

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 34-00374-07

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

PPG Industries, Inc.
95 Columbia Court
P. O. Box 31
Barberton, OH 44203

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

Same as #2

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Lionel H. Dahmer

TELEPHONE NUMBER

(216)848-4161 Ext.545

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.

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

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

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

9. FACILITIES AND EQUIPMENT.

10. RADIATION SAFETY PROGRAM.

11. WASTE MANAGEMENT.

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

FEE CATEGORY

AMOUNT
ENCLOSED \$120.00

13. 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

Lionel H. Dahmer

TYPED/PRINTED NAME

Lionel H. Dahmer

TITLE

Research Associate
Analytical Chemistry Dept.

DATE

4/25/85

14. VOLUNTARY ECONOMIC DATA

a. 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

8512040328 851113
REG3 LIC30
34-00374-07 PDR

DATE

CONTROL NO. 78817

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

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5. Radioactive Material

- a. Element and mass number: Cesium-137
- b. Chemical and/or physical form: Sealed Source
- c. Maximum amount which will be possessed at any one time: 500 milli-curies per source.

6. Purpose for Which Licensed Material Will be Used

Sources to be used in production equipment in the Barberton, OH Plant of PPG Industries, e.g., for level or density measurements.

7. Individual(s) Responsible for Radiation Safety Program and Their Training and Experience

Dr. Lionel H. Dahmer, Ph.D. Chemist has replaced Dr. B. J. DeWitt as the Radiation Officer for PPG Industries, Inc., Barberton (Ohio) Technical Center. Dr. Dahmer's radiation training consists of: formal course of one week on Radioisotope Use at New England Nuclear; laboratory use of radioisotopes at PPG (on the job for 5 years); and formal course in graduate school with Ph.D. research involving radioisotopes for 2 years.

William Stockert, Senior Chemist. He received training via a 1-day course on ionizing radiation and industrial hygiene aspects of ionizing radiation at an AIHA convention in Detroit, MI, May 1984. He also received a certificate for completion of a 5-day course on Radiation, Safety Instrumentation and Compliance at Oklahoma State University, October 1984.

8. Training for Individuals Working in or Frequenting Restricted Areas

Installation, initial radiation survey, maintenance, repair and disposal of gauges will be performed by the manufacturer. Relocation of any gauges will be done by PPG Plant Instrument Shop personnel by authority and under direct supervision by the Radiation Protection Officer, L. H. Dahmer or W. Stockert. Instrument shop personnel will be closely supervised regarding observance of shutter closures and padlocking and will be advised that no exposure to them of an unprotected radiation beam can occur while these safety features are not circumvented. They will also be advised that the gauges are periodically tested for leakage and that only leak-free gauges are allowed on the premises.

While no maintenance service per se will be performed on gauges by PPG personnel, one "peripheral" external maintenance function will be performed - painting the outside of the gauge assembly. Again, personnel performing this occasional function will be advised of the safety features of the device, the leak testing activities, and the non-exposure of radioactive beams to them while the gauge safety features are not violated.

9. Facilities and Equipment

Sealed sources are mounted on permanent structures such as mixing chambers for density or level measurement. Proper signs are in place and all personnel in the working vicinity are aware of the presence of these devices.

10. Radiation Safety Program

William Stockert of PPG Industries, Inc., Barberton, OH will conduct leak tests and perform analyses for these gauges. The wipe test will conform with the guidelines given in the National Bureau of Standards Handbook 126, document No. SD 003-003-01903-8, American National Bureau Standard N542, Appendix A, Method A2.1.1. Specifically, all external surfaces of the sealed sources (gauges), will be wiped with cotton swabs moistened with a solvent (such as acetone or EDTA-surfactant formulation), which will not attack the material of which the outer surface of the gauge is made. The activity on the swabs will be measured in the well detector system of the Baird Atomic Multiscaler Instrument, Model 955-152 which is capable of measuring alpha, beta, and gamma radiation with a sensitivity range of 0.005 mr/hr. Window thickness is 3 mg/cm². This instrument will be calibrated each time swab samples are measured vs sealed standards obtained from New England Nuclear which are ultimately referenced to NBS standards. These standards are enclosed in steel platens, New England Nuclear Item No. 1225. Sample activities in dpm's are compared to the activities in dpm's of these standards which have certified microcurie values. Swabs will be disposed of by our disposal contractor, Health Physics Associates, Highland Park, IL.

If the activity on the swabs is less than 5 nanocuries, the radioactive gauge will be considered to be leak-free. However, we have set an action level of 50% of this value. If as much as 2.5 nanocuries is found, the gauge will be tested seven days later and, if 2.5 nanocuries or more is again found, the gauge will be dismantled from its assembly and sent to the manufacturer for further testing and/or disposal. A report will be filed (within five days of finding for the second time as much as 2.5 nanocuries on any gauge leak test), to the U. S. Nuclear Regulatory Commission, Region III, Office of Inspection and Enforcement, 799 Roosevelt Rd., Glen Ellyn IL 60137.

The radiation safety officer, Lionel H. Dahmer, will supply the Plant Superintendents in charge of each shift with a schematic diagram including location of each radioactive gauge, the manufacturer's name, the nuclide involved, and the activity of the nuclide. Also supplied will be the names and phone numbers of two persons to phone (immediately after fire fighting personnel are phoned), if a fire occurs, in the area of any of the radioactive gauges. The persons to be phoned are William Stockert and Lionel H. Dahmer. The person contacted will go to the Plant site and remain there to give advice and direction. This person will also phone the manufacturer of the gauge to obtain advice and assistance in the ensuing corrective action. Until one of the two persons listed above arrives on the scene, the Superintendent in charge will, with the aid of the schematic diagram, warn firefighting personnel of the existence of the gauges and their exact location so that no inadvertent exposure to radiation can occur from a gauge which may become ruptured or otherwise damaged as a result of the fire. All working personnel will, of course, be ordered from the area and not be allowed near gauges until they are pronounced leak-free or are removed for disposal by the manufacturer. Working personnel will be advised of the potential hazard. Keep-out radiation signs will be posted near the gauge until corrective action is completed.

In the event of theft or unexplained disappearance of a gauge or part of a gauge device, the Superintendent in charge will phone one of the two persons listed above who will in turn phone the local police and state law enforcement personnel. One of these two persons will go to the Plant location and remain there to assist law enforcement personnel with descriptions of gauges, activities of nuclides, etc. He will also phone the manufacturer of the gauge for advice and to inform them of the theft/disappearance. In all cases of fire, loss, theft, accidents, or damage to radioactive gauges, the radiation safety officer, Lionel H. Dahmer, will file a complete written report within 30 days of the occurrence, describing the event, gauge, and corrective actions taken.

11. Waste Management

Waste is normally not generated; however, in the event of a leaking unit or otherwise malfunctioning unit, we will involve the manufacturer in dismantling and removing the unit from the premises. In the event of simple disposal of sources which are no longer used or wanted on the premises, we will employ U. S. Ecology for disposal of the source.