

## MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

302/38

Licensee		3. License Number	
1. City of Gladstone		24-26773-01	
2. 7010 North Holmes Gladstone, MO 64118		4. Expiration Date February 28, 2007	
		5. Docket or Reference No. 030-34311	
6. Byproduct, Source, and/or Special Nuclear Material	7. Chemical and/or Physical Form	8. Maximum Amount that Licensee May Possess at Any One Time Under This License	
A. Cesium-137	A. Sealed sources registered either with NRC under 10 CFR 32.210 or with an Agreement State and incorporated in a compatible portable gauging device as specified in Item 9 of this license	A. No single source to exceed 11 millicuries each	
B. Americium-241	B. Sealed sources registered either with NRC under 10 CFR 32.210 or with an Agreement State and incorporated in a compatible portable gauging device as specified in Item 9 of this license	B. No single source to exceed 50 millicuries each	

260049

0/1

230  
809702260082 970214  
PDR ADOCK 03034311  
C PDR

COPY

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number

24-26773-01

Docket or Reference Number

030-34311

9. Authorized Use:

- A. and B. To be used, for measurement purposes, in portable Troxler Electronics Laboratories, Inc. gauging devices that have been registered either with NRC under 10 CFR 32.210 or with an Agreement State and have been distributed in accordance with an NRC or Agreement State specific license authorizing distribution to persons specifically authorized by an NRC or Agreement State license to receive, possess, and use the devices.

CONDITIONS

10. Licensed material may be stored at the licensee's facilities located at 7010 North Holmes, Gladstone, Missouri and may be used at temporary job sites of the licensee anywhere in the United States where the U.S. Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material.
11. The Radiation Safety Officer for this license is Angela Lorenz.
12. Licensed material shall only be used by, or under the supervision and in the physical presence of, Angela Lorenz or individuals who have successfully completed the manufacturer's training program for gauge users, have been instructed in the licensee's routine and emergency operating procedures and who have been designated by the Radiation Safety Officer.
13. A. Sealed sources and detector cells shall be tested for leakage and/or contamination at intervals not to exceed 6 months or at such other intervals as specified by the certificate of registration referred to in 10 CFR 32.210.
- B. Notwithstanding Paragraph A of this Condition, sealed sources designed to emit alpha particles shall be tested for leakage and/or contamination at intervals not to exceed 3 months.
- C. In the absence of a certificate from a transferor indicating that a leak test has been made within 6 months prior to the transfer, a sealed source or detector cell received from another person shall not be put into use until tested.
- D. Sealed sources need not be leak tested if:
- (i) they contain only hydrogen-3; or
  - (ii) they contain only a radioactive gas; or
  - (iii) the half-life of the isotope is 30 days or less; or

COPY

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number

24-26773-01

Docket or Reference Number

030-34311

- (iv) they contain not more than 100 microcuries of beta and/or gamma emitting material or not more than 10 microcuries of alpha emitting material; or
  - (v) they are not designed to emit alpha particles, are in storage, and are not being used. However, when they are removed from storage for use or transferred to another person, and have not been tested within the required leak test interval, they shall be tested before use or transfer. No sealed source or detector cell shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.
- E. The leak test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. If the test reveals the presence of 0.005 microcurie or more of removable contamination, a report shall be filed with the U.S. Nuclear Regulatory Commission in accordance with 10 CFR 30.50(b)(2), and the source shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. The report shall be filed within 5 days of the date the leak test result is known with the U.S. Nuclear Regulatory Commission, Region III, ATTN: Chief, Nuclear Materials Safety Branch, 801 Warrenville Road, Lisle, Illinois 60532-4351. The report shall specify the source involved, the test results, and corrective action taken.
- F. The licensee is authorized to collect leak test samples for analysis by Troxler. Alternatively, tests for leakage and/or contamination may be performed by persons specifically licensed by the Commission or an Agreement State to perform such services.
14. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee.
15. When performing tests at temporary job sites, the authorized user shall not leave the moisture/density gauge unattended. Upon completion of tests the device shall be locked in the licensee's vehicle or a secure building to prevent unauthorized use, loss, or theft.
16. The licensee shall conduct a physical inventory every 6 months to account for all sources and/or devices received and possessed under the license.
17. The licensee is authorized to transport licensed material only in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."
18. Each portable nuclear gauge shall have a lock or outer locked container designed to prevent unauthorized or accidental removal of the sealed source from its shielded position. The gauge or its container must be locked when in transport, storage, or when not under the direct surveillance of an authorized user.

COPY

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number

24-26773-01

Docket or Reference Number

030-34311

19. Any cleaning, maintenance, or repair of the gauge(s) that requires removal of the source rod shall be performed only by the manufacturer or by other persons specifically licensed by the Commission or an Agreement State to perform such services.
20. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of licensed material to quantities below the minimum limit specified in 10 CFR 30.35(d) for establishing decommissioning financial assurance.
21. The licensee shall not use sealed sources or probes containing sealed sources at depths exceeding 3 feet below the surface.
22. The licensee may not possess and use materials authorized in Items 6, 7, and 8 until:
  - A. The licensee has constructed the facilities and obtained the equipment described in the application and supporting documentation; and
  - B. The U. S. Nuclear Regulatory Commission, Region III, ATTN: Chief, Materials Licensing Branch, 801 Warrenville Road, Lisle, IL 60532-4351 has been notified that activities authorized by the license will be initiated.
23. Within 30 days of the date of a decision not to complete the facility, acquire equipment, or possess and use authorized material, the licensee must notify the Commission in writing, of the decision.
24. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. The U.S. Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.
  - A. Application dated December 12, 1996; and
  - B. Letters dated January 27, 1997, and January 30, 1997.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date 14 FEBRUARY 1997

