

OFFICIAL PUBLIC COPY

April 20, 1995

City of Norfolk  
Department of Public Works  
Division of Streets and Bridges  
ATTN: R. Shaw Whitney, Jr.  
300 E. 17th Street  
Norfolk, VA 23517

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION CONCERNING LICENSE APPLICATION  
DATED JANUARY 31, 1995  
(REFERENCE CONTROL NO.256322;DOCKFT NO. 030-33796)

Gentlemen:

This letter is in reference to your radioactive materials application dated January 31, 1995. The following information is needed to continue our review of your application:

1. Regarding Item 7 of your application, please provide the following:
  - a. Provide management's commitment that the Radiation Safety Officer (RSO) has independent authority to stop unsafe operations and will be given sufficient time to fulfill his radiation safety duties and responsibilities.
  - b. Provide a description of the methods and checks management will use to assure that the RSO has current copies of the regulations, reviews all new and revised regulations, and makes changes, as needed, in licensee procedures to comply with the regulations.
  - c. Provide a copy of an organizational chart that shows the RSO position to demonstrate that the RSO has sufficient independence and direct communication with responsible management officials.
  - d. Provide an additional description of the RSO's duties and responsibilities to fully address those listed in Appendix C of the enclosed Policy and Guidance Directive PG 2-07 (Rev. 0). Refer to page 9 of this guide for assistance in preparing your response.
  
2. In Item 8 of your application you did not describe the training required for personnel who will be authorized to use the portable gauges. Please describe the initial training that employees who will use the portable gauges will receive and describe the annual refresher training these personnel will receive. Refer to page 10 of the enclosed PG 2-07 for assistance in preparing your response.

3. In Item 9 of your application you indicate that you have a Troxler-GM survey meter. Please provide the following information regarding this survey meter:
  - a. Identify who will calibrate the meter and the frequency of this calibration.
  - b. Describe how you will ensure that the survey meter is working properly before use.
  - c. Commit to either have the meter at each jobsite for timely evaluation of source integrity following an incident, or explain how you will have access to the meter for this purpose at any jobsite.

Refer to page 17 of PG 2-07 for assistance in preparing your response.

4. Regarding Item 10 of your application, please describe the frequency of inventories you will perform and describe the records you will maintain of your inventories. Refer to page 19 of PG 2-07 for assistance in preparing your response.
5. Please confirm that you will obtain and maintain current copies of applicable DOT regulations and that you will develop and implement procedures for complying with applicable DOT regulations. Refer to pages 20 through 22 for assistance in preparing your response.
6. After review of your operating and emergency procedures, it appears that your procedures do not include all the elements included in the operating and emergency procedures in Appendix H to PG 2-07. Please review these procedures, compare them to your procedures, and either revise your procedures to include all the elements described in Appendix H or include similar elements in your procedures that provide an equivalent level of safety as those in the appendix. Also, please confirm that a copy of your operating and emergency procedures will be available at each job site. Refer to pages 22 and 23 of PG 2-07 for assistance in preparing your response.
7. Section 20.1101 of 10 CFR Part 20 requires, in part, that a licensee review, at least annually, the content and implementation of its radiation programs. You did not describe such a program in your license application. Please review Item 10.8 of PG 2-07 and provide a description of your audit program as described in this guide.

Our review of your license request will continue upon receipt of the above referenced information. Please forward two copies of your reply and refer to Control Number 256322. If you wish, replies may be transmitted via electronic facsimile (FAX) to (404) 331-7437. You should then mail the original copy of any electronically transmitted documents.

City of Norfolk

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In order to continue prompt review of your application, we request that you respond to this letter within 30 calendar days from the date of this letter.

If you have any questions, please call me at (404) 331-0344.

Sincerely,

Jay L. Henson  
Materials License Reviewer  
Nuclear Materials Licensing Section

Enclosure: PG 2-07

SEND TO PUBLIC DOCUMENT ROOM?		YES		NO		
OFFICE	RII DRSS	RII DRSS				
SIGNATURE						
NAME	JHenson	JPotter				
DATE	04 / 20 / 95	04 / 20 / 95	04 / / 95	04 / / 95	04 / / 95	04 / / 95
COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY

DOCUMENT NAME: G:\DRSS\NMLS\256322D.JLH

(FOR LFMS USE)  
INFORMATION FROM LTS  
.....

