

(5-1997)  
10 CFR 30, 32, 33  
34, 35, 36, 39 and 40

## APPLICATION FOR MATERIAL LICENSE

Estimated burden per response to comply with this information collection request: 7 hours. Submittal of the application is necessary to determine that the applicant is qualified and that adequate procedures exist to protect the public health and safety. Forward comments regarding burden estimate to the Information and Records Management Branch (T-6 F33), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to the Paperwork Reduction Project (3150-0120), Office of Management and Budget, Washington, DC 20503. NRC may not conduct or sponsor, and a person is not required to respond to, an information collection unless it displays a currently valid OMB control number.

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.

## APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:

DIVISION OF INDUSTRIAL AND MEDICAL NUCLEAR SAFETY  
OFFICE OF NUCLEAR MATERIALS SAFETY AND SAFEGUARDS  
U.S. NUCLEAR REGULATORY COMMISSION  
WASHINGTON, DC 20555-0001

## ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:

## IF YOU ARE LOCATED IN:

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

LICENSING ASSISTANT SECTION  
NUCLEAR MATERIALS SAFETY BRANCH  
U.S. NUCLEAR REGULATORY COMMISSION, REGION I  
475 ALLENDALE ROAD  
KING OF PRUSSIA, PA 19406-1415

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

ATLANTA FEDERAL CENTER  
U. S. NUCLEAR REGULATORY COMMISSION, REGION II  
61 FORSYTH STREET, S.W., SUITE 23T85  
ATLANTA, GEORGIA 30303-3415

## IF YOU ARE LOCATED IN:

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

MATERIALS LICENSING SECTION  
U.S. NUCLEAR REGULATORY COMMISSION, REGION III  
801 WARRENVILLE RD.

LISLE, IL 60532-4351

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS,  
LOUISIANA, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA,  
OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS, UTAH,  
WASHINGTON, OR WYOMING, SEND APPLICATIONS TO:

NUCLEAR MATERIALS LICENSING SECTION  
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV  
611 RYAN PLAZA DRIVE, SUITE 400  
ARLINGTON, TX 76011-8064

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 JURISDICTIONS.

## 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)

New Technology Management, Inc.  
10461 White Granite Dr., Ste. 104  
Oakton VA 22124-2762

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

At temporary U.S. Government sites during  
testing and demonstration

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

Douglas Doan

## TELEPHONE NUMBER

(703) 359-7636

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 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 3P

AMOUNT  
ENCLOSED \$ 730.00

## 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, 36, 39 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.

## CERTIFYING OFFICER - TYPED/PRINTED NAME AND TITLE

Douglas Doan Vice President

## SIGNATURE



## DATE

July 20, 1999

## FOR NRC USE ONLY

TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED	CHECK NUMBER	COMMENTS
			\$		

APPROVED BY

DATE

258443

**APPLICATION FOR MATERIAL LICENSE  
NRC FORM 313**

**ITEM 5: RADIOACTIVE MATERIAL**

- a. Cesium 137
  - b. Sealed source (3M Model No. 4F6S)
  - c. 2 curies
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**ITEM 6: PURPOSE FOR WHICH LICENSED MATERIAL WILL BE USED**

The licensed material will be used in Ohmart Model SH-F2 device for the detection of contraband such as narcotics.

**ITEM 7: INDIVIDUAL RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE**

Richard D. Long, RSO

Before obtaining licensed materials, the proposed RSO will have successfully completed one of the training courses described in Criteria in the section entitled 'Individual(s) Responsible for Radiation Safety Program and Their Training and Experience – Radiation Safety Officer' in NUREG-1556, Vol. 1, 'Consolidated Guidance about Materials Licenses: Program-Specific Guidance about Portable Gauge Licenses' dated May 1997.

**ITEM 8: TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS**

Radiation Safety briefings will be given to the users of the contraband detection system as part of the overall training program in the use of the detection system. The radiation safety briefing will be conducted by specially trained persons. The outline of the briefing and the qualifications of the trainer are attached as Enclosure A. Records of the training will be maintained for at least three years.