By William P. Keithold  
Nuclear Materials Licensing Branch, Region III

COPY



BETWEEN:

License Fee Management Branch, ARM  
and  
Regional Licensing Sections

(FOR LFMS USE)  
INFORMATION FROM LTS

Program Code: \_\_\_\_\_  
Status Code: 3  
Fee Category: \_\_\_\_\_  
Exp. Date: 0  
Fee Comments: \_\_\_\_\_  
Decom Fin Assur Req'd: \_\_\_\_\_

S7  
MS-16

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED

Applicant/Licensee: GLADSTONE, CITY OF  
Received Date: 961218  
Docket No: 3034311  
Control No.: 302138  
License No.:  
Action Type: New Licensee

2. FEE ATTACHED

Amount: \$550  
Check No.: 72369

3. COMMENTS

Signed  
Date

D. Hersey  
12-27-96

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered / ☒)

1. Fee Category and Amount: 3P \$550

2. Correct Fee Paid. Application may be processed for:

Amendment  
Renewal  
License

3. OTHER

Signed  
Date

SC  
12/27/96

JAN 02 1997

Log	Dec 9 III
Remitter	
Check No.	72369
Amount	\$550
Fee Category	3P
Type of Fee	App
Date Check Rec'd	12/27/96
Date Completed	
By:	SC

1996 DEC 27 PM 2:04

(7-90)  
10 CFR 30, 32, 33,  
34, 35, 36, 39 and 40

## APPLICATION FOR MATERIAL LICENSE

Estimated burden per response to comply with this information collection request: 7 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. Forward comments regarding burden estimate to the Information and Records Management Branch (T-6 133), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to the Paperwork Reduction Project (3150-0120), Office of Management and Budget, Washington, DC 20503. NRC may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

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:

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

## ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:

## IF YOU ARE LOCATED IN:

CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, MAINE, MARYLAND,  
MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, PENNSYLVANIA,  
RHODE ISLAND, OR VERMONT, SEND APPLICATIONS TO:

LICENSING ASSISTANT SECTION  
NUCLEAR MATERIALS SAFETY BRANCH  
U. S. NUCLEAR REGULATORY COMMISSION, REGION I  
475 ALLENDALE ROAD  
KING OF PRUSSIA, PA 19406-1415

ALABAMA, FLORIDA, GEORGIA, KENTUCKY, MISSISSIPPI, NORTH CAROLINA, PUERTO  
RICO, SOUTH CAROLINA, TENNESSEE, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA,  
SEND APPLICATIONS TO:

NUCLEAR MATERIALS LICENSING SECTION  
U. S. NUCLEAR REGULATORY COMMISSION, REGION II  
101 MARIETTA STREET, NW, SUITE 2000  
ATLANTA, GA 30323-0199

## IF YOU ARE LOCATED IN:

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

MATERIALS LICENSING SECTION  
U. S. NUCLEAR REGULATORY COMMISSION, REGION III  
801 WARRENVILLE RD  
LISLE, IL 60532-4351

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 SECTION  
U. S. NUCLEAR REGULATORY COMMISSION, REGION IV  
611 RYAN PLAZA DRIVE, SUITE 400  
ARLINGTON, TX 76011-8064

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 \_\_\_\_\_

## 2 NAME AND MAILING ADDRESS OF APPLICANT (Include Zip code)

City of Gladstone  
7010 North Holmes  
Gladstone Missouri 64118

## 3 ADDRESS(ES) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

Useage: Temporary job sites of licensee where USNRC  
maintains jurisdiction  
Storage: 7010 North Holmes  
Gladstone Missouri 64118

## 4 NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

(Please see attachment.)

## TELEPHONE NUMBER

(Please see attachment.)

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 LICENSEE FEES (See 10 CFR 170 and Section 170.31)

FEE CATEGORY 3.P.

AMOUNT  
ENCLOSED 550.00

## 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. 740 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

NORMAN LE CLERG - DIRECTOR OF ENGINEERING

*Norman Le Clerg*

12-12-96

## FOR NRC USE ONLY

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

\$

## APPROVED BY

## DATE

Pm: 12-16-96

RECEIVED

DEC 18 1996

302138

REGION III

PRINTED ON RECYCLED PAPER

U.S. Nuclear Regulatory Commission  
Region III  
801 Warrenville Road  
Lisle, Illinois 60523-4351

ATTN: Materials Licensing Section

Re: Application for a Category 3.P.  
Radioactive Materials License  
for Portable Gauges

Gentlemen:

Please find enclosed an application for a U.S. NRC (category 3.P.) portable gauge radioactive materials (RAM) license prepared on behalf of the City of Gladstone, Missouri. Please expedite the review of the enclosed license application (U.S. NRC Form 313 plus attachments).

Thank you for your assistance in this matter. Should you have any questions regarding this license application, please contact John Thornton at 847/695-0900.

RECEIVED  
DEC 18 1996  
REGION III

Pm: 12-16-96

DEC 18 1996

ATTACHMENT TO NRC FORM 313

- ITEM 4      This application was prepared by John Thornton on behalf of the applicant named in Item 2. of the license application. John Thornton may be contacted at Troxler Electronic Laboratories, Inc., 784 Church Road, Elgin, Illinois, 60123, tel. 847/695-0900, fax 847/695-5094.
- ITEM 5      Attached is a schedule of radioactive material to be possessed under the authorization of the license applied for herein.
- ITEM 6      (Please see attachment.)
- ITEM 7      (Please see attachment.)
- ITEM 8      (Please see attachment.)
- ITEM 9      (Please see attachment.)
- ITEM 10     (Please see attachment.)
- ITEM 11     (Please see attachment.)
- ITEM 12     (Please see attachment.)