BETWEEN:

License Fee Management Branch, ARM  
and  
Regional Licensing Sections

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

LICENSE FEE TRANSMITTAL

A. REGION II

1. APPLICATION ATTACHED  
Applicant/Licensee: CITY OF NORFOLK  
Received Date: 950221  
Docket No.: 3033796  
Control No.: 256322  
License No.: \_\_\_\_\_  
Action Type: New Licensee

2. FEE ATTACHED  
Amount: 570.00  
Check No.: 7780

3. COMMENTS

Signed Nancy Witt  
Date FEB 12 1995  
B. LICENSE FEE MANAGEMENT BRANCH (Check when a Newstone 03 is entered in) 8370

1. Fee Category and Amount: 3P

2. Correct Fee Paid. Application may be processed for:  
Amendment \_\_\_\_\_  
Renewal License \_\_\_\_\_

3. OTHER

Signed Robert Mays  
Date 2/15/95

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 2.25 HOURS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MRIB) 7741 U.S. NUCLEAR REGULATORY COMMISSION WASHINGTON, DC 20555 AND TO THE PAPERWORK REDUCTION PROJECT (1550-0120) OFFICE OF MANAGEMENT AND BUDGET WASHINGTON, DC 20503

### APPLICATION FOR MATERIAL LICENSE

**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 MATERIAL SAFETY AND SAFEGUARDS  
U.S. NUCLEAR REGULATORY COMMISSION  
WASHINGTON, DC 20555

**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 III  
475 HIGHLAND ROAD  
KING OF PRUSSIA, PA 19381-1414

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

NUCLEAR MATERIALS SAFETY SECTION  
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV  
101 MARILYN STREET, NW, SUITE 2000  
ATLANTA, GA 30321

**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  
770 ROUSEVELT ROAD  
LENEXA, MO 64584

ARKANSAS, COLORADO, IDAHO, KANSAS, LOUISIANA, MONTANA, NEBRASKA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, SOUTH DAKOTA, TEXAS, UTAH, OR WYOMING, SEND APPLICATIONS TO

MATERIAL RADIATION PROTECTION SECTION  
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV  
400 RYAN PLAZA, DRIVE, SUITE 300  
ARLINGTON, TX 76010-9964

ALASKA, ARIZONA, CALIFORNIA, HAWAII, NEVADA, OREGON, WASHINGTON, AND U.S. TERRITORIES AND POSSESSIONS IN THE PACIFIC, SEND APPLICATIONS TO

NUCLEAR MATERIALS SAFETY SECTION  
U.S. NUCLEAR REGULATORY COMMISSION, REGION V  
1450 MARIA LANE  
WAUNUKO, HI 96794

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**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 all that apply)

- 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 Norfolk  
Department of Public Works  
Division of Streets and Bridges  
300 E. 17th St., Norfolk, Va. 23517

3. ADDRESSES WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

City of Norfolk  
Division of Streets and Bridges  
300 E. 17th Street  
Norfolk, Va. 23517

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION: **Frederick W. Rudiger**  
**Superintendent, Division of Streets and Bridges**

TELEPHONE NUMBER

804-441-2993

SUBMIT ITEMS 5 THROUGH 11 ON A 4 1/2" 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 physical form, and c. maximum amount which will be possessed at any one time. **See attachment**

6. PURPOSES FOR WHICH LICENSED MATERIAL WILL BE USED. **See attachment**

7. INDIVIDUALS RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE. **See attachment**

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS. **See attachment**

9. FACILITIES AND EQUIPMENT. **See attachment**

10. RADIATION SAFETY PROGRAM. **See attachment**

11. WASTE MANAGEMENT. **See attachment**

12. LICENSE FEES. See 10 CFR 171.22 and 171.23.  
FEE CATEGORY: **3 P** AMOUNT ENCLOSURE: \$ **570.00**

13. CERTIFICATION. Applicant certifies that the applicant understands that all statements and representations made in this application are binding upon the applicant.

THE APPLICANT AND ANY FEDERAL AGENCIES THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAME IN ITEM 4, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 17.12, 17.14, 17.15, AND 17.16, AND THAT ALL INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF.

