



Mark A. Hackel
County Executive

DEPARTMENT OF ROADS

117 South Groesbeck Highway ♦ Mount Clemens, Michigan 48043

Phone: (586) 463-8671

www.MacombCountyMi.gov/roads

Robert P. Hoepfner, P.E.
Director of Roads

March 13, 2014

U. S. Nuclear Regulatory Commission, Region 111
Materials Licensing Section
801 Warrenville Road , Suite 210
Lisle, IL 60532-4362

Attention: Materials Licensing Branch

RE: License No. 21-15686-01

Application for Renewal

Dear Members of the Commission:

Please find enclosed an application (NRC Form 313) for renewal of License Number 21-15686-01.
Please note the application fees for renewal is waived per Section 170-31 of 10 CFR Parts 170 and 171 of NRC Guidelines.

If you have any questions or require additional information, please contact us at (586) 463-8671.

Sincerely,

MACOMB COUNTY DEPARTMENT OF ROADS

Robert P. Hoepfner, P.E.
Director of Roads
Radiological Safety Officer

CC: Walter Schell, P.E.

RPH/gjv
RPH.1002

NRC FORM 313 (03-2014) 10 CFR 30, 32, 33, 34 35, 36, 37, 39, and 40	U.S. NUCLEAR REGULATORY COMMISSION APPLICATION FOR MATERIALS LICENSE	APPROVED BY OMB: NO. 3150-0120 Estimated burden per response to comply with this mandatory collection request: 4.3 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 FOIA, Privacy, and Information Collections Branch (T-5 P53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by Internet e-mail to InfoCollections.Resource@nrc.gov , and to the Desk Officer, Office of Information and Regulatory Affairs, NECIB-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.
EXPIRES: 05/31/2015		
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. *AMENDMENTS/RENEWALS THAT INCREASE THE SCOPE OF THE EXISTING LICENSE TO A NEW OR HIGHER FEE CATEGORY WILL REQUIRE A FEE.		
APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH: OFFICE OF FEDERAL & STATE MATERIALS AND ENVIRONMENTAL MANAGEMENT PROGRAMS DIVISION OF MATERIALS SAFETY AND STATE AGREEMENTS U.S. NUCLEAR REGULATORY COMMISSION WASHINGTON, DC 20555-0001		IF YOU ARE LOCATED IN: 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 60532-1322
ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS: IF YOU ARE LOCATED IN: ALABAMA, CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA, KENTUCKY, MAINE, MARYLAND, MASSACHUSETTS, 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 2100 RENAISSANCE BOULEVARD, SUITE 100 KING OF PRUSSIA, PA 19409-2713		ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS, LOUISIANA, MISSISSIPPI, 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 1800 E. LAMAR BOULEVARD ARLINGTON, TX 78011-4511
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) <input type="checkbox"/> A. NEW LICENSE <input type="checkbox"/> B. AMENDMENT TO LICENSE NUMBER <input checked="" type="checkbox"/> C. RENEWAL OF LICENSE NUMBER <u>21-15686-01</u>		2. NAME AND MAILING ADDRESS OF APPLICANT (Include ZIP code) Macomb County Department of Roads (formerly Road Commission of Macomb County) 117 S. Groesbeck Highway Mt. Clemens, MI 48043
3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED 117 S Groesbeck Highway, Mt. Clemens, MI, 58270 Williams Street, New Haven, MI and at temporary job sites anywhere Macomb County Department of Roads maintains jurisdiction for regulating the use of radioactive materials		4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION Robert P. Hoepfner BUSINESS TELEPHONE NUMBER (586) 463-8671 BUSINESS CELLULAR TELEPHONE NUMBER (586) 907-4771 BUSINESS EMAIL ADDRESS rhopfner@rcmcweb.org
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. FACILITIES AND EQUIPMENT.
9. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.		10. RADIATION SAFETY PROGRAM.
11. WASTE MANAGEMENT.		12. LICENSE FEES (Fees required only for new applications, with few exceptions*) (See 10 CFR 170 and Section 170.31)
FEE CATEGORY <input type="text"/> AMOUNT ENCLOSED \$ <u>0.00</u>		
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, 37, 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 02 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 Robert P. Hoepfner, Director of Roads		SIGNATURE DATE <u>3-14-14</u>
FOR NRC USE ONLY		
TYPE OF FEE	FEE LOG	FEE CATEGORY
AMOUNT RECEIVED	CHECK NUMBER	COMMENTS
APPROVED BY	DATE	

Item 5 – Radioactive Material

A.	B.	C.	D.
<u>By product, Source and or Special Nuclear Material</u>	<u>Chemical and/or Physical Form</u>	<u>Troxler Drawing Number</u>	<u>Maximum Amt. That licensee may possess at any one time under this license</u>
A. Cesium – 137	Sealed Source	A-102112	A. Seven sources not to exceed 9 millicuries each
B. Americium – 241	Sealed Source	A-102451	B. Seven sources not to exceed 44 millicuries each

Item 6. Material Use

A. For use in Troxler Model 3400 Series, Troxler Model 3440 and Troxler Model 3450 Density/Moisture Gauges

Item 7. Individual(s) Responsible For Radiation Safety Program and Their Training and Experience

Same person whose name is listed on the application for Material License Renewal. He has successfully completed one of the training courses for Radiation Safety Officer (RSO).