## ITEM 5 -- RADIOACTIVE MATERIAL

### SCHEDULE OF RADIOACTIVE MATERIAL

Byproduct, source, and/or special nuclear material	Chemical and/or physical form	Maximum amount the licensee may possess at any one time under the license
Cesium-137	Scaled sources registered pursuant to 10 CFR Part 32 and incorporated in a compatible portable gauging devices as specified below	No single source to exceed 10 millicuries (nominal)
Americium-241	Sealed sources registered pursuant to 10 CFR Part 32 and incorporated in a compatible portable gauging devices as specified below	No single source to exceed 50 millicuries (nominal)

#### AUTHORIZED USE:

To be used, for measurement purposes, in portable Troxler Electronic Laboratories, Inc. gauging devices that have been registered either with NRC under 10 CFR 32.210 or with an Agreement State and have been distributed in accordance with an NRC or Agreement State specific license authorizing distribution to persons specifically authorized by an NRC or Agreement State licensee to receive, possess, and use the devices.


ITEM 6 - PURPOSES FOR WHICH LICENSED MATERIAL WILL BE USED

For use only for the purpose for which the device was designed (for measurement of construction materials) and in accordance with the manufacturer's recommendations for use.

ITEM 7 - INDIVIDUAL RESPONSIBLE FOR RADIATION PROGRAM AND  
THEIR TRAINING AND EXPERIENCE

The Radiation Safety Officer (RSO) for the license applied for herein shall be Angela Lorenz. Ms. Lorenz has obtained a high school diploma and a BS degree in Business Management/Accounting from Park College (1990), and completed a gauge manufacturer's training course on November 18, 1987. (Please see attached copy of resume and training certificates [2].) The RSO's duties and responsibilities shall include, but may not be limited to, those listed in Appendix C to (Draft) Regulatory Guide DG-0008.

M. ANGELA LORENZ



**PROFESSIONAL  
OBJECTIVE**

A Construction Inspection Management position where administrative and technical experience will be utilized to integrate construction, project management and quality control.

**EDUCATION**

Park College, Parkville, B.S. May 1990, GPA 3.5/4.0  
Majors: Business Management / Accounting

**COMPUTER  
SKILLS**

Familiar with several computer programs including Lotus 123, Excel, Wordperfect, and Autocad. Experience with Construction Management Systems and development of construction inspection related programs.

**RELATED  
EXPERIENCE**

Engineering Tech / Safety Coordinator, JBM Engineers & Planners  
Lead inspector for construction projects \$2-5.5 million. Responsible for inspection and documentation of city, state and federally funded transportation projects. Managed 3-5 employees and developed numerous construction inspection computer programs. Developed and implemented the safety program.  
May 1994 - Present

Engineering Technician, Bucher, Willis and Ratliff  
Responsible for inspection and documentation of city, state and federally funded transportation projects, construction surveying and materials testing. Autocad, computer program development and data entry as needed to support the structural engineering department.  
September 1991 - May 1994

Engineering Technician, JBM & Associates  
Responsible for inspection and documentation of city, state and federally funded construction projects, surveying and materials testing. Design and draft civil engineering drawings as needed for consultant plan sheets, manual and Autocad.  
September 1987 - April 1990

Technical Drafter, St. Joseph Light and Power  
Responsible for drafting electrical and mechanical drawings as needed by the engineering department. Reviewed completed electrical jobs and revised mapping systems. Field surveying and measuring.  
September 1986 - September 1987

Engineering Technician, Kansas Dept. of Transportation  
Responsible for inspection and documentation of state and federally funded construction projects, construction surveying and materials testing.  
June 1980 - April 1985



# HUMBOLDT SCIENTIFIC, INC. TRAINING COURSE CERTIFICATION

This certifies that

Angela Lyons

has successfully completed a

## RADIOLOGICAL SAFETY AND GAGE USE TRAINING COURSE

covering the following subjects:

1. Fundamentals, types, and basic units of radiation and radiation safety.
2. Biological effects of radiation.
3. Principles and practices of radiation protection.
4. Mathematics and calculations basic to radiological safety.
5. Safe handling of gages containing sealed radioactive sources.
6. Actual gage use in testing of materials.

November 18, 1987  
DATE OF TRAINING

Beta, Inc.

C. Allen Maxwell  
INSTRUCTOR

# KANSAS DEPARTMENT OF TRANSPORTATION OF

Awards this Certificate  
to

Angela Lyons

for

Nuclear Meter Calibration and Use

February 15, 1989

*Rosemary M. Ingram*

District One

*Rex E. Gary*

Rosemary M. Ingram, P.E.  
District Materials Engineer

Rex E. Gary, P.E.  
District Engineer

ITEM 8 -- TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING  
RESTRICTED AREAS

