

FORM NRC-313 I
(1-79)
10 CFR 30

U.S. NUCLEAR REGULATORY COMMISSION

APPLICATION FOR BYPRODUCT MATERIAL LICENSE
INDUSTRIAL

1. APPLICATION FOR:
(Check and/or complete as appropriate)

21-18724-01
030-14088

X a. NEW LICENSE

b. AMENDMENT TO:
LICENSE NUMBER

c. RENEWAL OF:
LICENSE NUMBER

See attached instructions for details.

Completed applications are filed in duplicate with the Division of Fuel Cycle and Material Safety, Office of Nuclear Material Safety, and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555 or applications may be filed in person at the Commission's office at 1717 H Street, NW, Washington, D. C. or 7915 Eastern Avenue, Silver Spring, Maryland.

2. APPLICANT'S NAME (Institution, firm, person, etc.)

McDowell & Associates

TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION
313-399-2066

3. NAME OF PERSON TO BE CONTACTED REGARDING THIS APPLICATION

William Bronson

TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION
313-399-2066

4. APPLICANT'S MAILING ADDRESS (Include Zip Code)

10659 Galaxie
Ferndale, Michigan 48220

5. STREET ADDRESS WHERE LICENSED MATERIAL WILL BE USED
(Include Zip Code)

10659 Galaxie
Ferndale, Michigan 48220

(IF MORE SPACE IS NEEDED FOR ANY ITEM, USE ADDITIONAL PROPERLY KEYED PAGES.)

6. INDIVIDUAL(S) WHO WILL USE OR DIRECTLY SUPERVISE THE USE OF LICENSED MATERIAL

(See Items 16 and 17 for required training and experience of each individual named below)

FULL NAME

TITLE

a. William Bronson

Vice-President

b.

c.

7. RADIATION PROTECTION OFFICER (See attached Sheet)
William Bronson

Attach a resume of person's training and experience as outlined in Items 16 and 17 and describe his responsibilities under Item 15.

8. LICENSED MATERIAL

LINE NO.	ELEMENT AND MASS NUMBER	CHEMICAL AND/OR PHYSICAL FORM	NAME OF MANUFACTURER AND MODEL NUMBER (If Sealed Source)	MAXIMUM NUMBER OF MILLICURIES AND/OR SEALED SOURCES AND MAXIMUM ACTIVITY PER SOURCE WHICH WILL BE POSSESSED AT ANY ONE TIME
A	B	C	D	
(1)	Cs 137	Sealed Source	Troxler Drawing No. 102112	No source to exceed 9 mCi
(2)	AM 241:BE	Sealed Source	Troxler Drawing No. 102451	No source to exceed 40 mCi
(3)				
(4)				

DESCRIBE USE OF LICENSED MATERIAL
E

- (1) For use in Troxler 3400 Series Moisture-Density Gauge to measure
(2) properties of construction materials.

License Fee Information

next page
on Reverse Side

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9. STORAGE OF SEALED SOURCES

LINE NO.	CONTAINER AND/OR DEVICE IN WHICH EACH SEALED SOURCE WILL BE STORED OR USED. A.	NAME OF MANUFACTURER B.	MODEL NUMBER C.
(1)	Moisture-Density Gauge	Troxler Electronics	3400 Series
(2)			
(3)			
(4)			

10. RADIATION DETECTION INSTRUMENTS

LINE NO.	TYPE OF INSTRUMENT A	MANUFACTURER'S NAME B	MODEL NUMBER C	NUMBER AVAILABLE D	RADIATION DETECTED (alpha, beta, gamma, neutron) E	SENSITIVITY RANGE (milliroentgens/hour or counts/minute) F
(1)	None					
(2)						
(3)						
(4)						

11. CALIBRATION OF INSTRUMENTS LISTED IN ITEM 10

<input type="checkbox"/> a. CALIBRATED BY SERVICE COMPANY NAME, ADDRESS, AND FREQUENCY N/A	<input type="checkbox"/> b. CALIBRATED BY APPLICANT Attach a separate sheet describing method, frequency and standards used for calibrating instruments.
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12. PERSONNEL MONITORING DEVICES

TYPE (Check and/or complete as appropriate.) A	SUPPLIER (Service Company) B	EXCHANGE FREQUENCY C
<input checked="" type="checkbox"/> (1) FILM BADGE G <input type="checkbox"/> (2) THERMOLUMINESCENCE DOSIMETER (TLD) <input type="checkbox"/> (3) OTHER (Specify): _____	R.S. Landauer, Jr. Company Glenwood Science Park Glenwood, Illinois 60425 312-755-7000	<input checked="" type="checkbox"/> MONTHLY <input type="checkbox"/> QUARTERLY <input type="checkbox"/> OTHER (Specify): _____

13. FACILITIES AND EQUIPMENT (Check where appropriate and attach annotated sketch(es) and description(s).)

- ☐ a. LABORATORY FACILITIES, PLANT FACILITIES, FUME HOODS (Include filtration, if any), ETC.
☒ b. STORAGE FACILITIES, CONTAINERS, SPECIAL SHIELDING (fixed and/or temporary), ETC.
☐ c. REMOTE HANDLING TOOLS OR EQUIPMENT, ETC.
☐ d. RESPIRATORY PROTECTIVE EQUIPMENT, ETC.

