

NOTE FOR: FCLB Staff
FROM: Charles W. Emeigh, FCLB
SUBJECT: STANDARDIZED LICENSE CONDITIONS

The following standardized License Conditions and Technical Position have been revised to reflect the Office of Nuclear Material Safety and Safeguards organizational changes:

- License Condition for Leak Testing Sealed Uranium Sources
- License Condition for Plutonium Alpha Sources
- License Condition for Leak Testing Sealed Source Which Contains Alpha and/or Beta-Gamma Emitters
- License Condition for Leak Testing Sealed Byproduct Material Sources
- License Condition for Leak Testing Sealed Plutonium Sources
- Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct, Source, or Special Nuclear Material

Also, licenses containing a Radiological Contingency Plan condition should be revised to reflect the current NMSS organization.

Please incorporate these revisions into the applicable licenses during the next licensing action.

Copies of the revised conditions and position are enclosed.

Original signed by Charles W. Emeigh

Charles W. Emeigh, FCLB

Enclosures: As stated

cc: J. Hickey, FCOB
F. Brown, IMNS

Distribution: w/encl.

NMSS R/F NRC File Center FCLB R/F JGreeves
ETenEyck FCSS R/F

OFC	FCLB	C	FCLB	E			
NAME	WTharpe		C Emeigh				
DATE	5/13/93		5/17/93				

C = COVER E = COVER & ENCLOSURE N = NO COPY

9308260303 930517
CF SUBJ
L-4-1PT50LIC CF

130005

[G:\FCLC]

L-4-1, PT, 50 Licenses

70 - 4 Licenses (given info)

4-13, 4-13

DFX/1

LICENSE CONDITION FOR LEAK TESTING

SEALED URANIUM SOURCES

APRIL 1993

- A. Each uranium source shall be tested for leakage at intervals not to exceed 6 months. In the absence of a certificate from a transferor indicating that a test has been made within 6 months prior to the transfer, the sealed source shall not be put into use until tested.
- B. The test shall be capable of detecting the presence of 0.005 microcurie of alpha contamination on the test sample. The test sample shall be taken from the source or from appropriate accessible surfaces of the device in which the sealed source is permanently or semipermanently mounted or stored. Records of leak test results shall be kept in units of microcuries and maintained for inspection by the Commission.
- C. If the test reveals the presence of 0.005 microcurie or more of removable alpha contamination, the licensee 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 Commission's regulations. Within 5 days after determining that any source has leaked, the licensee shall file a report with the Division of Fuel Cycle Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, describing the source, test results, extent of contamination, apparent or suspected cause of source failure, and the corrective action taken. A copy of the report shall be sent to the Administrator of the nearest NRC Regional Office listed in Appendix D of Title 10, Code of Federal Regulations, Part 20.
- D. The periodic leak test required by this condition does not apply to sealed sources that are stored and not being used. The sources excepted from this test shall be tested for leakage prior to any use or transfer to another person unless they have been leak tested within 6 months prior to the date of use or transfer.

LICENSE CONDITION FOR
PLUTONIUM ALPHA SOURCES

APRIL 1993

- A. Sources when not in use shall be stored in a closed container adequately designed and constructed to contain plutonium which might otherwise be released during storage.
- B. At least once every 3 months, the licensee shall test the source for loss of plutonium in one of the following ways using radiation detection instrumentation capable of detecting 0.005 microcurie of alpha contamination:
- (1) By measurement of the source of potential alpha contamination through surveys of the storage container and areas in which the source is used; or
 - (2) By wiping thoroughly the external surfaces of the source mount, other than the radioactive surface of the source, with a piece of filter paper of high wet strength and low porosity moistened with a solution which will not attack the mount and, after the paper is allowed to dry, measuring the radioactivity on the paper.
- C. If any survey or measurement performed as required by B.(1) or B.(2) above discloses the loss of more than 0.005 microcurie of plutonium from the source or if a source has been damaged or broken, the source shall be deemed to be losing plutonium. The licensee shall immediately withdraw it from use, and cause the source to be decontaminated and repaired, or disposed of in accordance with the Commission's regulations. Within 5 days after determining that any source has lost plutonium, the licensee shall file a report with the Division of Fuel Cycle Safety and Safeguards, U. S. Nuclear Regulatory Commission, Washington, DC 20555, describing the source, test results, extent of contamination, and corrective action taken. A copy of the report shall be sent to the Administrator of the nearest NRC Regional Office listed in Appendix D of Title 10, Code of Federal Regulations, Part 20.
- D. Records of test results shall be kept in units of microcuries and maintained for inspection by the Commission.
- E. Notwithstanding the periodic test required by Paragraph B, any plutonium alpha source containing not more than 0.1 microcurie of plutonium is exempted from the above requirements.

LICENSE CONDITION FOR LEAK TESTING
SEALED SOURCE WHICH CONTAINS ALPHA AND/OR
BETA-GAMMA EMITTERS

APRIL 1993

- A.
1. Each sealed source containing more than 100 microcuries of beta and/or gamma emitting material or more than 10 microcuries of alpha emitting material, other than Hydrogen-3, with a half-life greater than 30 days and in any form other than gas, shall be tested for leakage and/or contamination at intervals not to exceed 6 months. In the absence of a certificate from a transferor indicating that a test has been made within 6 months prior to the transfer, a sealed source received from another person shall not be put into use until tested.
 2. The periodic leak test required by this condition does not apply to sealed sources that are stored and not being used. Prior to any use or transfer to another person, the source shall be leak tested unless they have been tested within 6 months prior to the date of use or transfer.
- B. The test shall be capable of detecting the presence of 0.005 microcuries of radioactive material on the test sample. The sample shall be taken from the sealed source or appropriate accessible surfaces of the container or from the device where the sealed source is mounted or stored in 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 Commission.