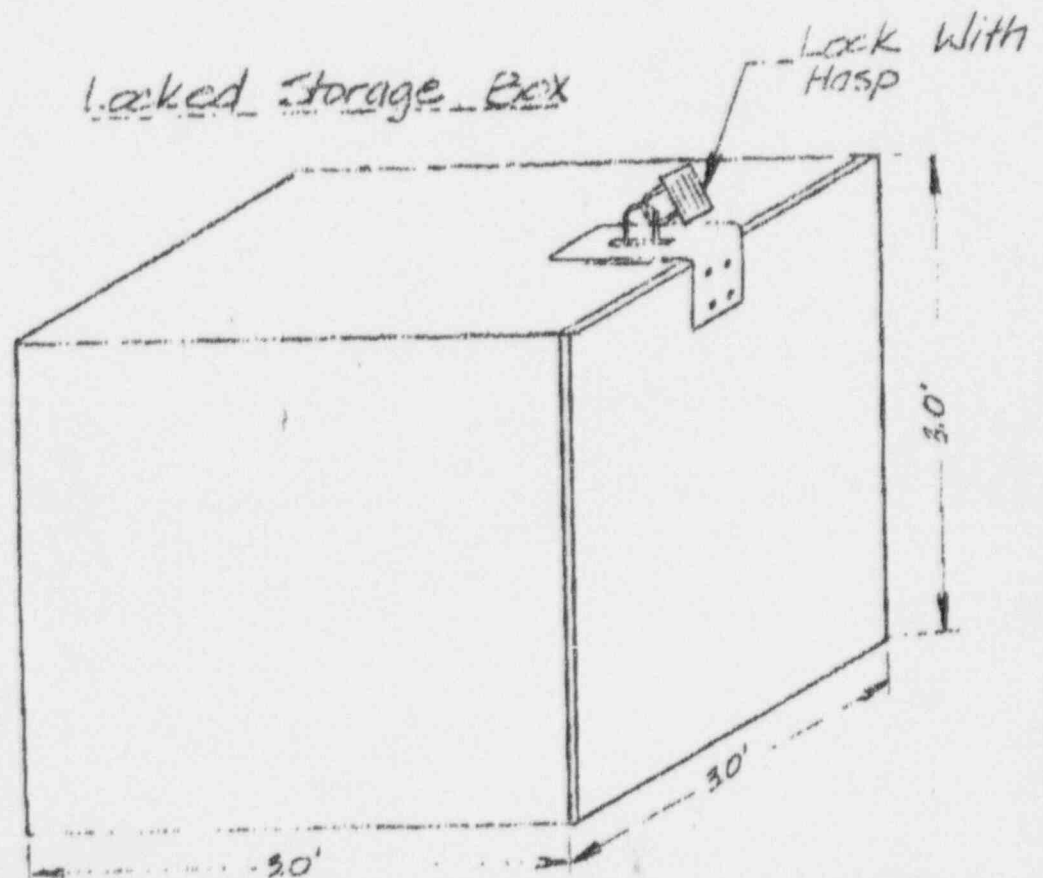
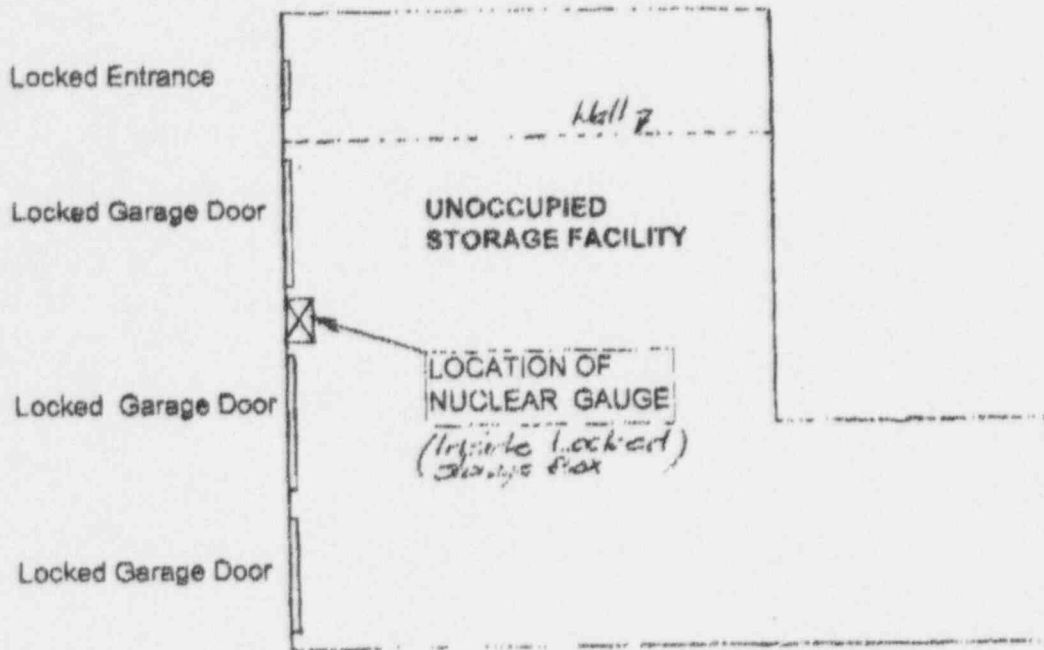
Before an individual is permitted to use a gauge, the individual (a) will have successfully completed a gauge manufacturer's course that meets the criteria of Parts I and II of Appendix D of (Draft) Regulatory Guide DG-0008, (b) will have received copies of, and been trained in, the applicants operating and emergency procedures, and (c) will have been designated as an authorized user by the RSO.

Annual refresher training shall be provided by the RSO.

## ITEM 9 -- FACILITIES AND EQUIPMENT

The (proposed) permanent storage facility is an existing structure (garage) located at the address listed in Item 3 of the license application. The garage is located near the Gladstone city administration building located in a residential area. Licensed material shall be stored in a cabinet within the permanent storage facility (please see attached diagram of permanent storage facility and [proposed] gauge storage enclosure [cabinet]). Both the permanent storage facility and gauge storage enclosure are locked at all times when not in use. During transportation, gauges will be locked within the transport vehicle as required by 10 CFR Part 49. Gauges not in storage shall be maintained under the constant surveillance and immediate control of authorized users.





