U.S. NUCLEAR REGULATORY COMMISSION APPROVED BY OME 3150-0120

80547 DATE

APPLICATION FOR MATERIAL LICENSE Expires: 5-31-87 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 IF YOU ARE LOCATED IN: U.S. NUCLEAR REGULATORY COMMISSION DIVISION OF FUEL CYCLE AND MATERIAL SAFETY, NMSS WASHINGTON, DC 20556 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 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: 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 I NUCLEAR MATERIAL SECTION B 631 PARK AVENUE U.S. NUCLEAR REGULATORY COMMISSION, REGION IV MATER AL RADIATION PROTECTION SECTION 611 RYAN PLAZA DRIVE, SUITE 1000 ARLINGTON, TX 78011 KING OF PRUSSIA, PA 19406 ALABAMA, FLORIDA, GEORGIA, KENTUCKY, MISSISSIPPI, NORTH CAROLINA, PUERTO RICO, SOUTH CAROLINA, TENNESSEE, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, BEND APPLICATIONS TO: ALASKA, ARIZONA, CALIFORNIA, HAWAII, NEVADA, OREGON, WASHINGTON, AND U.S. TERRITORIES AND POSSESSIONS IN THE PACIFIC, SEND APPLICATIONS U.S. NUCLEAR REGULATORY COMMISSION, REGION II MATERIAL RADIATION PROTECTION SECTION 101 MARIETTA STREET, SUITE 2900 U.S. NUCLEAR REGULATORY COMMISSION, REGION V MAYERIAL RADIATION PROTECTION SECTION 1450 MARIA LANE, SUITE 210 WALNUT CREEK, CA 94596 ATLANTA, GA 30323 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 (tern) 2. NAME AND MAILING ADDRESS OF APPLICANT (Include Zip Code) Franklin County Engineering Department A. NEW LICENSE 970 Dublin Road B. AMENDMENT TO LICENSE NUMBER C. RENEWAL OF LICENSE NUMBER 34-20131-01 Columbus, Ohio 43215 X 3. ADDRESS(ES) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED At the address listed in Item #2 and at temporary road and bridge projects throughout Franklin County. 4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION TELEPHONE NUMBER Michael B. Bashore, P.E. 614-462-3052 SUBMIT ITEMS 5 THROUGH 11 ON 8% 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. chem which will be possessed at any one time. nicel and/or physical form, and c. maximum amount 6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS. 9. FACILITIES AND EQUIPMENT 8707210661 870218 REG3 LIC30 34-20131-01 PD 10. RADIATION SAFETY PROGRAM 12. LICENSEE FEES (See 10 CFR 170 and Section (10 CFR 11. WASTE MAN FEE CATEGORY EXEMPT ENCLOSED \$ 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 WILLFULLY FALSE STATEMENT OF REPRESENTATION TO ANY DEPARTMENT OF AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION. SIGNATURE PERTIFYING OFFICER TYPED/PRINTED NAME John Circle, P.E. & P.S. Franklin County Engineer NUMBER OF EMPLOYEES (Total for d WOULD YOU WOULD YOU BE WILLING TO FURNISH COST INFORMATION (Bollar and/or steff 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 of financial—proprietary—information furnished to A ANNUAL RECEIPTS <\$250K entire facility excluding outside contractors) \$1M-3.5M \$250K-500K \$3.5M...7M the agency in confidence) NUMBER OF BEDS \$500K - 750K \$7M-10M \$750K-1M >\$10M YES NO FOR NRC USE ONLY TYPE OF FEE FEE LOG FEE CATEGORY COMMENTS APPROVED B

PRIVACY ACT STATEMENT ON THE REVERSE

CHECK NUMBER

AMOUNT RECEIVED

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)).
- 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.
- 5. 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 Radioactive Material

- a) Element is Cesium with a mass number of 137 (Cs137).
- b) The chemical and/or physical form is a sealed source.
- As per Troxler Drawing #A-102112, no single source to exceed 9mCi. As per Troxler Drawing #A-102451, no single source to exceed 40 mCi.

ITEM 6 Use of Licensed Materia?

The licensed material is for use in a Troxler Model 3411B

Surface Moisture Density Gauge to measure properties of construction materials.

ITEM 7 Individuals Responsible for Radiation Safety Program and their Training and Experience

MICHAEL B. BASHORE, P.E. BRUCE C. SMITH, P.E.

