



ENGINEERING CONSULTANTS, INC.

DL-051695-05

5575 Hollins Road · Roanoke, VA 24019 · (703) 342-4650

May 16, 1995

U. S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street, N.W.  
Atlanta, Georgia 30323

Attention: Chief, Nuclear Materials

Reference: Amendment of USNRC Materials  
License No. 45-25249-01

Gentlemen:

The storage location of the gauging device(s) will be changed to:

**7806 Plantation Road  
Roanoke, Virginia 24019**

The RSD will change to:

**Leonard W. Wagoner**

Mr. Wagoner has successfully completed the Humboldt Scientific, Inc. Training Course for the use of Nuclear Testing Equipment. Date of training - May 14, 1994. Other nuclear safety information remains the same. Thank you for your prompt attention.

Very truly yours,

TRIGON ENGINEERING CONSULTANTS, INC.

A handwritten signature in cursive script that reads "Leonard W. Wagoner".

Leonard W. Wagoner, P.E.  
Branch Manager

LWW:geb

256477

**MATERIALS LICENSE**

Amendment No. 1

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.

<p>1. Licensee Trigon Engineering Consultants, Inc.</p> <p>2. 5575 Hollins Road Roanoke, Virginia 24019</p>	<p>In accordance with letter dated <b>May 16, 1995</b></p> <p>3. License Number <b>45-25249-01</b> is <b>amended</b> in its entirety to read as follows:</p> <hr/> <p>4. Expiration Date <b>May 31, 1998</b></p> <hr/> <p>5. Docket or Reference No. <b>030-33165</b></p>
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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 source registered pursuant to 10 CFR 32.210 or an equivalent Agreement State regulation	A. No single source to exceed 11 millicuries (407 MBq)
B. Americium 241	B. Sealed neutron source registered pursuant to 10 CFR 32.210 or an equivalent Agreement State regulation	B. No single source to exceed 50 millicuries (1.85 GBq)

9. Authorized Use:

- A. Sealed source(s) contained in compatible portable gauging devices (registered pursuant to 10 CFR 32.210 or an equivalent Agreement State regulation) for measuring properties of materials.

**CONDITIONS**

- 10. Licensed material shall be used only 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. In addition, when licensed material is no longer required at temporary jobsites it shall be promptly returned to and stored at the licensee's facilities at 7806 Plantation Road, Roanoke VA 24019.
- 11. The Radiation Protection Officer for the activities authorized by this license is Leonard W. Wagoner.

9508160282 950710  
PDR ADOCK 03033165  
C PDR

*Handwritten initials: LL do*

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**License Number  
45-25249-01Docket or Reference Number  
030-33165

Amendment No. 1

**CONDITIONS**

(cont'd)

12. Licensed material shall be used by, or under the supervision and in the physical presence of, **Leonard W. Wagoner** or individuals who have been trained in the licensee's standard operating and emergency procedures and have satisfactorily completed at least one of the following:

- A. The device manufacturer's training course for safe use and handling of portable gauging devices containing licensed material, or
- B. A portable gauge training program conducted in accordance with the provisions of an NRC or Agreement State License.

The licensee shall maintain records of individuals designated as users and their training for five years following the last use of licensed material by the individual.

13. Sealed sources containing licensed material shall not be opened or removed from the gauging device by the licensee.

14. A.(1) The source(s) specified in Item 7, shall be tested for leakage and/or contamination at intervals not to exceed 6 months. Any source received from another person which is not accompanied by a certificate indicating that a test was performed within 6 months before the transfer shall not be put into use until tested.

(2) Notwithstanding the periodic leak test required by this condition, any licensed sealed source is exempt from such leak tests when the source contains 100 microcuries or less of beta and/or gamma emitting material or 10 microcuries or less of alpha emitting material.

B. Any source in storage and not being used need not be tested. When the source is removed from storage for use or transfer to another person, it shall be tested before use or transfer.

C. The 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, the source shall be removed from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. A report shall be filed within 5 days of the date the leak test result is known with the U. S. Nuclear Regulatory Commission, Region II, Division of Radiation Safety and Safeguards, Nuclear Material Inspection Section, 101 Marietta Street, Suite 2900, Atlanta, Georgia 30323. The report shall specify the source involved, the test results, and corrective action taken. Records of leak test results shall be kept in units of microcuries and shall be maintained for inspection by the Commission. Records may be disposed of following Commission inspection.

D. The licensee is authorized to collect leak test samples for analysis by Humboldt Scientific, Inc. or tests for leakage and/or contamination shall be performed by persons specifically licensed by the Commission or an Agreement State to perform such services.