## ITEM 10 -- RADIATION SAFETY PROGRAM

The radiation safety program shall encompass the following:

- 10.1 Personnel Monitoring Program - Personnel monitoring (Troxler quarterly thermoluminescent dosimeters [TLDs]) shall be provided to individuals for whom personnel monitoring is required by 10 CFR 1502.
- 10.2 Radiation Detection Instruments - At least one survey instrument capable of measuring between 1 microsievert per hour (0.1 millirem per hour) and 1 millisievert per hour (100 millirem per hour) will be available at all times to perform surveys after an incident where damage to the source is suspected. The survey meter will be calibrated by the manufacturer at intervals not to exceed six months.
- 10.3 Leak Testing - Leak tests shall be performed at intervals not to exceed 6 months. Leak test samples to be evaluated by Troxler Electronic Laboratories, Inc., who is specifically licensed to perform such services.
- 10.4 Inventories - Physical inventories to account for all licensed device possessed under the authorization of the license will be performed at 6 month intervals. Inventory records should include the radionuclide and activity (in units of becquerels or curies), manufacturer's name, model number, and serial number of each device. Inventory record(s) to be maintained for a period of three years after the date of the inventory.
- 10.5 Maintenance - Any maintenance (i.e., cleaning) of the gauge will be performed with the radioactive source in the safe shielded position in accordance with the manufacturer's directions or recommendations. More extensive maintenance that requires removal of the source from the shielded position or removal of the source rod from the device will be performed by the gauge manufacturer.
- 10.6 Transportation of Devices to Field Locations - As required by 10 CFR 71.5, the transportation of licensed material (i.e., to field locations [job sites]) shall be conducted in accordance with all applicable requirements of the U.S. Department of Transportation (DOT) regulations, 49 CFR.
- 10.7 Operating and Emergency Procedures - The operating and emergency procedures to include, but may not be limited to, the requirements and prohibitions outlined in Appendix H ("Operating and Emergency Procedures") of (Draft) Regulatory Guide DG-0008. A copy of the operating and emergency procedures shall be provided to all users of the device(s) before usage, and a copy shall be available at each job site.

ITEM 10 -- RADIATION SAFETY PROGRAM *(continued)*

- 10.8 Annual Audit of Radiation Safety Program - An annual audit of the radiation safety program as described in Appendix I of (Draft) Regulatory Guide DG-0008.
- 10.9 Financial Assurance and Recordkeeping for Decommissioning - The amount of licensed material to be possessed under the authorization of the license applied for herein is below the limits requiring financial assurance. Records for decommissioning shall be maintained, as required by 10 CFR 30.35(G).

ITEM 11 -- WASTE MANAGEMENT

Licensed material shall be transferred to a licensed recipient, such as the original manufacturer or other specific licensees authorized to possess the licensed material.



ITEM 12 -- LICENSE FEES

In accordance with 10 CFR 170.31, enclosed is a check in the amount of \$550.00 (payable to the U.S. Nuclear Regulatory Commission) to cover the license application fee.

FEB 14 1997

Norman LeClerq  
Director of Engineering  
City of Gladstone  
7010 North Holmes  
Gladstone, MO 64118

Dear Mr. LeClerq:

Enclosed is your NRC Material License Number 24-26773-01 in accordance with your request.

Please review the enclosed document carefully and be sure that you understand all conditions. If there are any errors or questions, please notify the U.S. Nuclear Regulatory Commission, Region III office at (630) 829-9887 so that we can provide appropriate corrections and answers.

Please note, License Condition 20 limits your possession of licensed material and License Condition 21 forbids the use of sealed sources at certain depths.

Please be advised that your license expires at the end of the day, in the month, and year stated in the license. Unless your license has been terminated, you must conduct your program involving byproduct materials in accordance with the conditions of your NRC license, representations made in your license application, and NRC regulations. In particular, note that you must:

1. Operate in accordance with NRC regulations 10 CFR Part 19, "Notices, Instructions and Reports to Workers; Inspections," 10 CFR Part 20, "Standards for Protection Against Radiation," and other applicable regulations.
2. Not possess and use materials authorized in Items 6, 7, and 8, on the license until:
  - a. You have constructed the facilities and obtained the equipment described in the license application and supporting documentation; and
  - b. You have notified the U. S. Nuclear Regulatory Commission, Region III, ATTN: Chief, Nuclear Materials Licensing Branch, in writing, that activities authorized by the license will be initiated.
3. Notify NRC, in writing, within 30 days:
  - a. When the Radiation Safety Officer permanently discontinues performance of duties under the license or has a name change; or

302138

- b. When the licensee's mailing address changes (no fee is required if the location of byproduct material remains the same).
- 4. In accordance with 10 CFR 30.36(b) and/or license condition, notify NRC, promptly, in writing, and request termination of the license:
  - a. When you decide to terminate all activities involving materials authorized under the license; or
  - b. If you decide not to complete the facility, acquire equipment, or possess and use authorized material.
- 5. Request and obtain a license amendment before you:
  - a. Change Radiation Safety Officers;
  - b. Order byproduct material in excess of the amount, or radionuclide, or form different than authorized on the license;
  - c. Add or change the areas of use or address or addresses of use identified in the license application or on the license; or
  - d. Change ownership of your organization.
- 6. Submit a complete renewal application with proper fee or termination request at least 30 days before the expiration date of your license. You will receive a reminder notice approximately 90 days before the expiration date. Possession of byproduct material after your license expires is a violation of NRC regulations. A license will not normally be renewed, except on a case-by-case basis, in instances where licensed material has never been possessed or used.

In addition, please note that NRC Form 313 requires the applicant, by his/her signature, to verify that the applicant understands that all statements contained in the application are true and correct to the best of the applicant's knowledge. The signatory for the application should be the licensee or certifying official rather than a consultant.

You will be periodically inspected by NRC. Failure to conduct your program in accordance with NRC regulations, license conditions, and representations made in your license application and supplemental correspondence with NRC will result in enforcement action against you. This could include issuance of a notice of violation, or imposition of a civil penalty, or an order suspending, modifying or revoking your license as specified in the General Policy and Procedures for NRC Enforcement Actions. Since serious consequences to employees and the public can result from failure to comply with NRC requirements,

N. LeClerq

-3-

prompt and vigorous enforcement action will be taken when dealing with licensees who do not achieve the necessary meticulous attention to detail and the high standard of compliance which NRC expects of its licensees.

