

**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		3. License number 5-682-6 (E63)
1. Name Ideal Cement Company 821 - 17th Street	2. Address Denver, Colorado	4. Expiration date May 31, 1963
6. Byproduct material (element and mass number)		5. Reference No. 5-682-5
A. Cobalt-60	7. Chemical and/or physical form A. Sealed source (U. S. Radium Corporation Model LAB-355A)	8. Maximum amount of radioactivity which licensee may possess at any one time A. 1 source of 50 millicuries

9. Authorized use
A. To be used in Ohmart Corporation Model SHRH-A source holder for regulating the depth of hot cement clinker in a clinker cooler.

CONDITIONS

10. Unless otherwise specified, the authorized place of use is the licensee's address stated in Item 2 above.
11. **Byproduct material may only be used at Ideal Cement Company, Boettcher, Colorado.**
12. **The licensee shall comply with the provisions of Title 10, Part 20, Code of Federal Regulations, Chapter 1, "Standards For Protection Against Radiation".**
13. **Byproduct material shall be used by, or under the direct supervision of, D. F. Carlson or Bobby Joe McMullan.**
14. **Byproduct material as sealed sources shall not be opened or removed from the Model SHRH-A source holder by the licensee.**
15. **Installation, relocation and initial radiation survey of the Model SHRH-A device shall be performed by J. L. Gilliland, Bobby Joe McMullan, or by other persons specifically authorized by the Commission to perform such services.**

(See page 2)

A/16

BYPRODUCT MATERIAL LICENSE

Supplementary Sheet

Continued from page 1

License Number 5-682-6

(B63)

CONDITIONS

16. Repair of the Model SHRH-A device containing byproduct material and installation, replacement and disposal of the sealed source containing byproduct material and used in the Model SHRH-A device shall be performed by the Ohmart Corporation, or other persons specifically authorized by the Commission to perform such services.
17. A. Each sealed source containing Cobalt 60 shall be tested for leakage and/or contamination at intervals not to exceed 3 years. 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 microcuries of contamination on the test sample. The test sample shall be taken from the sealed 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 microcuries 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 5 days of the test with the Director, Division of Licensing and Regulation, U. S. Atomic Energy Commission, Washington 25, D. C., describing the equipment involved, the test results and the corrective action taken. A copy of such report shall be sent to the manager of the nearest AEC operations office listed in Appendix D of Title 10, Code of Federal Regulations, Part 20.
- D. Tests for leakage and/or contamination shall be performed by the licensee as described in his application dated April 28, 1961, or by other persons specifically authorized by the Commission to perform such tests.

(See page 3)

Supplementary Sheet

ued from page 2

License Number 5-682-6
(E63)

CONDITIONS

The licensee is hereby authorized to produce radiation levels in an unrestricted area of a magnitude associated with a radiation level of 5 milliroentgens per hour at a distance of one foot from the sealed source containing Cobalt 60.

Except as provided otherwise by this 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 applications dated June 5, 1959; July 6, 1960 and April 28, 1961 and in his letters dated August 15, 1960 and July 6, 1960 from J. L. Milliland and S. A. Gretencort, respectively.

For the U. S. Atomic Energy Commission

Original Signed By
James R. Mason

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

MAY 8 1961

MS 100

DUPLICATED

den r/let