

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 20556

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 30333

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 12-13743-01

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

Pfizer Pigments Inc.
2001 Lynch Avenue
East St. Louis, IL 62201

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

Same as 2

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Stan A. Huber Consultants, Inc., New Lenox, IL 60451

TELEPHONE NUMBER
815-485-6161

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 EXPT

8510040057 850905
REG LIC30
12-13743-01 PDR

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS

9. FACILITIES AND EQ

10. RADIATION SAFETY PROGRAM

11. WASTE MANAGEMENT

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

FEE CATEGORY 3E AMOUNT ENCLOSED \$ 150.00

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

TYPED/PRINTED NAME

TITLE

DATE

Roger E. Rader

Plant Manager

8-1-85

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 information furnished to the agency in confidence)

YES

FOR NRC USE ONLY

TYPE OF FEE

FEE LOG

FEE CATEGORY

COMMENTS

AMOUNT RECEIVED

CHECK NUMBER

CONTROL NO. 79602

APPROVED BY

DATE

REGION III

9/5/85

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

Pfizer Pigment, Inc.
East St. Louis, Illinois

Ref: NRC 313, Item 5

Radioactive Material

<u>Source Description and/or Model No.</u>	<u>Isotope</u>	<u>Maximum Activity Per Source (Millicuries)</u>
Texas Nuclear, Model 57057157C in 5178 A Holder, S/N B123	Cs-137	50
Texas Nuclear, Model 570-57157C in 5190 Holder, S/N B1378 Source S/N B2453	Cs-137	100
Texas Nuclear Model LE/LX/LIT-4710 in 5178 A Holder S/N MB-1220	Cs-137	20
MB2502 Texas Nuclear in 5178A Holder S/N B199	Cs-137	50
MB2498 Texas Nuclear in 5178A Holder SN-B200	Cs-137	50
MB2602 Texas Nuclear in 5178A Holder SN-B201	Cs-137	20
MB2745 Texas Nuclear in 5178A Holder SN-B202	Cs-137	20
MB2599 Texas Nuclear in 5178A Holder SN-B205	Cs-137	20
MB2748 Texas Nuclear in 5178A Holder SN-B203	Cs-137	20
MB2504 Texas Nuclear in 5178A Holder SN-B202	Cs-137	50
Kay-Ray, Inc. Model CDC 809 S/N 8440 in Model 7062B Holder	Cs-137	100

Ref: NRC 313 - Item 6

Purpose(s) For Which Licensed Material Will Be Used

Gauging devices are used for density and level measurements

Individual(s) Responsible For Radiation Safety Program and Their
Training and Experience

*George Walker, Department Supervisor - Unit D

*James Sargent, Department Manager - Magnetics - IRN Area

*Gene Lilly, Instrument Electrician Supervisor

*Ralph Spencer, Department Supervisor - Magnetics - IRN Area

*Larry Stemmley, Department Supervisor - KROMA - JOD Area

**Jeff Carlton, Safety Environmental Engineer

*Gene A. Erlinger, Electrical Design Manager

*For training and experience of the above, please reference NRC License
#12-13743-01

**For training and experience of the above, please reference the attachments.

Jeffrey C. Carlton, P.E.
Safety/Environmental Engineer
Pfizer Pigments, Inc.
East St. Louis, Illinois

Educational Background

Bachelor of Science Degree - Civil Engineering
Purdue University, West LaFayette, Indiana May, 1979

Masters Degree - Civil Engineering
University of Missouri - Rolla, Missouri May, 1983

Training Seminars/Classes

Introduction to Occupational Safety
Southern Illinois University - Edwardsville, Illinois Fall, 1983

Nuclear Safety Training Program (see attached)
Texas Nuclear Company June 21, 1984

Professional Licenses

Professional Engineer - Missouri
License Number E-20994

Professional Engineer - Illinois
License Number 062-042028

Work Experience

June 1984 to Present
Safety/Environmental Engineer
Pfizer Pigments, Inc.
East St. Louis, Illinois

June 1982 to June 1984
Environmental Engineer
Pfizer Pigments, Inc.
East St. Louis, Illinois

June 1979 to June 1982
Environmental Engineer
Sverdrup Parcel & Associates, Inc.
Consulting Engineers
St. Louis, Missouri

Additionally, Stan A. Huber Consultants, Inc. have continuing educational programs (license regulations and basic radiation training) during each of their semi-annual visits.

NUCLEAR SAFETY TRAINING PROGRAM

PFIZER, INC. E. ST. LOUIS, IL.

PERSONNEL RECORD

The following individual has attended the Nuclear Safety Training Program presented at Pfizer's E. St. Louis facility on June 21, 1984 by Mr. Douglas Caldwell, Customer Service Representative for Texas Nuclear.