Sincerely,

Original Signed By  
W. P. Reichhold  
Nuclear Materials Licensing Branch

License No.: 24-26773-01  
Docket No.: 030-34311

Enclosure: New License Package

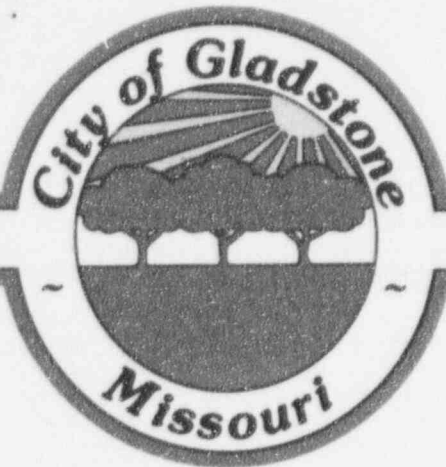
DOCUMENT NAME: M:\03034311.CL7

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	DNMS/RIII <i>WPR</i>								
NAME	WREICHHOLD:jaw								
DATE	02/24/97								

OFFICIAL RECORD COPY





P.O. BOX 10719

7010 NORTH HOLMES

316-436-2200

GLADSTONE, MISSOURI 64118-0719 GLADSTONE, MISSOURI 64118-2646

816-436-2228 FAX

January 27, 1997

United States Nuclear Regulatory Commission  
Region 3  
801 Warrenville Rd.  
Lisle, IL 60532-4351

**Re: Mail Control 302138**

Dear Mr. Bill Reichhold:

The additional information that you requested to complete the review of our new license application is as follows:

1. We wish to have a broad authorization for nuclear gauges.
2. We do not plan to use any gauges that involve lowering sealed radioactive sources below 3 feet.
3. Angela Lorenz and Angela Lyons are the same individual. Lyons is a maiden name.

Please find enclosed a copy of an organizational chart showing the RSO's position and correspondence form management regarding the RSO's authority to stop unsafe practices and conditions, and a copy of our Radiation Safety Program that may address other questions listed in your correspondence.

Sincerely,

Angela Lorenz,  
Radiation Safety Officer

Enclosures: 3

RECEIVED  
FEB 03 1997  
REGION III

*pm: 1-29-97*

**Radiation Safety Program  
City Of Gladstone, Mo**

**Personnel Monitoring Equipment**

Personnel monitoring equipment shall be used by individuals entering restricted areas who are likely to receive a dose in excess of 10% of the allowable limits.

All gauge users will be monitored with a thermoluminescent dosimeter (TLD) when they use the gauge. Troxler TLD Service will be the supplier of the monitoring equipment. The exchange frequency for the TLD's will be every 3 months.

**Radiation Detection Devices**

A Model CDV 700 G-M survey meter will be provided by Gladstone Public Safety for the timely evaluation of the source integrity following an incident at any jobsite. The contact person is Sgt Richard King @ 454-8310.

**Leak Testing**

A leak test will be performed at intervals not to exceed 6 months. The smear will be collected following the suppliers instructions, and sent to Troxler for analyzing. The leak test will be performed by the RSO. The leak test kit is Troxler Model #3880.

**Inventories**

Inventories will be conducted at intervals not to exceed 6 months, to account for all sealed sources and devices received and processed under the license. Records of the inventories shall be maintained for at least 3 years from the date of the inventory. Inventory records will include the radionuclide and amount (in units of becquerels or curies) of by product in each sealed source; the manufacturer's name, model number and serial number of each device containing byproduct material; the location of each sealed source and device; and the date of the inventory.

**Maintenance**

Maintenance will always be performed with the radioactive source in the safe shielded position in accordance with the manufacturers directions or recommendations. More extensive maintenance that requires removal of the source from its shielded position or removal of the source rod from the device will be performed by the gauge manufacturer.

**Transportation of Devices to Field Locations**

The gauge shall be locked, the case locked, and the case tightly secured to the inside of a truck bed or inside the trunk of a car. Copies of DOT regulations and applicable shipping papers, including emergency response information, will be kept in a visible location inside the vehicle at all times while transporting NRC-licensed material. The nuclear gauge will not be stored at a temporary jobsite.

**Operating and Emergency Procedures**

A copy of operating and emergency procedures shall be provided to each operator prior to the use of the gauge.

**Annual Audit of the Radiation Safety Program**

Annual audits will be conducted as described in Appendix I of the Draft Regulatory Guide (DG-0008) at intervals not to exceed 12 months. Documented results will be reviewed promptly by management after the audits completion. Prompt action will be taken to correct deficiencies identified during audits and to inform all personnel of the deficiencies and actions management expects its personnel to take to avoid similar deficiencies. Records of the audits will be maintained for at least 3 years after the record is made. The annual audits will be conducted by the RSO.

**Security**

The nuclear gauge will be stored inside a locked container and placed in the locked storage facility located on the City of Gladstone property, 7010 N. Holmes, Gladstone, Missouri. Security during transport will be

that described above in **Transportation of Devices to Field Locations**. The gauge will not be stored at a temporary jobsite. The gauge operator will stay within 15 feet of the gauge and maintain "line of sight" with the gauge while the device is in use. The radioactive sealed source will not be lowered into the ground more than 3 feet.

**Radiation Safety Officer**

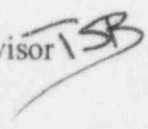
The RSO has the authority to stop unsafe practices and conditions. The RSO will maintain current copies of regulations, review all new and revised regulations and make changes as needed in the procedures that comply with the regulations.

