

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and 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.

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| Licensee | |
| 1. Eastman Kodak Company | 3. License Number SNM-1513, Amendment 3 |
| 2. Kodak Park, Building 320 Rochester, New York 14650 | 4. Expiration Date September 30, 2008 |
| | 5. Docket No. 70-1703 Reference No. |

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| 6. Byproduct Source, and/or Special Nuclear Material | 7. Chemical and/or Physical Form | 8. Maximum amount that Licensee May Possess at Any One Time Under This License |
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Uranium enriched to $\leq 93.4\%$ in the U-235 isotope

Uranium-aluminum alloy clad in aluminum

Up to _____ of U-235 located in the Californium Neutron Flux Multiplier (CFX)

9. Authorized place of use: For use in accordance with statements, representation, and conditions specified in the licensee's application dated March 23, 1998, and supplements dated September 30, 1998, and February 9, June 18, October 5, and November 1, 2007.
10. Authorized place of use: The licensee's Kodak Park, Building 82, in Rochester, New York, as described in the above application.
11. The licensee shall comply with the attached "License Condition for Leak Testing Sealed Uranium Sources," April 1993.
12. Release of equipment or material for unrestricted use shall be in accordance with the attached "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct, Source, or Special Nuclear Material," April 1993.
13. The licensee is hereby exempt from the requirements of 10 CFR 70.24 in specified areas of the Kodak facility for the movement and staging of materials packaged for transport.

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number

SNM-1513

Docket or Reference Number

70-1703

Amendment No. 3

14. The licensee shall follow the physical protection plan entitled "Licensee Physical Security Plan for the Protection of Special Nuclear Material of Moderate Strategic Significance," dated April 26, 2000 (transmitted by letter dated April 27, 2000), as it may be further revised in accordance with the provisions of 10 CFR 70.32(e), and in accordance with statements, representations, and conditions in submittal dated June 3, 2002, and February 9 and June 18, 2007.

FOR THE NUCLEAR REGULATORY COMMISSION

Date: November 12, 2007By: Joseph G. Giitter for /RA/

Robert C. Pierson, Director
Division of Fuel Cycle Safety
and Safeguards
Washington, DC 20555

Attachments:

1. License Condition for Leak Testing
Sealed Uranium Sources dated April 1993
2. Guidelines for Decontamination of Facilities
and Equipment Prior to Release for
Unrestricted Use or Termination of
Licenses for Byproduct, Source, or
Special Nuclear Material

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.

GUIDELINES FOR DECONTAMINATION OF FACILITIES AND EQUIPMENT
PRIOR TO RELEASE FOR UNRESTRICTED USE
OR TERMINATION OF LICENSES FOR BYPRODUCT, SOURCE,
OR SPECIAL NUCLEAR MATERIAL

U.S. Nuclear Regulatory Commission
Division of Fuel Cycle Safety
and Safeguards
Washington, DC 20005

April 1993

Attachment 2

The instructions in this guide, in conjunction with Table 1, specify the radionuclides and radiation exposure rate limits which should be used in decontamination and survey of surfaces or premises and equipment prior to abandonment or release for unrestricted use. The limits in Table 1 do not apply to premises, equipment, or scrap containing induced radioactivity for which the radiological considerations pertinent to their use may be different. The release of such facilities or items from regulatory control is considered on a case-by-case basis.

