

APPLICATION FOR MATERIAL LICENSE

INSTRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.

FEDERAL AGENCIES FILE APPLICATIONS WITH:

U.S. NUCLEAR REGULATORY COMMISSION
DIVISION OF FUEL CYCLE AND MATERIAL SAFETY, NMSS
WASHINGTON, DC 20555

ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS, IF YOU ARE LOCATED IN:

CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, MAINE, MARYLAND, MASSACHUSETTS, NEW JERSEY, NEW YORK, PENNSYLVANIA, RHODE ISLAND, OR VERMONT, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION I
NUCLEAR MATERIAL SECTION B
631 PARK AVENUE
KING OF PRUSSIA, PA 19406

ALABAMA, FLORIDA, GEORGIA, KENTUCKY, MISSISSIPPI, NORTH CAROLINA, PUERTO RICO, SOUTH CAROLINA, TENNESSEE, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION II
MATERIAL RADIATION PROTECTION SECTION
101 MARIETTA STREET, SUITE 2900
ATLANTA, GA 30323

IF YOU ARE LOCATED IN:

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION III
MATERIALS LICENSING SECTION
799 ROOSEVELT ROAD
GLEN ELLYN, IL 60137

ARKANSAS, COLORADO, IDAHO, KANSAS, LOUISIANA, MONTANA, NEBRASKA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, SOUTH DAKOTA, TEXAS, UTAH, OR WYOMING, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
MATERIAL RADIATION PROTECTION SECTION
611 RYAN PLAZA DRIVE, SUITE 1000
ARLINGTON, TX 76011

ALASKA, ARIZONA, CALIFORNIA, HAWAII, NEVADA, OREGON, WASHINGTON, AND U.S. TERRITORIES AND POSSESSIONS IN THE PACIFIC, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION V
MATERIAL RADIATION PROTECTION SECTION
1450 MARIA LANE, SUITE 210
WALNUT CREEK, CA 94596

PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTION.

1. THIS IS AN APPLICATION FOR (Check appropriate item)

- ☐ A. NEW LICENSE
☐ B. AMENDMENT TO LICENSE NUMBER _____
☒ C. RENEWAL OF LICENSE NUMBER 13-09312-01

2. NAME AND MAILING ADDRESS OF APPLICANT (Include Zip Code)

Louisville Cement Company
P.O. Box 659
Logansport, IN 46947

3. ADDRESS(ES) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED.

Louisville Cement Company
Logansport, IN 46947

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

David J. Jefferson, Louisville Cement Co., Speed, IN 47172

TELEPHONE NUMBER

(812) 246-3311

SUBMIT ITEMS 5 THROUGH 11 ON 8 1/2 x 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

5. RADIOACTIVE MATERIAL

a. Element and mass number, b. chemical and/or physical form, and c. maximum amount which will be possessed at any one time. see page 1 attached

6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.

see page 2 attached

7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE.

see page 3 attached

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.

see page 4 attached

9. FACILITIES AND EQUIPMENT.

10. RADIATION SAFETY PROGRAM

see page attached

WASTE MANAGEMENT.

see page attached

12. LICENSEE FEES (See 10 CFR 170 and Section 170.31)

FEE CATEGORY Renewal

AMOUNT ENCLOSED \$ 170.00

CERTIFICATION. (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING UPON THE APPLICANT.

THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, AND 40 AND THAT ALL INFORMATION CONTAINED HEREIN, IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF.

WARNING: 18 U.S.C. SECTION 1001, ACT OF JUNE 25, 1948, 62 STAT. 749 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

SIGNATURE—CERTIFYING OFFICER

TYPED/PRINTED NAME

TITLE

DATE

David J. Jefferson

Laboratory Supervisor

14. VOLUNTARY ECONOMIC DATA

ANNUAL RECEIPTS

<\$250K	\$1M-3.5M
\$250K-500K	\$3.5M-7M
\$500K-750K	\$7M-10M
\$750K-1M	>\$10M

b. NUMBER OF EMPLOYEES (Total for entire facility excluding outside contractors)

c. NUMBER OF BEDS

d. WOULD YOU BE WILLING TO FURNISH COST INFORMATION (Dollar and/or staff hours) ON THE ECONOMIC IMPACT OF CURRENT NRC REGULATIONS OR ANY FUTURE PROPOSED NRC REGULATIONS THAT MAY AFFECT YOU? (NRC regulations permit it to protect confidential commercial or financial—proprietary—information furnished to the agency in confidence)

☐ YES

☐ NO

FOR NRC USE ONLY

TYPE OF FEE

FEE LOG

FEE CATEGORY

COMMENTS

APPROVED BY

AMOUNT RECEIVED

CHECK NUMBER

DATE

PRIVACY ACT STATEMENT

Pursuant to 5 U.S.C. 552a(e)(3), enacted into law by section 3 of the Privacy Act of 1974 (Public Law 93-579), the following statement is furnished to individuals who supply information to the Nuclear Regulatory Commission on NRC Form 313. This information is maintained in a system of records designated as NRC-3 and described at 40 Federal Register 45334 (October 1, 1975).

