

# 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 \_\_\_\_\_

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

Coster Engineering  
P.O. Box 3407  
Mankato, MN  
56001

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

Airport Rd. R.R. 5  
Mankato, MN  
56001

## 4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Candy E. Fong

## TELEPHONE NUMBER

507-625-6621

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 MAN

8607030005 860514  
REG3 LIC30  
22-24700-01 PDR

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

## FEE CATEGORY

AMOUNT  
ENCLOSED \$ 230.00

## 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 WILL FULLY 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

Candy E. Fong

Candy E. Fong

Chemical Engineer April 23, 86

## 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

### AMOUNT RECEIVED

### CHECK NUMBER

APR 28 1986

REGION III  
APR 28 1986

### APPROVED BY

### DATE

5. Radioactive Material

The model of the gas chromatograph is Shimadzu GC - 9A

- a. The radioisotope that will be used in the gas chromatograph device is Nickel - 63
- b. The manufacturer and model number of the sealed source that will be used in the gas chromatography device is New England Nuclear NER 004
- c. The amount of radioactive material that will be in each sealed source is 10 millicuries.
- d. The manufacturer and model number of the detector cell that will be used in the gas chromatograph device is Shimadzu A221-25467-91

6. Purpose for which Licensed Material will be used

The licensed material Nickel - 63 is to be used in the Shimadzu ECD - 9A (electron captured detector) for the analysis of organic contaminants in water and wastewater.

7. Individuals Responsible for Radiation Safety Program and Their Training and Experience

The licensed material Nickel - 63 is to be used in the Shimadzu ECD - 9A for the analysis of organic contaminants in water and wastewater.

The responsible individual who will perform the operation is Miss Candy E-Fong Fong, a Chemical Engineer employed in our company. Miss Candy E-Fong Fong has received instruction and training in the principles and practices of radiation safety, the use of radiation detection instruments and the performance of these operations.

The outline of the instruction and time spent on each topic which Miss Candy E-Fong Fong has received are as follows:

- i. The operation of the Shimadzu ECD - 9A (6 hrs.)
- ii. The WIPE test. (1 hr.)
- iii. The temperature safety system of the electron capture detector ( ECD - 9A ) ( 6 hrs)
- iv. Principle and practice of radiation safety and proper maintenance of the detector. ( 3 hrs.)

Mr. Leo Olszewski is the authorized technical sales representative for Shimadzu Scientific Instrument. He has 26 years of experience in selling, servicing and maintaining electron capture detectors. He is also experienced in handling radioactive material such as radium, strontium 90, tritium, nickel - 63 detectors.

8. Training Provided to other Users

Other individuals will use the Shimadzu GC - 9A under the supervision of a " responsible individual ", Miss Candy E-Fong Fong.

Other individuals will not be permitted to perform any maintenance or repair operations.

Miss Candy E-Fong Fong will be the only authorized personnel to remove the Shimadzu ECD - 9A.

9. Facilities and Equipment

The laboratory in which the device is located will be

- i. accessible only to persons authorized to use the device and
- ii. locked when an authorized person is not physically present.

10. Radiation Safety Program

The leak-test will be performed by using a commercial leak-test kit. Miss Candy E-Fong Fong will take the smear and send it to the kit supplier. The kit supplier will provide a quantitative result of the radioactivity measured.

The leak-test kit model is WT-80SN

The kit supplier will be

Radiation Detection Company  
P.O. Box 1414  
Sunnyvale, California  
94088

tel. : (408) 735 - 8700

Federal licence number : 94-134-3098

Except for the WIPE test, absolutely NO maintenance will be performed. The Shimadze ECD -9A detector is to be opened by the Shimadzu manufacturer ONLY .



11.

Waste Management

The disposal of the radioactive material will be by transfer of the radioactive material to a licensee specifically authorized to possess it.

The licensee is the original supplier of the Shimadzu GC - 9A

The address of the original supplier is

Shimadzu Scientific Instrument Company  
7102 Riverwood Dr.  
Columbia, Maryland  
21046

**MATERIALS LICENSE**

Pursuant to Chapter 136C of the Iowa Code and 470-38 through 42 (136C) of the Iowa Administrative Code 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 radioactive materials 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 rules of the applicable chapter(s). This license is subject to all applicable rules and orders of the Iowa State Department of Health including the Iowa rules for Radiation Emitting Equipment [470-38 through 42] now or hereafter in effect, and to any conditions specified below.

## Licensee

1. Coster Engineering

3. License Number: 0009-1-77-GC  
NEW2. 1501 Ohio Street  
Des Moines, Iowa 50314

4. Expiration Date: March 30, 1991

5. Byproduct, Source, Special  
Nuclear and/or Natural  
Occurring or Accelerator  
Produced Radioactive  
Material6. Chemical and/or Physical  
Form7. Maximum Amount That Licensee  
May Possess at any One Time  
Under This License

A. Nickel-63

A. Foil Source  
(Shimadzu No.  
A221-25467-91  
detector cell)A. 1 cell not to exceed  
10 millicuries.

## 8. Authorized Use

A. To be used in a gas chromatograph for sample analysis.

## CONDITIONS

9. Licensed material shall be used only at Coster Engineering, 1501 Ohio Street, Des Moines, Iowa, 50314 or within the confines of the licensees mobile van at locations throughout the State of Iowa.
10. Licensed material shall be used by, or under the supervision of Candy E-Fong Fong.
1. In lieu of the conventional radiation caution colors (magenta or purple on yellow background) as provided in 470-40.9(3)"a"(1) of the Iowa Administrative Code, the licensee is hereby authorized to label detector cells and cell baths, containing licensed material and used in gas chromatography devices, with conspicuously etched or stamped radiation caution symbols without a color requirement.
2. Detector cells containing licensed material shall not be opened or the foil source removed from the detector by the licensee.