WARNING: FEDERAL STATUTE (18 U.S.C. 1001) MAKES IT A CRIMINAL OFFENSE TO MAKE A FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

SIGNATURE (CERTIFYING OFFICER) *R. Shaw Whitney, Jr.* **R. Shaw Whitney, Jr.** TITLE **Assistant Superintendent** DATE **1-31-95**

**FOR NRC USE ONLY**

TYPE OF FEE <b>AIP</b>	FEE CODE <b>Exp 4</b>	FEE CATEGORY <b>3P</b>	COMMENTS
AMOUNT RECEIVED <b>8570</b>	RECEIPT NUMBER <b>271880</b>		
APPROVED BY <i>Keta Messier</i>			DATE <b>2/28/95</b>

256622

ATTACHMENT TO  
NRC FORM 313 (3-92)

5. RADIOACTIVE MATERIAL:

A.

- 1) Gamma Source Cesium 137 (CS-137)
- 2) Special Form
- 3) 9 mCi per gauge.

B.

- 1) AM 241:BE
- 2) Special Form
- 3) 44 mCi per gauge.

6. PURPOSES FOR WHICH LICENSED MATERIAL WILL BE USED:

- a. For use in a Troxler Model 3400 series, or 4640, portable measuring gauge.
- b. For use in a Troxler Model 3400 series portable measuring gauge.

7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE:

R. Shaw Whitney, Jr.  
Troxler Nuclear Gauge Safety Training Program  
October 4, 1994, Richmond, Virginia  
Instructor Frank Jones

also -

VDOT Nuclear Safety &  
VDOT Nuclear Hazmat  
Dec 13, 1994, Suffolk, Va.  
Instructors: Robert Lawson & Greg McGann

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS:

Two (2) other employees have been trained by the Troxler Nuclear Gauge Safety Training Program on October 4, 1994, Richmond, Virginia, by Instructor Frank Jones.

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**9. FACILITIES AND EQUIPMENT:**

**a. Facility.**

Storage of the nuclear gauge will be in a padlocked locker within a locked storage room. Access to locker will only be to an authorized user. Limited access by Facility Team Leader only. (Please see attachment 1.A.)

**b. Equipment.**

<u>Type</u>	<u>Radiation Detected</u>	<u>Sensitivity Range</u>	<u>Use</u>
Troxler-GM	Beta, Gamma	0-50 mK/HR	Surveying

Personnel Monitoring Devices -  
Type K TLD Supplied by Landauer Inc.

**10. RADIATION SAFETY PROGRAM**

**a. Radiation Safety Officer.**

R. Shaw Whitney, Jr., has been designated as the Division 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 in the license is up-to-date.
- 2) To 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 and the NRC regulations.
- 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. Personnel monitoring equipment will consist of TLD's supplied by Troxler Radiation Monitoring Services on a quarterly exchange period.
- 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 ensure 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.

**b. Operating Procedures.**

**1) Transportation of Equipment.**

- a) All possible means shall be provided to ensure that the equipment secured in the transporting vehicle and the equipment is away from passenger compartment. When transporting in an enclosed vehicle (van), the vehicle will be locked. When transporting in an open vehicle, the gauge should be securely fastened and locked to the truck bed.
- b) The gauge will be transported in the TROXLER transportation case. Department of Transportation requires that the gauge be transported properly labeled carrying case.
- c) At all times during transport, the operator will have a properly completed Bill of Lading for each gauge.

**2) Utilization Procedures.**

- a) 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.
- b) 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 achievable (ALARA).
- c) 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.

**3) Maintenance and Leak Test Procedures.**

- a) Periodic maintenance will include cleaning the gauge. During any maintenance, you must wear your personnel monitoring device. Accepted cleaning and lubrication procedures developed by the manufacturer will be followed.

- b) No maintenance will be performed in which the radioactive source is removed from the gauge. For this type of maintenance, the gauge will be returned to the manufacturer.
- c) The leak test will be performed using the TROXLER Model 3880 Leak Test Kit. The leak test will be performed using the manufacturer's instructions. Again, the personnel monitoring device will be employed. Gauges will be leak tested at intervals not to exceed six (6) months.

4) Record Keeping in Regards to Facility Decommissioning.

Records of information important to the safe and effective decommissioning of the facility will be maintained in an identified location, until the license is terminated by the Commission. The file shall be entitled "Facility Decommissioning File". The records will include the following:

- a) Records of any leakage involving the spread of contamination, where the contamination remains after cleanup procedures have been exhausted, and/or if the contamination is inaccessible.
- b) Drawings or sketches of areas in facility where radioactive materials are used and/or stored. These drawings will indicate locations of any non-removable contamination.
- c) Records of the cost estimate for the decommissioning of the facility.

c. Emergency Procedures.

