed Sources.	B. 14 curies contained in one source of 9 curies and one source of 5 curies.
C. Strontium 9[illegible]	C. Westinghouse Sealed Sources.	C. 50 millicuries contained in 100 sources of 500 microcuries each.

9. Authorized [illegible]

B. For use in AN/[illegible]DM-1 Radiac Calibrator for calibration of radiation detection equipment.
C. Calibration [illegible]ck sources in AN/PDR-18B radiation detection instruments.

CONDITIONS

B. Each sealed source containing byproduct material with a half-life greater than thirty [illegible] days and in any form other than gas, shall be tested for leakage and/or contamination as follows:

(1) An appropriate test for leakage and/or contamination shall be performed on the sealed source surface, or on the accessible surfaces of the device in which such a sealed source is permanently or semipermanently mounted. The test shall be performed upon receipt of a source from another person, unless the licensee receives certification from the person making the transfer that the sealed source has been tested within thirty (30) days prior to transfer and found free of any removable radioactive material.

(2) Following completion of the test prescribed in B(1), each sealed source shall be tested for leakage and/or contamination at intervals not to exceed six (6) months.

C. The test performed pursuant to B shall be sufficiently sensitive to detect 0.05 microcurie of removable beta and/or gamma emitting radioactive material. Records of leak test results shall be maintained by the licensee.

D. If the test performed pursuant to B(1) or B(2) reveals removable radioactive material, the licensee shall take immediate action to prevent spread of contamination and, within thirty (30) days after completion of the test, shall notify the Isotopes Branch, Division of Licensing and Regulation, U.S. Atomic Energy Commission, Washington 25, D.C.

(See page 3)

BYPRODUCT MATERIAL LICENSE

Supplementary Sheet

License Number

CONDITIONS

[illegible] shall be performed by the manufacturers of the sources or by [illegible] licensed by the Commission to perform such repairs.

15. [illegible] specifically provided for in the license, the licensee shall possess [illegible] material described in Items 6, 7 and 8 of this license in accordance [illegible] statements, representations, and procedures contained in his application dated [illegible] 3, 1960, and [illegible] related documents and amendments as follows:

"AN/DDM-1A Calibrator", submitted with application dated June 3, 1960.

16. [illegible] administrative instructions referenced in Condition 15A covering radiological [illegible] and security of byproduct material shall be followed and a copy of [illegible] be supplied to each individual using or having responsibility for [illegible] of such material. Any changes in the administrative instructions shall have the [illegible] approval of the Isotopes Branch, Division of Licensing and Regulation.

17. The licensee shall exercise appropriate administrative control to assure that no person [illegible] use or personally supervise the use of byproduct material until such person has:

[illegible] received instructions in, and demonstrated a thorough understanding of, the [illegible] regulations of 10 CFR, Part 20, the licensee's operating and emergency procedures; and the provisions of this license.

[illegible] Demonstrated competency in the use of byproduct material, equipment, and survey instruments which will be used.

For the U. S. Atomic Energy Commission

by Chief, Isotopes Branch

Division of Licensing and Regulation
Washington 25, D. C.

Date June 13, 1960