1. **AUTHORITY:** Sections 81 and 161(b) of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2111 and 2201(b)).
2. **PRINCIPAL PURPOSE(S):** The information is evaluated by the NRC staff pursuant to the criteria set forth in 10 CFR Parts 30, 32, 33, 34, 35 and 40 to determine whether the application meets the requirements of the Atomic Energy Act of 1954, as amended, and the Commission's regulations, for the issuance of a radioactive material license or amendment thereof.
3. **ROUTINE USES:** The information may be (a) provided to State health departments for their information and use; and (b) provided to Federal, State, and local health officials and other persons in the event of incident or exposure, for their information, investigation, and protection of the public health and safety. The information may also be disclosed to appropriate Federal, State, and local agencies in the event that the information indicates a violation or potential violation of law and in the course of an administrative or judicial proceeding. In addition, this information may be transferred to an appropriate Federal, State, or local agency to the extent relevant and necessary for an NRC decision or to an appropriate Federal agency to the extent relevant and necessary for that agency's decision about you.
4. **WHETHER DISCLOSURE IS MANDATORY OR VOLUNTARY AND EFFECT ON INDIVIDUAL OF NOT PROVIDING INFORMATION:** Disclosure of the requested information is voluntary. If the requested information is not furnished, however, the application for radioactive material license, or amendment thereof, will not be processed. A request that information be held from public inspection must be in accordance with the provisions of 10 CFR 2.790. Withholding from public inspection shall not affect the right, if any, of persons properly and directly concerned need to inspect the document.
5. **SYSTEM MANAGER(S) AND ADDRESS:** U.S. Nuclear Regulatory Commission
Director, Division of Fuel Cycle and Material Safety
Office of Nuclear Material Safety and Safeguards
Washington, D.C. 20555

SUPPLEMENTAL PAGE 1 OF 8

ITEM 5 RADIOACTIVE MATERIAL

Line 1 Cesium 137, Sealed Source - Ohmart Mdl. A2102 ✓
1 source of 150 millicuries

Line 2 Cesium 137, Sealed Source - Ohmart Mdl. A2104 ✓
1 source of 150 millicuries

Line 3 Cesium 137, Sealed Source - Ohmart Mdl. A2104 ✓
1 source of 150 millicuries

} Same

SUPPLEMENTAL PAGE 2 OF 8

ITEM 6 PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.

Line 1 Density measurements in discharge line of slurry pump.

Line 2 Measurement of specific gravity of clay slurry.

Line 3 Measurement of specific gravity of raw mix slurry.

SUPPLEMENTAL PAGE 3 OF 8

ITEM 7 INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE.

- (a) Mr. Jerry Lenon - On the job training and is responsible for testing sources at the Logansport Plant. Experience commenced with installation of the first source in 1963.
- (b) Mr. David Jefferson
 - 1. U.S. Navy Hospital Corps. School (September 1955 to March 1956)
Instruction concerning recognition and treatment of radiation related injuries.
 - 2. U.S. Navy Training Course (1957) "Biological & Chemical Warfare". Radiation decontamination techniques.
 - 3. Dr. C.A. Lang, University of Louisville Medical School (1960)
Use and handling of radioisotopes in biochemical research.
 - 4. On the job training working with medical x-ray, analytical x-ray (emmission and diffraction) and radioisotopes in research. Experience commenced in 1956.

SUPPLEMENTAL PAGE 4 OF 8

ITEM 8 TRAINING FOR INDIVIDUAL(S) WORKING IN OR FREQUENTING
RESTRICTED AREAS.

- (a) Access to the vicinity of the unshielded radiation beam or source is greatly restricted due to the configuration of the source holder and the physical location of the unit. The density gauges are installed on the slurry pipe lines well out of the general traffic pattern and reach. Should maintenance be required on the pipe lines, the gauges are equipped with lockable shutters which would be closed and locked out. ✓
- (b) Maintenance and repair of devices containing byproduct material and installation, relocation, replacement and disposal of sealed sources containing byproduct material used in such devices shall be performed only by Ohmart Corporation, Cincinnati, Ohio, or by the other persons specifically authorized by the Commission or an Agreement State to perform such services.