**ITEM 9: FACILITIES AND EQUIPMENT**

No response needed

**ITEM 10: RADIATION SAFETY PROGRAM – AUDIT PROGRAM**

No response needed

**RADIATION SAFETY PROGRAM – TERMINATION ACTIVITIES**

No response needed

**RADIATION SAFETY PROGRAM – INSTRUMENTS**

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The detection system will come with a Victoreen 450 (or equivalent ionization chamber survey meter) to check the operation of the device using the sealed source.

**RADIATION SAFETY PROGRAM – MATERIAL RECEIPT AND ACCOUNTABILITY**

Physical inventories will be conducted at intervals not to exceed 6 months, to account for all sealed sources and devices received and possessed under the license.

**RADIATION SAFETY PROGRAM - OCCUPATIONAL DOSIMETRY**

Experience with the U.S. government programs using the same detection system during the past two years has shown that film badges are not required by the users of the detection system.

**RADIATION SAFETY PROGRAM – PUBLIC DOSE**

No response needed

**RADIATION SAFETY PROGRAM – OPERATING AND EMERGENCY PROCEDURES**

Operating and emergency procedures will be developed, implemented, and maintained, and will meet the criteria in the section entitled 'Radiation Safety Program – Operating and Emergency Procedures' in NUREG-1556, Vol. 1, 'Consolidated Guidance about Materials Licenses: Program-Specific Guidance about Portable Gauge Licenses', dated May 1997.

**RADIATION SAFETY PROGRAM – LEAK TESTS**

Leak tests will be performed at intervals approved by the NRC or an Agreement State and specified in the Sealed Source and Device Registration sheet. Leak tests will be performed by an organization authorized by NRC or an Agreement

State to provide leak testing services to other licensees or using a leak test kit supplied by an organization authorized by NRC or an Agreement State to provide leak test kits to other licensees and according to kit supplier's instructions.

#### **RADIATION SAFETY PROGRAM – MAINTENANCE**

**Routine cleaning and lubrication:** We will implement and maintain procedures for routine maintenance of our gauges according to each manufacturer's recommendations and instructions.

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**Non-routine maintenance or repair operations that require detaching the source or sources from the gauge:** We will send the gauge to the manufacturer or other person authorized by the NRC or an Agreement State to perform non-routine maintenance or repair operations that require detaching the source or source rod from the gauge.

#### **RADIATION SAFETY PROGRAM – TRANSPORTATION**

No response needed

#### **ITEM 11: WASTE MANAGEMENT – GAUGE DISPOSAL AND TRANSFER**

No response needed

## ENCLOSURE A

### OUTLINE OF THE RADIATION SAFETY BRIEFING

- Radioactivity
  - Atoms and Nuclei (electrons, protons and neutrons)
  - Electromagnetic Spectrum (photons)
  - Alpha, Beta and Gamma Rays
  - Activity (Curie) and half-life
  - Natural and Artificial Radioactivity
- Radiation Safety
  - Exposure (Roentgen)
  - Absorbed Dose (Rad)
  - Dose Equivalent (Rem)
  - Background Radiation
  - Internal and External Exposure
  - Effects of Radiation (Acute and Delayed)
  - Basic Radiation Safety Criteria (ALARA Principle)
  - Time, Distance and Shielding
  - Radiation Measurement Instruments
- Safety Guidelines for the Gamma-Ray Imaging System
  - Description of the System (including sealed source in its housing and the primary and secondary shutters)
  - Results of Radiation Survey
  - Control and Surveillance of the Source Cabinet
  - Record Keeping
  - Emergency Procedures

### QUALIFICATIONS OF THE INSTRUCTOR

- Bachelor's degree in a physical science, life science or engineering subject, or have equivalent work experience
- Successful completion of the system operator training course
- Successful completion of a twenty-four hour radiation safety course and eight hours of hands-on experience with the operation of the system