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number	45-25249-01
Docket or Reference Number	030-33165
Amendment No. 1	

**CONDITIONS**

(cont'd)

15. The licensee may transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."
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. Records of inventories shall be maintained for 5 years from the date of each inventory, and shall include the quantities and kinds of byproduct material, manufacturer's name and model numbers, location of the sources and/or devices, and the date of the inventory.
17. The licensee shall maintain records of information important to safe and effective decommissioning at location specified in Condition 10. pursuant to the provisions of 10 CFR 30.35(g) until this license is terminated by the Commission.
18. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of licensed material to quantities below the minimum specified 10 CFR 30.35(d) for establishing decommissioning financial assurance.
19. 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.
20. 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.
21.
  - A. The licensee may not possess and use materials authorized in Items 6, 7, and 8, until: 1) the licensee has constructed facilities and obtained the equipment described in the application and supporting documentation; and 2) the U.S. Nuclear Regulatory Commission, Region II, ATTN: Chief, Nuclear Materials Inspection Section, has been notified that activities authorized by the license will be initiated.
  - B. 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.

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number	45-25249-01
Docket or Reference Number	030-33165
Amendment No. 1	

**CONDITIONS**

(cont'd)

22. 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 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 April 29, 1993
- B. Letters dated:
  - (1) May 14, 1993 [FAX, extract from license application]
  - (2) May 19, 1993 [FAX, sketch of storage area]
  - (3) May 16, 1995 [change storage location & RSO]
  - (4) June 21, 1995 [ FAX with training certificate for Leonard Wagoner]

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

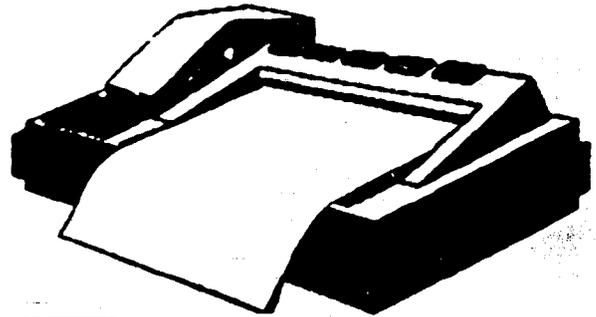
EARL G. WRIGHT

Date JUL 10 1995

By Earl G. Wright  
Region II, Nuclear Materials Licensing Section  
101 Marietta Street, Suite 2900  
Atlanta, GA 30323



ENGINEERING CONSULTANTS, INC.



8875 Mallino Road - Roanoke, VA 24019 • (703) 342-4660

FACSIMILE TRANSMITTAL COVER SHEET

DATE 6-21-95

TIME 8:30

PLEASE DELIVER THE FOLLOWING PAGE(S) TO:

NAME JOHN POTTER

COMPANY NRC

FACSIMILE TELEPHONE NO. \_\_\_\_\_

THIS FACSIMILE IS BEING SENT BY:

NAME \_\_\_\_\_

TRIGON FACSIMILE TELEPHONE NO. 1-703-342-4669

NUMBER OF PAGES (INCLUDING COVER SHEET) 2

IF YOU DO NOT RECEIVE ALL PAGES, PLEASE CALL AS SOON AS POSSIBLE. OUR TELEPHONE NUMBER IS (703)342-4660.

NAME \_\_\_\_\_

COMMENTS \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

# HUMBOLDT SCIENTIFIC, INC.

## NUCLEAR GAGE TRAINING CERTIFICATION

Leonard W. Wagoner

HAS SUCCESSFULLY COMPLETED A CERTIFIED COURSE ON  
RADIATION SAFETY, TRANSPORT AND OPERATION OF  
INSTRUMENTS USING GAMMA AND NEUTRON RADIATION  
TO MEASURE THE PHYSICAL PROPERTIES OF  
CONSTRUCTION MATERIALS

Subjects included were:

Types and basic units of ionizing radiation.  
Calculations related to radiation safety.  
Biological effects of radiation.  
Methods of protection.  
Leak testing procedures.  
Procedures for safe transport and storage.  
Federal and State Regulations.

Accident prevention and procedures.  
Instrument theory and operation.  
Limitations of field maintenance.  
Instrument standardization and calibration.  
Test site selection and preparation.  
Field operation and calculations.  
Types and reasons for measurement errors.