**Refresher Training**

An annual refresher course will be given by the RSO at intervals not to exceed 12 months. The annual refresher course will include the following:

1. "Dry runs" of emergency procedures.
2. Review of the operating and emergency procedures.
3. DOT requirements.
4. Changes in regulations or license conditions.
5. Deficiencies identified during the performance of annual audits of the radiation safety program.

m e m o r a n d u m

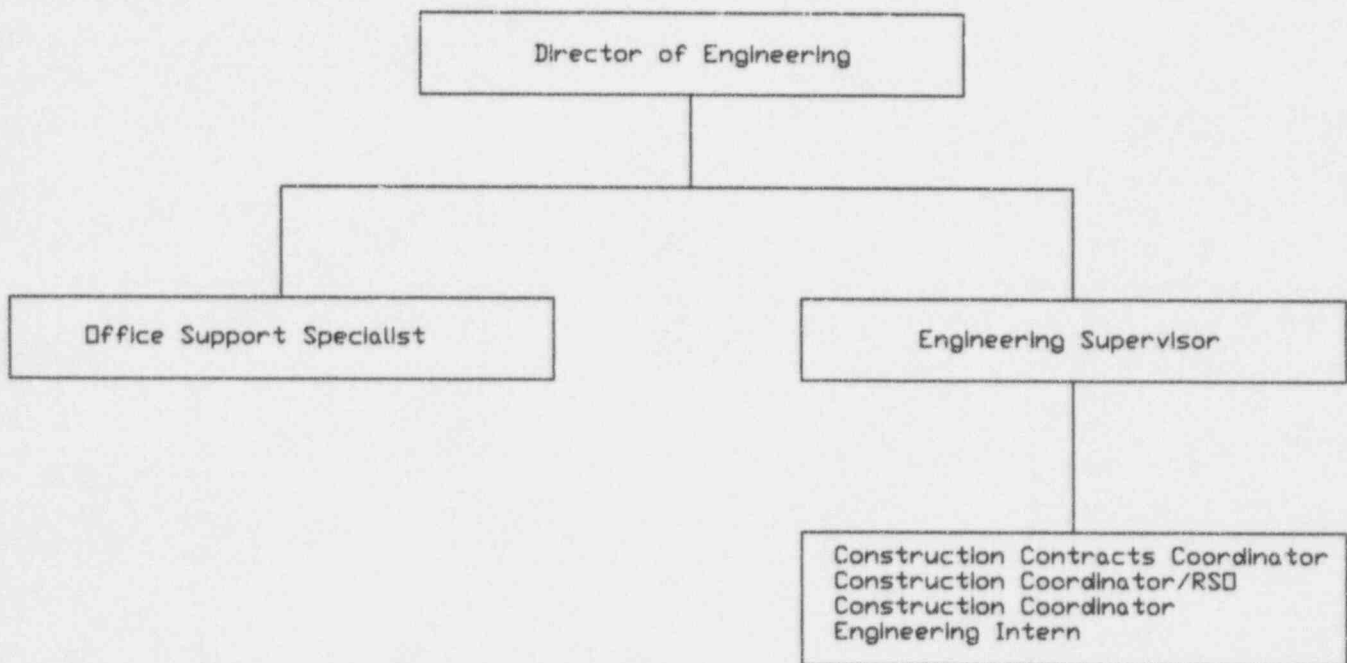
**to:** Norman LeClerq, Director of Engineering  
**from:** T. Scott Brandom, Engineering Supervisor   
**date:** January 28, 1997  
**subject:** Radiation Safety Officer Responsibilities

With the procurement of the Troxler 3440 moisture density gauge, there are responsibilities set forth by the Nuclear Regulatory Commission requiring management's active participation.

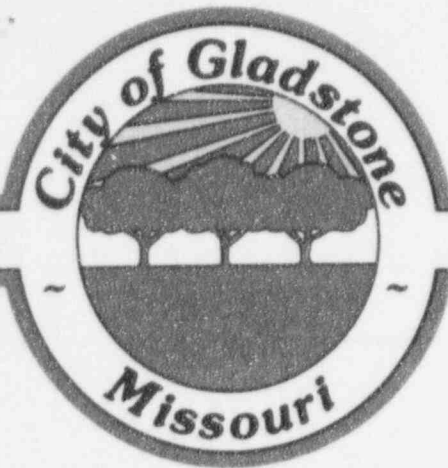
Management is committed that the delegated Radiation Safety Officer, Angi Lorenz, has the authority to stop all unsafe practices and conditions during use, transportation and /or storage of the gauge. Management will assure that the RSO has current copies of regulations, reviews all new and revised regulations, and makes changes as needed in the procedures to comply with the regulations.



## Department of Engineering







P.O. BOX 10719

7010 NORTH HOLMES

816-436-2200

GLADSTONE, MISSOURI 64118-0719 GLADSTONE, MISSOURI 64118-2646

816-436-2228 FAX

January 30, 1997

United States Nuclear Regulatory Commission  
Region 3  
801 Warrenville Rd.  
Lisle, IL 60532-4351

Dear Mr. Bill Reichhold:

Please find enclosed a copy of the information that you requested 01/30/97 to complete our NRC license application. If I can be of any further assistance please contact me at (816) 436-2200. Thank you for your prompt attention.

Sincerely,

Angela Lorenz,  
Radiation Safety Officer

Enclosures: 2

RECEIVED  
FEB 03 1997  
REGION III

Pm: 1-31-97

FEB 03 1997

m e m o r a n d u m

**to:** Norman LeClerq, Director of Engineering  
**from:** T. Scott Brandom, Engineering Supervisor *TSB*  
**date:** January 30, 1997  
**subject:** Radiation Safety Officer Responsibilities

With the procurement of the Troxler 3440 moisture density gauge, there are responsibilities set forth by the Nuclear Regulatory Commission requiring management's active participation.