One year on-the-job use of Troxler 2401 surface moisture density gauge and five years on-the-job use of Troxler 3411B Surface Moisture Density Gauge

Both individuals named above completed a formal Standard Training Course put on by the Troxler Electronic Laboratories, Inc. at Columbus, Ohio on February 20, 21, 1985.

COVERING:

- a) Principles and practices of radiation protection.
- b) Radioactivity monitoring techniques and instruments.
- c) Mathematics and calculations basic to the use and measurement of radioactivity.
- d) Biological effects of radiation.
- e) General safety precautions.
- f) Accident and incident procedures.
- g) Nuclear Gauge Storage and transportation procedures.

ITEM 8 Training provided to other users

Employees not listed in Item 7 for this application or for Item 6 in the application for the license issued on April 22, 1981 will be required to complete a manufacturer's training program before being permitted to use the nuclear device. All certificates of employees completing the training course will be kept on file in the construction office of the Franklin County Engineering Department at 970 Dublin Road, Columbus, Ohio.

An ongoing commitment will be made to send at least two employees to the manufacturer's training program on a basis of no more than every two years to keep this office up to date on the latest developments concerning the use of nuclear gauges.

FRANKLIN COUNTY ENGINEERS -

970 Dublin Rd. COLUMBUS, OHIO 43215 Phone 462-3030

108 9 STORAGE FACILITIES	
SHEET NO.	OF
CALCULATED BY	DATE
CHECKED BY	DATE

STORAGE FACILITIES NOT TO SCALE SCALE ___ APPROX. ROAD 40' RADIUS SALT STORAGE # MATERIAL STORAGE STORAGE SHEDS ELECTRIC SHOP YARD OFFICE EQUIP. STORAGE PAINT SHOP PARKING 81 FENCE SECURITY CAMERA MAINTENANCE GARAGE MAIN OFFICE

Surface moisture density gauge when not in use on the projects shall be stored and locked in Shed # . Key can only be obtained by authorized personnel from the yard attendent.

S. Named Co.

ITEM 10 Radiation Safety Program

The Radiation Safety Officers shall inform all operators as to the correct guidelines for emergency procedures, storage, transporting and operation of the gauge. They will administer the film badge program and be responsible for the leak test which will be accomplished with the Troxler Model 3880 leak test kit.

Guidelines for Surface Moisture Density Gauges

1) Emergency Procedures

In case of an accident involving damage or loss of a gauge, one of the following persons shall be contacted immediately:

Bruce Smith Work - 614-462-3052 Home - 614-764-1927 Mike Bashore Work - 614-462-3052 Home - 614-451-7743

If a gauge is damaged, do not attempt to move it. Isolate the area to at least a 16' radius and take appropriate measures to prevent anyone from coming into contact with the damaged gauge. Immediately inform one of the above named persons. They will further investigate the accident site and notify the proper authorities for safe removal of the damaged gauge.

2) Transporting

Gauges must always be stored in the transport case provided with each gauge when being moved. The transport case should be carried in the back of pick-up trucks as far away from passengers as possible. The case should be placed in the vehicle in a manner which will prevent it from falling off the vehicle or otherwise being damaged. Gauges shall not be transported in the passenger cab of the vehicle under any circumstances.

3) Storage

When not being used, the gauge shall be stored in the transport case with the source rod padlocked in its shielded position. The case and gauge shall then be placed in a locked storage room in the project office away from any area in which project personnel will be working. When no longer needed on the project, the gauge shall be returned to Franklin County Engineering Department, 970 Dublin Road office for storage and secured in Shed #6.

4) Operation

Only persons who have been properly instructed may operate gauges. Keep all unauthorized persons 15 feet out of operating area. All Operators must wear a film badge when using the gauge for the purpose of monitoring the amount of radiation to which the operator is exposed. Exposure records for each individual are kept on file in the Construction Office and are available if requested.

Under no circumstances should an operator attempt to remove the source rod from the gauge. Operators may only perform routine cleaning such as the bottom plate. The source rod should always be in its shielded position except when performing a test. The source rod should never be wiped with the hand. Use tongs or some other means to hold the wiping rag.

Personnel Monitoring Devices (Film Badges) used are Type Pl exchanged on a monthly cycle. The supplier (service company) is

R.S. Landauer Jr. and Company Glenwood Science Park Glenwood, Illinois 60425

ITEM 11 Waste Management

Sources will be returned to the manufacturer.