14. WASTE DISPOSAL

- a. NAME OF COMMERCIAL WASTE DISPOSAL SERVICE EMPLOYED
Sources will be returned to Manufacturer.
- b. IF COMMERCIAL WASTE DISPOSAL SERVICE IS NOT EMPLOYED, SUBMIT A DETAILED DESCRIPTION OF METHODS WHICH WILL BE USED FOR DISPOSING OF RADIOACTIVE WASTES AND ESTIMATES OF THE TYPE AND AMOUNT OF ACTIVITY INVOLVED. IF THE APPLICATION IS FOR SEALED SOURCES AND DEVICES AND THEY WILL BE RETURNED TO THE MANUFACTURER, SO STATE.

INFORMATION REQUIRED FOR ITEMS 15, 16 AND 17

Describe in detail the information required for Items 15, 16 and 17. Begin each item on a separate page and key to the application as follows:

15. RADIATION PROTECTION PROGRAM. Describe the radiation protection program as appropriate for the material to be used including the duties and responsibilities of the Radiation Protection Officer, control measures, bioassay procedures (if needed), day-to-day general safety instruction to be followed, etc. If the application is for sealed source's also submit leak testing procedures, or if leak testing will be performed using a leak test kit, specify manufacturer and model number of the leak test kit.
(See attached Sheet)
16. FORMAL TRAINING IN RADIATION SAFETY. Attach a resume for each individual named in Items 6 and 7. Describe individual's formal training in the following areas where applicable. Include the name of person or institution providing the training, duration of training, when training was received, etc.

Seaman Nuclear Corporation
Wisconsin

 - a. Principles and practices of radiation protection.
 - b. Radioactivity measurement standardization and monitoring techniques and instruments.
 - c. Mathematics and calculations basic to the use and measurement of radioactivity.
 - d. Biological effects of radiation.
17. EXPERIENCE. Attach a resume for each individual named in Items 6 and 7. Describe individual's work experience with radiation, including where experience was obtained. Work experience or on-the-job training should be commensurate with the proposed use. Include list of radioisotopes and maximum activity of each used.
(See attached Sheet)

Applicant...	1435
Check No.	4110 (3L)
Amount, Fee...	
Type of...	Application
Date Check...	MAY 1 5 1979
Received By	Brown

18. CERTIFICATE (This item must be completed by applicant)

RECEIVED BY LFMB	
Date	MAY 1 5 1979
Log	May 6 10 11
By	Brown
Orig. To	
Action Compl.	5/16/79

The applicant and any official executing this certificate on behalf of the applicant named in Item 2, certify that this application is prepared in conformity with Title 10, Code of Federal Regulations, Part 30, and that all information contained herein, including any supplements attached hereto, is true and correct to the best of our 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.

a. LICENSE FEE REQUIRED (See Section 170.31, 10 CFR 170)	b. CERTIFYING OFFICIAL (Signature) <i>William Bronson</i>
\$110.00	c. NAME (Type or print) William Bronson
(1) LICENSE FEE CATEGORY: Category 3.L	d. TITLE Vice-President
(2) LICENSE FEE ENCLOSED: \$110.00	e. DATE May 2, 1979

Item 7

William Bronson has been designated as Radiation Protection Officer. His duties will be as follows:

1. To insure the safe use of gauge and insure compliance with appropriate regulations.
2. To insure that only authorized and trained personnel use the gauge, as listed in the application for license.
3. To insure that personnel use badges provided.
4. To insure proper storage and use of gauge.
5. To be responsible and give assistance if gauge is damaged or stolen, and to contact proper authorities.
6. To assure that conditions of license are met.
7. To insure that leak tests are performed.
8. To keep appropriate records of gauge, leak tests and personnel monitoring.

Resume is provided under Item 17.

Item 15

Our Safety Program is as follows:

Handling, Security, Monitoring of Personnel

1. Only authorized personnel will be allowed to use the Nuclear Gauge. These engineers and technicians will be trained in the standard operating and safety procedures for this specific gauge. Any conditions which these operators feel are unsafe will be reported to the Radiation Officer (Mr. Bronson).
2. Film badges will be provided and used by the authorized personnel. Appropriate records will be kept.
3. When the gauge is not being used, it will be in the safe position and stored in its designated area.
4. When the gauge is transported in its container to the site, it will be locked away from the passengers of the vehicle (trunk or rear of truck with cap).
5. A Leak Test Kit is being purchased along with the gauge. Leak Test Kit #3880.