If the test reveals the following:

1. The presence of 0.005 microcuries or more of removable contamination from the sealed sources other than described below, or
2. The presence of 0.05 microcuries or more of removable contamination from the teletherapy sealed source, or
3. An indication that the irradiator sealed source which is stored in the water pool for shielding purposes is leaking.

The licensee 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 Commission regulations.

Within 5 days after determining that any source has leaked, the licensee shall file a report with the Division of Fuel Cycle Safety and Safeguards, U. S. Nuclear Regulatory Commission, Washington, DC 20555, describing the source, test results, extent of contamination, apparent or suspected cause of source failure, and corrective action taken. A copy of the report shall be sent to the Administrator of the NRC Regional Office having jurisdiction listed in Appendix D, Title 10, Code of Federal Regulations, Part 20.

LICENSE CONDITION FOR
LEAK TESTING SEALED BYPRODUCT MATERIAL SOURCES

APRIL 1993

- A. Each source shall be tested for leakage at intervals not to exceed 6 months. In the absence of a certificate from a transferor indicating that a test has been made within 6 months prior to the transfer, the sealed source shall not be put into use until tested.
- B. The test shall be capable of detecting the presence of 0.005 microcurie of contamination on the test sample. The test sample shall be taken from the source or from appropriate accessible surfaces of the device in which the sealed source is permanently or semipermanently mounted or stored. Records of leak test results shall be kept in units of microcuries and maintained for inspection by the Commission.
- C. If the test reveals the presence of 0.005 microcurie or more of removable contamination, the licensee 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 Commission's regulations. Within 5 days after determining that any source has leaked, the licensee shall file a report with the Director, Division of Fuel Cycle Safety and Safeguards, U. S. Nuclear Regulatory Commission, Washington, DC 20555, describing the source, test results, extent of contamination, apparent or suspected cause of source failure, and corrective action taken. A copy of the report shall be sent to the Administrator of the nearest NRC Regional Office listed in Appendix D of Title 10, Code of Federal Regulations, Part 20.
- D. The periodic leak test required by this condition does not apply to sealed sources that are stored and not being used. The sources excepted from this test shall be tested for leakage prior to any use or transfer to another person unless they have been leak tested within 6 months prior to the date of use or transfer.

LICENSE CONDITION FOR LEAK TESTING

SEALED PLUTONIUM SOURCES

APRIL 1993

- A. Each plutonium source shall be tested for leakage at intervals not to exceed 6 months. In the absence of a certificate from a transferor indicating that a test has been made within 6 months prior to the transfer, the sealed source shall not be put into use until tested.
- B. The test shall be capable of detecting the presence of 0.005 microcurie of alpha contamination on the test sample. The test sample shall be taken from the source or from appropriate accessible surfaces of the device in which the sealed source is permanently or semipermanently mounted or stored. Records of leak test results shall be kept in units of microcuries and maintained for inspection by the Commission.
- C. If the test reveals the presence of 0.005 microcurie or more of removable alpha contamination, the licensee 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 Commission's regulations. Within 5 days after determining that any source has leaked, the licensee shall file a report with the Division of Fuel Cycle Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, describing the source, test results, extent of contamination, apparent or suspected cause of source failure, and corrective action taken. A copy of the report shall be sent to the Administrator of the nearest NRC Regional Office listed in Appendix D of Title 10, Code of Federal Regulations, Part 20.
- D. The periodic leak test required by this condition does not apply to sealed sources that are stored and not being used. The sources excepted from this test shall be tested for leakage prior to any use or transfer to another person unless they have been leak tested within 6 months prior to the date of use or transfer.

LICENSE CONDITION FOR LEAK TESTING

SEALED PLUTONIUM SOURCES

APRIL 1993

- A. Each plutonium source shall be tested for leakage at intervals not to exceed 6 months. In the absence of a certificate from a transferor indicating that a test has been made within 6 months prior to the transfer, the sealed source shall not be put into use until tested.
- B. The test shall be capable of detecting the presence of 0.005 microcurie of alpha contamination on the test sample. The test sample shall be taken from the source or from appropriate accessible surfaces of the device in which the sealed source is permanently or semipermanently mounted or stored. Records of leak test results shall be kept in units of microcuries and maintained for inspection by the Commission.
- C. If the test reveals the presence of 0.005 microcurie or more of removable alpha contamination, the licensee 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 Commission's regulations. Within 5 days after determining that any source has leaked, the licensee shall file a report with the Division of Fuel Cycle Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, describing the source, test results, extent of contamination, apparent or suspected cause of source failure, and corrective action taken. A copy of the report shall be sent to the Administrator of the nearest NRC Regional Office listed in Appendix D of Title 10, Code of Federal Regulations, Part 20.
- D. The periodic leak test required by this condition does not apply to sealed sources that are stored and not being used. The sources excepted from this test shall be tested for leakage prior to any use or transfer to another person unless they have been leak tested within 6 months prior to the date of use or transfer.