

NRC FORM 313

(10-2005)

10 CFR 30, 32, 33,
34, 35, 36, 39, and 40

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0120

EXPIRES: 10/31/2008

APPLICATION FOR MATERIAL LICENSE

Estimated burden per response to comply with this mandatory collection request: 4.4 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. Send comments regarding burden estimate to the Records and FOIA/Privacy Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0120), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

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:

IF YOU ARE LOCATED IN:

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

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

☒ MATERIALS LICENSING BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, IL 60532-4352

ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:

IF YOU ARE LOCATED IN:

ALABAMA, CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA, KENTUCKY, MAINE, MARYLAND, MASSACHUSETTS, MISSISSIPPI, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, NORTH CAROLINA, PENNSYLVANIA, PUERTO RICO, RHODE ISLAND, SOUTH CAROLINA, TENNESSEE, VERMONT, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:

LICENSING ASSISTANCE TEAM
DIVISION OF NUCLEAR MATERIALS SAFETY
U.S. NUCLEAR REGULATORY COMMISSION, REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406-1415

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 BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TX 76011-4005

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

24-32076-01

2. NAME AND MAILING ADDRESS OF APPLICANT (Include ZIP code)

BRUCKER ENGINEERING LTD
7547 RAVENSRIDGE DRIVE
ST. LOUIS, MO 63119

3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

7545 RAVENSRIDGE DRIVE
ST. LOUIS, MO 63119

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

CINDY M. KEMPF

TELEPHONE NUMBER

314-961-4495

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. LICENSE FEES (See 10 CFR 170 and Section 170.31)

FEE CATEGORY

AMOUNT
ENCLOSED

\$ - 0 -

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.

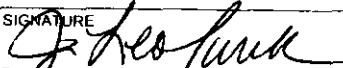
WARNING: 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948 62 STAT. 749 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

CERTIFYING OFFICER - TYPED/PRINTED NAME AND TITLE

SIGNATURE

DATE

J. LEO TUREK PRESIDENT



4/30/08

FOR NRC USE ONLY

TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED	CHECK NUMBER	COMMENTS
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APPROVED BY