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6. The gauge will be kept at the laboratory (designated storage area) when not in use. The gauge will not be stored at the job sites.
7. If the gauge is damaged or stolen, the personnel will report the incident immediately to the Safety Officer (Mr. Bronson). If stolen, a written report will be filed with your office, and authorities notified.

Item 17

William Bronson has received his training in Radiological Safety at the Seaman Nuclear Corporation in Wisconsin. This course is a two day program held in a one ten hour day. This course was taken in August of 1978. A certificate was issued after completion of program and testing.

Mr. Bronson has had practical field experience with Nuclear Gauges, both Seaman and Troxler since 1972.

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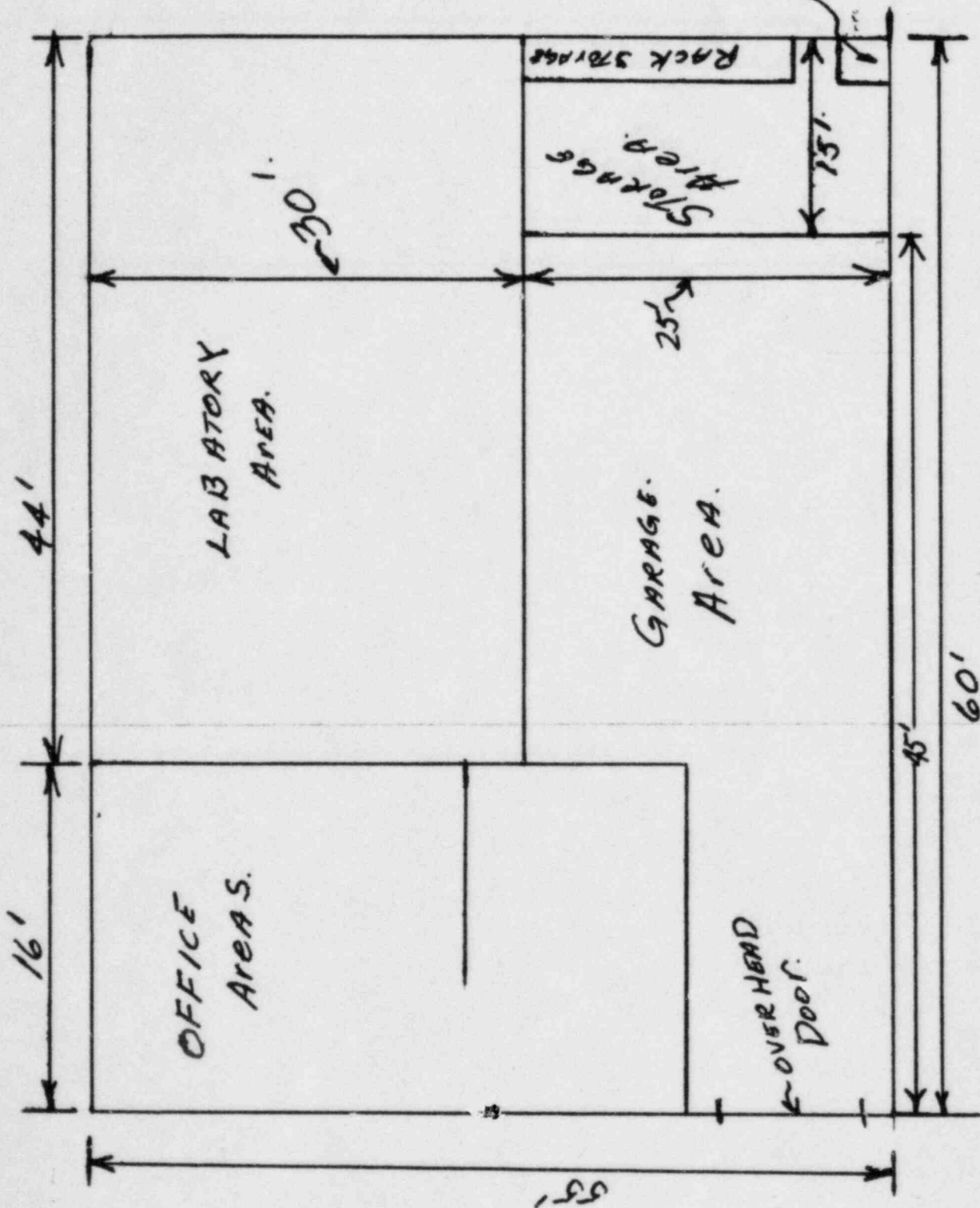
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Mc DONELL & ASSOC.

ITEM 13



NOT TO
SCALE.

MAY 8 1979

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