Management is committed that the delegated Radiation Safety Officer, Angi Lorenz, has the authority to stop all unsafe practices and conditions during use, transportation and /or storage of the gauge. Management will assure that the RSO has current copies of regulations, reviews all new and revised regulations, and makes changes as needed in the procedures to comply with the regulations. Management will also participate in the annual audit of the Radiation Safety Program and will review results at the audits completion to be assured that the RSO remains in compliance with the regulations.

**Radiation Safety Program  
City Of Gladstone, Mo**

**Personnel Monitoring Equipment**

Personnel monitoring equipment shall be used by individuals entering restricted areas who are likely to receive a dose in excess of 10% of the allowable limits.

All gauge users will be monitored with a thermoluminescent dosimeter (TLD) when they use the gauge. Troxler TLD Service will be the supplier of the monitoring equipment. The exchange frequency for the TLD's will be every 3 months.

**Radiation Detection Devices**

A Model CDV 700 G-M survey meter will be provided by Gladstone Public Safety for the timely evaluation of the source integrity following an incident at any jobsite. The contact person is Sgt Richard King @ 454-8310.

**Leak Testing**

A leak test will be performed at intervals not to exceed 6 months. The smear will be collected following the suppliers instructions, and sent to Troxler for analyzing. The leak test will be performed by the RSO. The leak test kit is Troxler Model #3880.

**Inventories**

Inventories will be conducted at intervals not to exceed 6 months, to account for all sealed sources and devices received and processed under the license. Records of the inventories shall be maintained for at least 3 years from the date of the inventory. Inventory records will include the radionuclide and amount (in units of becquerels or curies) of by product in each sealed source; the manufacturer's name, model number and serial number of each device containing byproduct material; the location of each sealed source and device; and the date of the inventory.

**Maintenance**

Maintenance will always be performed with the radioactive source in the safe shielded position in accordance with the manufacturers directions or recommendations. More extensive maintenance that requires removal of the source from its shielded position or removal of the source rod from the device will be performed by the gauge manufacturer.

**Transportation of Devices to Field Locations**

The gauge shall be locked, the case locked, and the case tightly secured to the inside of a truck bed or inside the trunk of a car. Copies of DOT regulations and applicable shipping papers, including emergency response information, will be kept in a visible location inside the vehicle at all times while transporting NRC-licensed material. The nuclear gauge will not be stored at a temporary jobsite. The gauge will be secured in the transporting vehicle during periods of non-use.

**Operating and Emergency Procedures**

A copy of operating and emergency procedures shall be provided to each operator prior to the use of the gauge.

**Annual Audit of the Radiation Safety Program**

Annual audits will be conducted as described in Appendix I of the Draft Regulatory Guide (DG-0008) at intervals not to exceed 12 months. Documented results will be reviewed promptly by management after the audits completion. Prompt action will be taken to correct deficiencies identified during audits and to inform all personnel of the deficiencies and actions management expects its personnel to take to avoid similar deficiencies. Records of the audits will be maintained for at least 3 years after the record is made. The annual audits will be conducted by the RSO.

### **Security**

The nuclear gauge will be stored inside a locked container and placed in the locked storage facility located on the City of Gladstone property, 7010 N. Holmes, Gladstone, Missouri. Security during transport will be that described above in **Transportation of Devices to Field Locations**. The gauge will not be stored at a temporary jobsite. The gauge will be secured in the transporting vehicle during periods of non-use. The gauge operator will stay within 15 feet of the gauge and maintain "line of sight" with the gauge while the device is in use. The radioactive sealed source will not be lowered into the ground more than 3 feet.

### **Radiation Safety Officer**

The RSO has the authority to stop unsafe practices and conditions. The RSO will maintain current copies of regulations, review all new and revised regulations and make changes as needed in the procedures that comply with the regulations.

### **Refresher Training**

An annual refresher course will be given by the RSO at intervals not to exceed 12 months. The annual refresher course will include the following:

1. "Dry runs" of emergency procedures.
2. Review of the operating and emergency procedures.
3. DOT requirements.
4. Changes in regulations or license conditions.
5. Deficiencies identified during the performance of annual audits of the radiation safety program.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION III  
801 WARRENVILLE ROAD  
LISLE, ILLINOIS 60532-4351

December 31, 1996

Angela Lorenz  
Radiation Safety Officer  
City of Gladstone  
7010 North Holmes  
Gladstone, MO 64118

SUBJECT: ACKNOWLEDGEMENT OF CORRESPONDENCE  
(Letter & Application Dated 12/12/96)

Dear Licensee:

In response to your request, we have completed the initial processing, which is an administrative review of your application for a(n):

☒ New License                      ☐ Amendment                      ☐ Renewal  
☐ Termination                      ☐ Auth User (Amendment not required)  
☐ Other \_\_\_\_\_

No administrative deficiencies were identified during this initial review. However, it should be noted that a technical review may identify omissions in the submitted information.

It appears that your request is nonroutine and has been assigned to Bill Reichhold for an expedited review. If you should have any questions please contact Mr. Reichhold at (630) 829-9887.

1. New and amendment actions are normally processed within 90 days, unless we find major deficiencies, or policy issues requiring central program office assistance.
2. Renewal actions are normally processed within 180 days, however, under timely filing (before expiration), you may continue to operate under your existing license.
3. Termination actions are normally processed within 90 days, unless confirmatory surveys following decontamination/decommissioning activities are involved.

A copy of your correspondence has been forwarded to our Licensing Fee and Debt Collection Branch (301/415-6097) for approval of the fee category and amount, if required.

If you have a compelling safety or business-related reason for requesting expedited review, please contact the Materials Licensing Branch at (630) 829-9887. We will try to complete your request as soon as practicable. Any correspondence about this request should reference the control number.

Nuclear Materials Support Branch

Mail Control No. 302138  
License No. 24-26773-01