APPLICATION FOR MATERIAL LICENSE

U.S. NUCLEAR REGULATORY COMMISSION APPROVED BY OMB 3150-0120 Expires: 5-31-87

INSTRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR CL. IPLETING 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 531 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

PRIVACY ACT STATEMENT ON THE REVERSE

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, PUITE 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 (tem)) A. NEW LICENSE. B. AMENDMENT TO LICENSE NUMBER C. RENEWAL OF LICENSE NUMBER	2. NAME AND MAILING ADDRESS OF APPLICANT (Include Zip Code) Commercial Testing & Engineering Co. 1919 S. Highland Ave. Suite 210-B Lombard, Illinois 60148				
P.O. Box 127, 16130 Van Druen Rd. Re South Holland, IL 60473 or and at temporary job sites throughout	he United States where the U.S. Nuclear egulatory Commission maintaines jurisdiction wer the use of by-product materials.				
4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION William B. Katterhenry	(312) 953-9300				
SUBMIT ITEMS 5 THROUGH 11 ON 8% x 11" PAPER. THE TYPE AND SCOPE OF INFORMATI	ON TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.				
RADIOACTIVE MATERIAL 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. INDIVIDUALISI RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE.	8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.				
9. FACILITIES 8606180163 860418 REG3 LIC30	10. RADIATION SAFETY PROGRAM.				
11. WASTE MAIN 12-24674-01 PDR	12 LICENSEE FEES (See 10 CFR 170 and Section 170.31) FEE CATEGORY 3P AMOUNT ENCLOSED \$ 230.00				
SIGNATURE CERTIFYING OFFICER TYPED/PRINTED NAME William B. Katte:	OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS TS 30, 32, 33, 34, 35, AND 40 AND THAT ALL INFORMATION CONTAINED HEREIN, CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION THIN ITS JURISDICTION. TITLE Director Utility Services 3/7/86				
SANNUAL RECEIPTS b. NUMBER OF EMPLOYEES (Total for entire facility excluding outside contractors)	AY ECONOMIC DATA 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) X YES NO				
	USEONLY				
Application Than 12 III FEE CATEGORY COMMENTS CONTROL N	40. 80864 Hacksen				
230 CHECK NUMBER	3/19/86				

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 PROVID-ING 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.
- 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

ITEM 5. MATERIAL TO BE POSSESSED

A.		TALL DET WE	54 × 1
Radionuclei	Form	Drawing #	Maximum Amount

5E. Cs-137	Sealed Source	A-100601	Not to	exceed 6mC:	per source

Campbell Pacific Model

5F. Cs-137	Sealed Source	CPN-131	Not to	exceed	10mCi p	per source

5H. Am-241:Be Sealed Source CPN-131 Not to exceed 10mC1 per source

ITEM 6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.

- 6-1. To be used in Troxler Model 3400 Series Surface Moisture/Density gauge to measure the properties of materials.
- 6-2. To be used in Troxler Model 3565 Series Sediment Density Gauge to measure the properties of materials.
- 6-3. To be used in Troxler Model 3216/3218 Series Roof Moisture Gauge to measure the properties of materials.
- 6-4. To be used in Troxler Model 3241 Asphalt Content Gauge to measure the properties of materials.
- 6-5. To be used in Troxler Model 3300 Series Depth Moisture Gauge to measure the properties of materials.
- 6-6. To be used in Troxler Model 1351, 1352 Series Depth Moisture Gauge to measure the properties of materials.
- 6-7. To be used in Troxler Model 2376 Two Probe Depth Density Gauge to measure the properties of materials.
- 6-8. To be used in Troxler Model 4640 Series Surface Density Gauge to measure the properties of materials.
- 6-9. To be used as a component of a CPN Corp. Model MC Series Gauge to measure the properties of materials.
- 6-10. To be used as a component of a CPN Corp. Model 500 Series Gauge to measure the properties of materials.
- 6-11. To be used as a component of a CPN Corp. Model AC Series Gauge to measure the properties of materials.

