

## MATERIALS LICENSE

Amendment No. 04

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, 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.

Licensee		In accordance with letter dated May 21, 1985	
1. Stepan Chemical Company		3. License number 12-18821-01 is amended in its entirety to read as follows:	
2. Rural Route 1 Elwood, IL 60421		4. Expiration date July 31, 1990	
		5. Docket or Reference No. 030-14217	
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	
A. Cesium-137	A. Sealed sources (New England Nuclear Model NER 570; Gamma Industries Model VD; General Radioisotope Products Model 850233; 3M Company Model 4P6M; or Amersham Models X.8. or X.19.)	A. No single source to exceed 200 millicuries	
B. Cesium-137	B. Sealed sources (Kay-Ray, Inc. Model No. 7700D)	B. No single source to exceed 100 millicuries	
C. Cesium-137	C. Sealed sources (Kay-Ray, Inc. Model No. 7700F)	C. No single source to exceed 500 millicuries	
D. Cesium-137	D. Sealed sources (Kay-Ray, Inc. Model No. 7700G)	D. No single source to exceed 1000 millicuries	

## 9. Authorized Use

- A. To be used in a Kay-Ray, Inc. Model 7063 source holder for level measurements.
- B. To be used in a Kay-Ray, Inc. Model 7062 source holder for level measurements.
- C. and D. To be used in a Kay-Ray, Inc. Model 7063 source holder for level measurements.

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CONDITIONS

10. Licensed material shall be used only at the licensee's facilities located at Rural Route 1, Elwood, Illinois.
11. The licensee shall comply with the provisions of Title 10, Chapter 1, Code of Federal Regulations, Part 19, "Notices, Instructions and Reports to Workers; Inspections" and Part 20, "Standards for Protection Against Radiation."
12. Licensed material shall be used by, or under the supervision of, Jim Potochnic, Tighe Schafer, Greg Polcyn, Hector Cuello, or Joseph Jupa.
13. A. (1) Each sealed source shall be tested for leakage and/or contamination at intervals not to exceed three years. In the absence of a certificate from a transferor indicating that a test has been made within six months prior to the transfer, a sealed source received from another person shall not be put into use until tested.  
(2) Notwithstanding the periodic leak test required by this condition, any licensed sealed source is exempt from such leak tests when the source contains 100 microcuries or less of beta and/or gamma emitting material or 10 microcuries or less of alpha emitting material.  
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 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 or to be disposed of in accordance with Commission regulations. A report shall be filed within five (5) days of the test with the U. S. Nuclear Regulatory Commission, Region III, 799 Roosevelt Road, Glen Ellyn, Illinois 60137, describing the equipment involved, the test results, and the corrective action taken.  
D. Tests for leakage and/or contamination shall be performed by Kay-Ray, Inc. or by other persons specifically authorized by the Commission or an Agreement State to perform such services.
14. Sealed sources containing licensed material shall not be opened or removed from their respective source holders by the licensee.

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15. Installation, relocation, removal from service, maintenance, repair, and initial radiation survey of devices containing licensed material and installation, replacement, and disposal of sealed sources containing licensed material used in devices shall be performed only by the device manufacturer or by other persons specifically authorized by the Commission or an Agreement State to perform such services.
16. The licensee shall conduct a physical inventory every six (6) months to account for all sealed sources received and possessed under the license. The records of the inventories shall be maintained for two (2) years from the date of the inventory for inspection by the Commission, and shall include the quantities and kinds of byproduct material, manufacturer's name and model numbers, location of sealed sources and the date of the inventory.
17. Except as specifically provided otherwise by this license, the licensee shall possess and use licensed material described in Items 6, 7, and 8 of this license in accordance with statements, representations, and procedures contained in applications dated October 11, 1979 and August 28, 1981; and letters dated November 3, 1981, May 11, 1983, July 26, 1983, August 17, 1985 and May 21, 1985. The Nuclear Regulatory Commission's regulations shall govern the licensee's statements in applications or letters, unless the statements are more restrictive than the regulations.

For the U.S. Nuclear Regulatory Commission

Date July 19, 1985

Original Signed  
By Bruce S. Mallett  
Materials Licensing Section, Region III

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