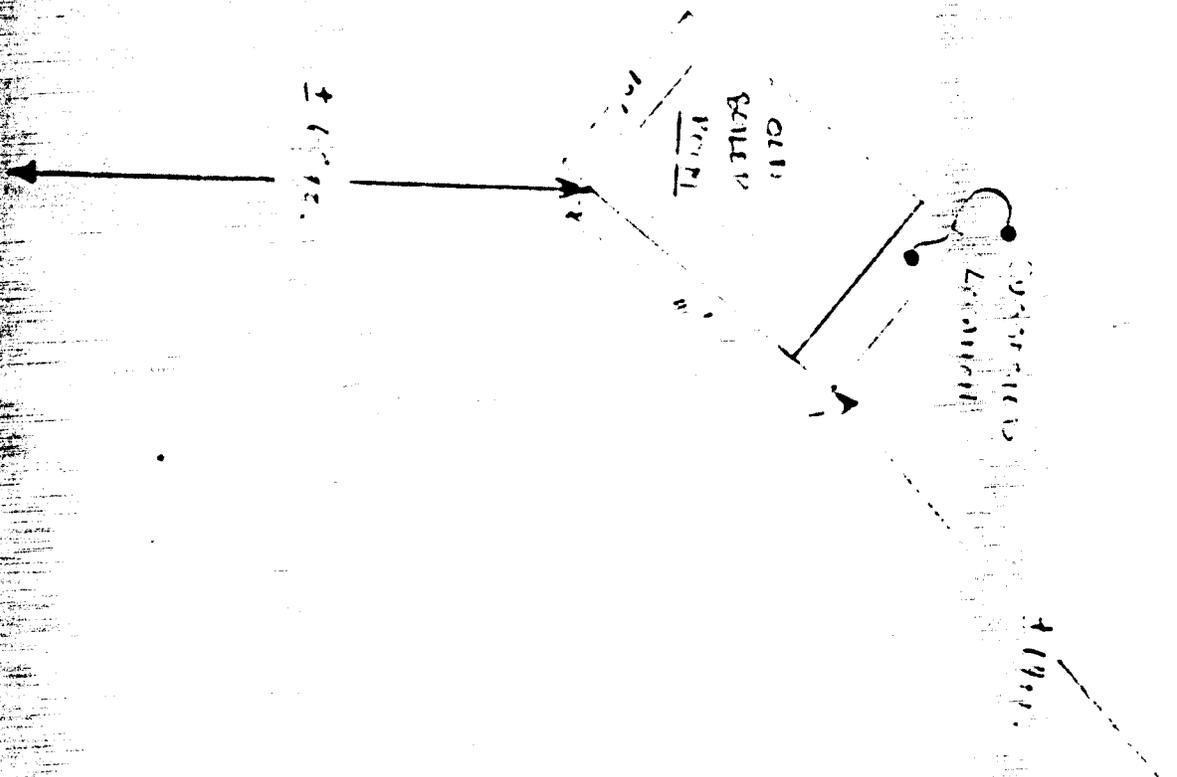
- 1) In the event of physical damage to a gauge, the following will be performed:
  - a) Immediately cordon off an area around the gauge. An area radius of 15 feet will be sufficient.
  - b) If a vehicle is involved, it must be stopped until the extent of contamination, if any, can be established.
  - c) A visual inspection of the gauge is to be made to determine if the source housing and/or shielding has been damaged.
  - d) At the earliest possible time, when the situation is under control, you must contact R. Shaw Whitney, Jr., at 804-441-2952, describe the present conditions and follow the instructions of the Radiation Safety Officer.
- 2) In the event the gauge is lost or stolen, immediately notify the Radiation Safety Officer as listed above in c.1).a).

**11. WASTE MANAGEMENT.**

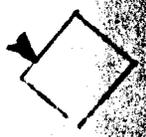
**Disposition of the gauge will be by transfer to either another licensee specifically licensed to possess the radioactive material or to a licensed disposal facility. The manufacturer will assist in locating a properly licensed disposal facility.**

REF MAP TO 770

Map



Map



ELEVATED  
ASPHALT  
ROAD

256322

AWD