CONTROL NO. 80864

ITEM 7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE. William E. Katterhenry, listed in item 4, will be the contact for Commercial Testing And Engineering Company and the Nuclear Regulatory Commission. Mr. Katterhenry attended the "Radiation Safety Program" while employed at Bowser-Morner Testing Laboratories August 31, 1983. He was responsible for a segment of the work performed with nuclear gauges since 1980. He will attend a Troxler training seminar prior to the end of March 1986. ITEM 8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS. Each operator will attend a "Nuclear Radiation Safety" seminar that has been approved by the Nuclear Radiation Commission. William E. Katterhenry, as named in items 4 and 5, will maintain a copy of each individual's training certificate on file. ITEM 9. FACILITIES AND EQUIPMENT A sketch of our facility, where the licensed materials will be stored when not in use, is shown in Figure 1, attached. The gauges will be kept in an unoccupied storage area. Mr. William E. Katterhenry, Radiation Safety Officer, and David Smercina, a Licensed Operator will be in possession of the keys to the storage area. The nearest occupied area will be a minimum distance of 15 feet. ITEM 10. RADIATION SAFETY PROGRAM 1. Radiation Safety Officer A. William E. Katterhenry has been designated as Commercial Testin, & Engineering Company's Radiation Safety Officer and will assume the duties and responsibilities that include the following: 1. To ensure that all terms and conditions of the license are being met and that the information contained on the license is up-to-date. 2. i. ensure that the equipment has been leak tested in the required timely manner and that the leak test is performed in the manner prescribed by the equipment manufacturer. 3. To ensure that the use of the equipment is only by individuals that have been authorized by the Radiation Safety Officer and that all users wear personnel monitoring equipment when utilizing the equipment. 4. To maintain the records as required by the license and the regulations. These records shall include personnel exposure records, leak test records and training certificates for all users. 5. To insure that the equipment is properly secured against unauthorized removal at all times when it is not in use.

6. To serve as a point of contact and give assistance in case of emergency such as equipment damaged in the field or theft and to notify the proper authorities in case of emergency. 7. To ensure that all users have read and understand the radiation safety operating and emergency procedures. 2. Operating Procedures A. Transportation of Equipment 1. All possible means shall be provided to ensure that the equipment is fully secured in the transporting vehicle and the equipment is away from the passenger compartment. When transporting in an enclosed vehicle (car or van), the vehicle will be locked. When transporting in an open bed vehicle, the dauge should be securely fastened and locked to the truck bed. 2. The gauge will be transported in the manufacture's transportation case. The U.S. Department of Transportation requires that the gauge be transported in a properly labeled carrying case. 3. At all times during transportation, the operator will have a properly completed bill of lading for each gauge. B. Utilization Procedures 1. When the gauge is in the field, you as the authorized user must maintain control over the gauge at all times. The gauge must never be left unattended. 2. When not making measurements, the gauge should be placed in the transportation case and returned to its permanent storage area as soon as possible. The gauge is to be used for its intended purpose only. By doing so, you will maintain any radiation exposure to as low as reasonably attainable. 3. When using the equipment, you will wear the personnel monitoring device that has been assigned to you. When you are not using the equipment, your monitoring device is to be stored in the radiation free area that has been designated in the office. C. Maintenance and Leak Test Procedures 1. Periodic maintenance will include cleaning the gauge. During any maintenance . you must wear your personal monitoring device. 2. No maintenance will be performed in which the radioactive yource is removed from the gauge. For this type of maintenance, the gauge will be returned to the manufacturer. 3. The leak test will be performed using the TROXLER Model 3880

Leak Test Kit. The leak test will be performed using the manufacture's instructions. Again, the personnel monitoring device will be employed. Gauges will be leak tested at intervals not to exceed six (6) months.

3. EMERGENCY PROCEDURES

- A. In the event of physical damage to a gauge, the following will be performed:
 - 1. Immediately cordon off an area around the gauge. An area radius of 15 feet will be sufficient.
 - 2. If a vehicle is involved, it must be stopped until the extent of contamination, if any, can be established.
 - 3. A visual inspection of the gauge is to be made to determine if the source housing and/or shielding has been damaged.
 - 4. At the earliest possible time, when the situation is under control, you must contact William E. Katterhenry, Radiation Bafety Officer for Commercial Testing and Engineering Company, at (312) 953-9300. Describe the present conditions and follow the instructions of the Radiation Safety Officer.
- B. In the event the gauge is lost or stolen, immediately notify the Radiation Safety Officer as listed in Item 3.A.4.

ITEM 11. WASTE MANAGEMENT

Disposal of radioactive material is very strictly enforced. Commercial Testing & Engineering Company will transfer the gauge to another licensed user, a licensed burial ground or back to the manufacture for disposal.