NAME: Jeff Carlton
EMPLOYEE NUMBER: Staff
TITLE: Safety/Environmental Engineer

The training course consisted of the following items:

.1 Radioactivity

- A. Isotopes
- B. Alpha, Beta, & Gamma Radiation
- C. Radioactive Decay
- D. Half - Life

.2 Effects of Radioactive Exposure

- A. Exposure
- B. Biological Effects
- C. Radiation Damage
- D. Total Accumulated Dose
- E. Effects & Methods of Shielding

.3 Regulatory Compliance Activities

- A. Leak Testing
- B. Surveying Activities & Equipment
- C. Licensing
- D. Shipping
- E. Posting Radiation Caution Signs
- F. Regional NRC Office

Ref: NRC 313 - Item 8

Training For Individuals Working In or Frequenting Restricted Areas

During each semi-annual visit, S.A. Huber Consultants, Inc. visits our facilities for about seven (7) hours of updating sessions with our Radiation Safety Officers. This includes reviews of our license files and records, inventory and leak tests, and regulatory topics primarily involving 10 CFR Parts 19 and 20. We trust this periodic supplemental and formal program will be sufficient for practical purposes involving the relatively simple controls required for level and density gauge uses at our industrial facility.

Ref: NRC 313 - Item 9

Facilities and Equipment

<u>Radionuclide</u>	<u>Description</u>	<u>Location</u>
Cs-137	Texas Nuclear, Model 570-57157C in 5178 A Holder, S/N B123	IRN 37
Cs-137	Texas Nuclear, Model 570-57157C in 5190 Holder, S/N B1378 Source S/N B2453	JOD Area
Cs-137	Texas Nuclear Model LE/LX/LIT- 4710 in 5178 A Holder S/N MB-1220	IRN 47
Cs-137	MB2502 Texas Nuclear in 5178A Holder S/N B199	IRN 55 Feed Bin
Cs-137	MB2498 Texas Nuclear in 5178A Holder SN-B200	LT0433 (Homogenizing Tank)
Cs-137	MB2602 Texas Nuclear in 5178A Holder SN-B201	IRN 55
Cs-137	MB2504 Texas Nuclear in 5178A Holder SN-B204	In Storage
Cs-137	MB2745 Texas Nuclear in 5178A Holder SN-B202	IRN 56
Cs-137	MB2599 Texas Nuclear in 5178A Holder SN-B205	IRN 58
Cs-137	MB2748 Texas Nuclear in 5178A Holder SN-B203	IRN 57
Cs-137	Kay-Ray, Inc. Model CDC 809 S/N 8440 in Model 7062B Holder	NYD

Radiation Safety Program

1. Only industrial gauges (containing radioactive material) that are listed on the facility NRC license and intended for immediate permanent installation by the gauge manufacturer(s), or their trained delegates, are to be ordered.
2. Upon installation of such gauges, the manufacturer representatives provide a radiation survey report attesting to the shielding safety of the devices and a leak test certificate attesting to the integrity of the sealed sources contained therein. These certifications are to be maintained for inspection by the Nuclear Regulatory Commission (NRC) or any other regulatory agencies having jurisdiction.
3. The sealed sources are to be leak tested at three (3) year intervals by Ohmart Corp. or Texas Nuclear personnel or by other persons specifically authorized by the NRC or Agreement State to perform such services. One such specific firm is S. A. Huber Consultants, Inc. of New Lenox, Illinois using their "Leak Test Kit for Sealed Sources" under their NRC License #12-17503-01. Records of these periodic test reports are also to be maintained for inspection. The action level for withdrawing a sealed source from use would be removable contamination of 0.005 microcurie or more.
4. Sealed sources containing radioactive material shall not be removed from their respective source holders by the licensee. Gauge adjustments are made following the manufacturer operating manuals for each measuring device.
5. Installation, relocation, maintenance, repair, and initial radiation survey of devices containing byproduct material shall be performed only by the device supplier trained personnel or by other persons specifically authorized by the Commission or Agreement States to perform such services. This also applies to leak testing, installation, replacement, and disposal of sealed sources contained in these devices.
6. The licensee shall conduct a physical inventory every six months to account for all sealed sources received and possessed under the license. The records for the inventories shall be maintained for two years from the date of the inventory for inspection by the Commission, and shall include the quantities and kinds of byproduct material, location of sealed sources, and the date of the inventory.
7. Although the gauges are marked with "caution-radiation symbol" and warnings, extra warning signs have been installed at each location at the level and density measuring areas defined in this NRC license application.
8. The Radiation Safety Officer (R.S.O.) duties include maintenance of all of the aforementioned records and safety measures. The R.S.O. is

also expected to be familiar with the Title 10, Chapter 1 Code of Federal Regulations as applicable to these facilities, and especially Part 20, "Standards for Protection Against Radiation".

The R.S.O. is expected to keep current with any new NRC regulations or changes affecting this license and to provide answers to any radiation safety related questions by personnel. One such measure of continuing education is the nuclear consulting services of S.A. Huber Consultants, Inc. of New Lenox, Illinois, whereby semi-annual visits are scheduled for license reviews, inventories, records, regulatory updates, training, and related professional services.

The R.S.O. is responsible for the overall radiation protection program within this facility. The R.S.O. has authority to implement and enforce all NRC license stipulations pertaining to this facility on a daily basis and has authority to immediately terminate any hazardous, or potentially hazardous, operation.

REF: NRC 313 - Item 11

Waste Management

We will use manufacturer of sealed sources or ADCO Services of Tinley Park, Illinois, or any NRC licensed waste disposal service.