DATE

RECEIVED MAY 12 2008

U.S. NUCLEAR REGULATORY COMMISSION

MATERIALS LICENSE

1. Renewal of License # 24-32076-01

2. Brucker Engineering, Ltd.
7547 Ravensridge Drive
St. Louis, MO 63119

3. Brucker Engineering, Ltd.
7545 Ravensridge Drive
St. Louis, MO 63119

4. Cindy M. Kempf
314-961-4495

5a. Element & mass number

5b. Chemical and/or physical form

5c. Maximum amount which will be
possessed at any one time

A. Cesium-137

A. Sealed sources (Troxler
Dwg. No. A-102112)

A. No single source to exceed
9 millicuries each

B. Americium-241

B. Sealed sources (Troxler
Dwg. No. A-102451)

B. No single source to exceed
44 millicuries each

C. Californium-252

C. Sealed sources (Troxler
Dwg. No. A-105560)

C. No single source to exceed
66 millicuries each

D. Americium-241

D. Sealed sources (Troxler
Dwg. No. A-106510)

D. No single source to exceed
11 millicuries each

E. Californium-252

E. Sealed sources (Troxler
Dwg. No. A-105779)

E. No single source to exceed
60 millicuries each

F. Cesium-137

F. Sealed sources (Boart
Longyear Company, CPN
Products Model CPN-131)

F. No single source to exceed
10 millicuries each

G. Americium-241

G. Sealed sources (Boart
Longyear Company, CPN
Products Model CPN-131)

G. No single source to exceed
50 millicuries each

H. Cesium-137

H. Sealed sources (HIS Dwg.
2200064)

H. No single source to exceed
11 millicuries

I. Americium-241

I. Sealed sources (HIS Dwg.
2200067)

I. No single source to exceed
44 millicuries

6. **Purpose(s) for which licensed material will be used.**
 - A and B To be used in Troxler Model 3400 Series portable gauges for measuring physical properties of materials.
 - A and C To be used in Troxler Model 3400-M Series portable gauges for measuring physical properties of materials.
 - A To be used in Troxler Model 4640 Series portable gauges for measuring physical properties of materials.
 - B To be used in Troxler Model 3216, 3217, or 3218 portable moisture density gauges for measuring physical properties of materials.
 - D and E To be used in Troxler Model 4430 portable water/cement gauges for measuring cement content of plastic concrete.
 - F and G To be used in Boart Longyear Company, CPN Products Models MC Series portable moisture density gauges for measuring physical properties of materials.
 - H and I To be used in Humboldt Scientific Inc. Model 5001 portable gauges for measuring physical properties of materials.

7. **Individual responsible for radiation safety program and their training experience.**
Radiation Safety Officer - J. Leo Turek
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, Rev.1, dated November 2001.

8. **Training for individuals working in or frequenting restricted areas.**
Training is done by Humboldt Scientific.
Before using licensed materials, authorized users will have successfully completed one of the training course described in Criteria in the section entitled "Training for Individuals Working in or Frequenting Restricted Areas: in NUREG-1556, Vol. 1, Rev 1, dated November 2001.

9. **Facilities and Equipment**
No information needs to be submitted in response to this item; key issues are addressed under "Radiation Safety Program - Public Dose" and "Radiation Safety Program - Operating and Emergency Procedures." **Need Not be Submitted with Application**

10. **Radiation Safety Program - Audit Program**
The applicant is not required to, and should not submit its audit program to NRC for review during the licensing phase. **Need not be Submitted with Application**

10. **Radiation Safety Program - Termination of Activities**
The applicant is not required to submit a response to the termination of activities section during the initial application. However, when the license expires when the licensee ceases operation, NRC Form 314 must be submitted. **Need not be Submitted with Application**

10. **Radiation Safety Program - Survey of Instruments**
We will either possess and use, or have access to and use, a radiation survey meter that meets the Criteria in the section entitled "Radiation Safety Program - Instruments" in NUREG-1556, Vol. 1, Rev. 1, dated November 2001.

10. **Radiation Safety Program - Materials 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.

10. Radiation Safety Program - Occupational Dosimetry

Either we will maintain, for inspection by NRC, documentation demonstrating that unmonitored individuals are not likely to receive a radiation dose in excess of 10 percent of the allowable limits in 10 CFR Part 20, or we will provide dosimetry processed and evaluated by an NVLAP-approved processor that is exchanged at a frequency recommended by the processor.

10. Radiation Safety Program - Public Dose

The applicant is not required to submit a response to the public dose section during the licensing phase. This matter will be examined during an inspection. **Need not be submitted with application.**

10. Radiation Safety Program - Operating and Emergency Procedures

We will implement and maintain the operating and emergency procedure in Appendix H of NUREG-1556, Vol. 1, Rev. 1, dated November 2001, and provide copies of these procedures to all gauge users and at each job site.

10. Radiation Safety Program - Leak Test

Leak tests will be performed at intervals approved by 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 for 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 the kit supplier's instructions.

10. 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.

Non-Routine Maintenance - We will send the gauge to the manufacturer or other person authorized by NRC or an Agreement State to perform non-routine maintenance or repair operations that require the removal of the source or source rod from the gauge.

10. Radiation Safety Program - Transportation

This applicant is not required to submit its response to transportation during the licensing process. However, this issue will be reviewed during inspection. **Need not be submitted with application**

11. Waste Management Gauge Disposal and Transfer

The applicant is not required to submit a response to waste management during the licensing process. However, the licensee should develop, implement, and maintain gauge transfer and disposal procedures in its radiation protection program.

Brucker Engineering, Ltd.
7547 Ravensridge Drive
St. Louis, MO 63119

SAINT LOUIS MO 631

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Materials Licensing Branch
US Nuclear Regulatory Commission, Region III
2443 Warrenville Road, Suite 210
Lisle, IL 60532-4352

60532-4352