1. The licensee shall make a reasonable effort to eliminate residual contamination.
2. Radioactivity on equipment or surfaces shall not be covered by paint, plating, or other covering material unless contamination levels, as determined by a survey and documented, are below the limits specified in Table 1 prior to the application of the covering. A reasonable effort must be made to minimize the contamination prior to use of any covering.
3. The radioactivity on the interior surfaces of pipes, drain lines, or ductwork shall be determined by making measurements at all traps, and other appropriate access points, provided that contamination at these locations is likely to be representative of contamination on the interior of the pipes, drain lines, or ductwork. Surfaces of premises, equipment, or scrap which are likely to be contaminated but are of such size, construction, or location as to make the surface inaccessible for purposes of measurement shall be presumed to be contaminated in excess of the limits.
4. Upon request, the Commission may authorize a licensee to relinquish possession or control of premises, equipment, or scrap having surfaces contaminated with materials in excess of the limits specified. This may include, but would not be limited to, special circumstances such as razing of buildings, transfer of premises to another organization continuing work with radioactive materials, or conversion of facilities to a long-term storage or standby status. Such requests must:
 - a. Provide detailed, specific information describing the premises, equipment or scrap, radioactive contaminants, and the nature, extent, and degree of residual surface contamination.
 - b. Provide a detailed health and safety analysis which reflects that the residual amounts of materials on surface areas, together with other considerations such as prospective use of the premises, equipment, or scrap, are unlikely to result in an unreasonable risk to the health and safety of the public.
5. Prior to replace of premises for unrestricted use, the licensee shall make a comprehensive radiation survey which establishes contamination is within the limits specified in Table 1. A copy of the survey report shall be filed with the Division of Fuel Cycle Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, and also the Administrator of the NRC Regional Office having jurisdiction. The report shall be filed at least 30 days prior to the planned date of abandonment. The survey report shall:
 - a. Identify the premises.
 - b. Show that reasonable effort has been made to eliminate residual contamination.
 - c. Describe the scope of the survey the general procedures followed.
 - d. State the findings of the survey in units specified in the instruction.

Following review of the report, the NRC will consider visiting the facilities to confirm the survey.

TABLE 1

ACCEPTABLE SURFACE CONTAMINATION LEVELS

| NUCLIDES (1) | AVERAGE (2, 3, 6) | MAXIMUM (2,4,6) | REMOVABLE (2,5,6) |
|---|---------------------------------|----------------------------------|---------------------------------|
| U-nat, U-235, U-238, and associated decay products | 5,000 dpm a/100 cm ² | 15,000 dpm a/100 cm ² | 1,000 dpm a/100 cm ² |
| Transuranics, Ra-226, Ra-228, Th-230, Th-232, Pa-231, Ac-227, I-125, I-129 | 100 dpm/100 cm ² | 300 dpm /100 cm ² | 20 dpm/100 cm ² |
| Th-nat, Th-232, Sr-90, Ra-223, Ra-224, U-232, I-126, I-131, I-133 | 1000 dpm/100 cm ² | 3000 dpm/100 cm ² | 200 dpm/100 cm ² |
| Beta-gamma-emitters (nuclides with decay modes other than alpha emission or spontaneous fission) except Sr-90 and others noted above. | 5000 dpm by/100 cm ² | 15,000 dpm b/100 cm ² | 1000 dpmb/100 cm ² |

(1) Where surface contamination by both alpha- and beta-gamma-emitting nuclides exists, the limits established for alpha- and beta-gamma-emitting nuclides should apply independently.

(2) As used in this table, dpm (disintegrations per minute) means the rate of emission by radioactive material as determined by correcting the counts per minute observed by an appropriate detector for background, efficiency, and geometric factors associated with the instrumentation.

(3) Measurements of average contaminant should not be averaged over more than 1 square meter. For objects of less surface area, the average should be derived for each such object.

(4) The maximum contamination level applies to an area of not more than 100 cm².

(5) The amount of removable radioactive material per 100 cm² of surface area should be determined by wiping that area with dry filter or soft absorbent paper, applying moderate pressure, and assessing the amount of radioactive material on the wipe with an appropriate instrument of known efficiency. When removable contamination on objects of less surface area is determined, the pertinent levels should be reduced proportionally and the entire surface should be wiped.

(6) The average and maximum radiation levels associated with surface contamination resulting from beta-gamma-emitters should not exceed 0.2 mrad/hr at 1 cm and 1.0 mrad/hr at 1 cm, respectively, measured through not more than 7 milligrams per square centimeter of total absorber.