Item 8. Training for Individual(s) Working in or Frequently Restricted Areas

Each individual that will operate the density/moisture gauge will complete the Troxler Nuclear Gauge Training Course, and the Troxler haz-mat training course, read and understand our radiation safety procedures, and be approved by our radiation safety officer. Copies of each individual's training certificate will be maintained on file.

Item 9. Gauge Storage Area

Licensed Material "Troxler – 3440 Series and 3450 Series are stored (when not in use) in a locked metal enclosure, secured from unauthorized personnel, and it is tended under constant surveillance and immediate control by us. This device is also, stored in a locked transport vehicles when it is used on the field.

Item 10. Radiation Safety Program

- 10.1 **Personnel Monitoring** - All personnel using 3440 and 3450 Gauges, wear a Dosimeter Badge when they use the device. These Dosimeter Badges are Instadose Dosimeter supplied by Mirion Technologies, and they are read every month.
- 10.2 **Radiation Detection Instruments** - Macomb County Department of Roads (MCDR) is in the process of purchasing a Troxler Troxalert G-M survey meter. The survey meter will be calibrated annually by the manufacturers and checked for functionality before use.
- 10.3 **Sealed Source Leak Test** - A leak test is performed on all 3440 and 3450 Gauges every 6 months.

Leak-Test Kit used:	Model	<u>3880 Leak Test Kit</u>
	Number	<u>3880</u>
	Name	<u>Leak Test Kit for Sealed Radioactive Source</u>
	Address	<u>Troxler Electronic Laboratories</u> <u>Research Triangle, N.C. 27709</u>
	License No.	<u>32-05998-03</u>

The Leak Test Samples will be taken under the supervision of the individual(s) specified in Item #4.

- 10.4 **Material Receipt and Accountability** - MCDR maintains records of receipt, transfer, and disposal of gauges for a minimum of three years.

MCDR conducts physical inventories of sealed sources at intervals not exceeding six months.

MCDR maintains gauge utilization logs detailing dates that gauges are utilized, job site, and Name of technician using gauge.

- 10.5 **Public Dose** - MCDR ensures that gauges are used, transported and stored in such a manner That no member of the public receives a dose of more than 100 mrem in one year.

MCDR ensures that the dose in unrestricted areas does not exceed 2 mrem in one hour.

MCDR controls and maintains constant surveillance over gauges that are not in storage and over secure gauges from unauthorized use or removal.

- 10.6 **Operating and Emergency Procedure** - An Operating and Emergency Procedures documents is provided to each person who uses the 3440 and 3450 Gauges. These procedures include the following topics:

1. Use of Personnel Monitoring
2. Use of the 3440, and 3450 Gauges
3. Storage of the Gauges
4. Transportation To and From Work Sites
5. Leak-Testing Procedures

6. Emergency Procedures

- 10.7 **Maintenance** – MCDR maintains procedures for routine maintenance of our gauges in accordance with the manufacturer's recommendations and instructions.

MCDR returns our gauges to the manufacturer for annual maintenance and for any non-routine Maintenance or repairs that require removal of the service or source rod.

- 10.8 **Transportation** – MCDR ensures that the gauges are transported in accordance with the US DOT requirements.

- 10.9 **Audit Program** - MCDR conducts an annual audit to ensure that our radiation safety program is compliant with applicable NRC, State of Michigan and US DOT regulations and terms and conditions stated in NRC License No. 21-15686-01, and that doses to workers and the public are As Low As Reasonably Achievable (ALARA).

Checklist information is as provided by NRC.

Records of audits will be maintained for a minimum of three years and corrective actions necessary will be taken promptly to prevent recurrence of deficiencies.

WJS/gjv

**Macomb County Department of Roads**

117 S. Groesbeck Highway

Mount Clemens, MI 48043

586/463-8671

Fax - 586/463-8676

COMPANY: U.S. NRCATTN: FrankFAX: 630-515-1078PAGES: 5DATE: 3-24-14FROM: Bob Hoepfner / wjs

COMMENTS:

Copy of application for renewal of license #
21-15686-01

Please notify Walter Schell on ext. 1203 if transmission is incomplete or a retransmission is needed.