ITEM 10 RADIATION SAFETY PROGRAM

- (a) Sealed sources are leak tested every three (3) years using wipe test kits obtained from the Ohmart Corporation.
- (b) The test procedure is as follows: (OHMART PROCEDURE)
 - 1. CAUTION The source holder SHOULD NOT be dis-assembled to test the source container. Testing of the external surface of the source holder is adequate.
 - 2. Take the cardboard mailing tube containing the Q-Tip to the source holder to be tested. Unscrew the metal top from the mailing tube. Remove the cork from the glass test tube which holds the Q-Tip. Tilt the mailing tube and grasp the Q-Tip by the wooden end.
 - 3. Wipe the external surface of the source holder with the cotton tipped end. Wipe the joint between the outer tubing and the top plate and the area on the top plate where the rotor shaft protrudes. These areas are most likely to be contaminated if the source leaks. DO NOT touch the cotton tipped end or allow it to touch other objects as this would spread contamination if the source leaks.
 - 4. After making the wipe test, replace the Q-Tip in the test tube with the cotton tipped end at the bottom of the tube. Replace the cork in the test tube and the metal screw-top on the cardboard mailing tube.
 - 5. Attach an address label reading "The Ohmart Corporation, 4241 Allendorf Drive, Cincinnati, OH". Return the mailing tube via Railway or Air Express. DO NOT send mailing tube by conventional mail as Postal Regulations PROHIBIT mailing radioactive material in this form.
 - 6. Upon receipt of the wipe, the Ohmart Corp. performs a very sensitive test to determine the presence of radioactive material. If the wipe is free from contamination, a notice will be sent, via mail, that the source is leak free. If the wipe has a significant amount of radioactive material, an emergency notification will be sent, via telegram or telephone, advising that the source holder must be taken out of service and returned for repair. The emergency notification will contain detailed instructions for removal and shipment of the source holder.
 - 7. The leak test will be conducted by or under the direction of Mr. Jerry Lenon or such others qualified to conduct said test.

SUPPLEMENTAL PAGE 6 OF 8

- (c) Radiation Safety information contained in the instrument instruction manuals is to be reviewed with persons working in general area around the sealed sources on a periodic basis.
- (d) The EMERGENCY PROCEDURES to be followed in case of accidents involving damage or loss of the gauges or devices are:

1. In the event of damage to gauge or device -

- a. Immediately seal off area to prevent exposure to radiation from the source. Minimum distance of 20 feet should be observed for sources 150 millicuries or less; this will result in a radiation exposure level of less than 2 mRem/hour from an unshielded source.

- b. Immediately notify:

Jerry Lenon, Electrical Supervisor, Logansport, IN.
Office (219) 753-5121 Ext.51 - Home (219) 686-2364

William G. Biehl, Plant Manager, Logansport, IN.
Office (219) 753-5121 Ext.21 - Home (219) 722-4238

David Jefferson, Supervisor, Environmental Control,
Speed, IN. Office (812) 246-3311 Ext.183
Home (502) 459-5585 (Louisville, KY).

Who will in turn, notify the appropriate agencies:

Radiological Emergency Assistance, Indiana State Board
of Health, Indianapolis, IN (317) 633-0144.

U.S. Nuclear Regulatory Commission, Region III,
Glen Ellyn, IL (312) 790-5500.

- c. Take necessary steps for repair and/or disposal of source through Ohmart Corp., Cincinnati, OH (513) 272-0131.

2. In the event of theft or loss of a gauge or device -

- 1. Immediately notify:

Jerry Lenon	(see above)
William Biehl	" "
David Jefferson	" "

Who will in turn, notify the appropriate agencies:

SUPPLEMENTAL PAGE 7 OF 8

Radiological Emergency Assistance, Indiana State
Board of Health, Indianapolis, IN (317) 633-0144.

U.S. Nuclear Regulatory Commission, Region III,
Glen Ellyn, IL (312) 790-5500.

Indiana State Police, Peru, IN (317) 473-6666.

SUPPLEMENTAL PAGE 8 OF 8

ITEM 11 WASTE MANAGEMENT

Disposal of sealed sources containing byproduct material used in such devices shall be performed only by Ohmart Corporation, Cincinnati, OH or by other persons specifically authorized by the Commission or an Agreement State to perform such services.