*Michael W. Wagoner*  
Instructor

Humboldt Scientific, Inc.  
551-D Pylon Drive  
Raleigh, NC 27636

Date of Training: May 14, 1994  
Location: Charlotte, NC  
Certificate Number: Z01

Control # 256477

LICENSE FEE REQUIREMENTS

LICENSE FEE AND DEBT COLLECTION BRANCH  
DIVISION OF ACCOUNTING AND FINANCE  
OFFICE OF THE CONTROLLER  
U.S. NUCLEAR REGULATORY COMMISSION  
WASHINGTON, DC 20555-0001

*Attn: Rita Messier*

*Trigon Engineering Consultants, Inc.  
Attn: Leonard W. Wagoner, P.E.  
Branch Manager  
5575 Hallins Road  
Roanoke, VA 24019*

TYPE OF ACTION

NEW LICENSE

RENEWAL OF LICENSE

AMENDMENT TO LICENSE

REQUESTED DATE  
*5/16/95*

LICENSE NUMBER  
*45-25249-01*

CONTROL NUMBER  
*256477*

I. APPLICATION FEE DUE

Your request for a licensing action is subject to the fee(s) in the category(ies) noted below in accordance with Section 170.31 of the enclosed Federal Register notice. Payment of the fee is required prior to the issuance of the license, renewal, or amendment.

FEE CATEGORY	APPLICATION	RENEWAL	AMENDMENT
<i>3P</i>	\$	\$	\$ <i>360</i>
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$

II. FEE NOT REQUIRED

Enclosed is Check No. \_\_\_\_\_ which accompanied your request. The fee is not required because:

- We received your Check No. \_\_\_\_\_ in payment of the fee.
- The Licensing staff has informed us that your request is to be considered as a continuation of your request dated \_\_\_\_\_, Control No. \_\_\_\_\_.
- Your request was combined, prior to review, with your \_\_\_\_\_ request, Control No. \_\_\_\_\_.

FEE(s) DUE	\$
PAYMENT RECEIVED	\$ <i>350</i>
AMOUNT DUE	\$ <i>10</i>

III. CHECK RETURNED

Enclosed is Check No. \_\_\_\_\_ which was returned to us by the bank for:

- INSUFFICIENT FUNDS
- ACCOUNT CLOSED
- OTHER

MAIL THE REPLACEMENT CHECK TO THE ADDRESS LISTED AT THE TOP OF THIS FORM AND REFERENCE THE ABOVE CONTROL NUMBER.

Your request was received without the prescribed application fee.

We received your Check No. *36928* in the amount of \$ *350*. Payment of the additional fee noted above is required.

Your request will increase the scope of your license program. Therefore, your request is subject to the application fee(s) noted above. Refer to Section 170.31 and Footnote 1(d)(2).

Your license expired prior to the receipt of your application for renewal. Therefore, your request is subject to the application fee(s) noted above. Refer to Section 170.31 and Footnote 1(a).

IV. LICENSE ISSUED WITHOUT THE REQUIRED FEE

License No. \_\_\_\_\_, Amendment No. \_\_\_\_\_, issued on \_\_\_\_\_ was issued without the required fee being collected. The fee required is noted in Section I of this form.

The scope of your licensed program was increased. Therefore, your request is subject to the application fee(s) noted in Section I of this form. Refer to Section 170.31 and Footnote 1(d)(2).

Because of the urgency of your request, the license was issued without remittance of the prescribed fee noted in Section I of this form.

MAKE PAYMENT OF THE FEE(S) TO THE U.S. NUCLEAR REGULATORY COMMISSION AND MAIL THE PAYMENT TO THE ADDRESS LISTED AT THE TOP OF THIS FORM. IF WE DO NOT RECEIVE A REPLY FROM YOU WITHIN 30 CALENDAR DAYS FROM THE DATE LISTED BELOW, WE SHALL ASSUME THAT YOU DO NOT WISH TO PURSUE YOUR APPLICATION AND WILL VOID THIS ACTION.

SIGNATURE - LICENSE FEE ANALYST	LFDDB	LFDDB
<i>Rita Messier</i>	<i>[Signature]</i>	<i>[Signature]</i>
	<i>6/19/95</i>	<i>1 1</i>

DISTRIBUTION  
NRC AF 45  
NRC R 100  
Pending Fee File  
Region *II*

DATE  
*6/19/95*

(FOR LFMS USE)  
INFORMATION FROM LTS

Program Code: 03121  
Status Code: 0  
Fee Category: 3p  
Exp. Date: 19980531  
Fee Comments:  
Decom Fin Assur Req'd: N

BETWEEN:  
License Fee Management Branch, ARM  
and  
Regional Licensing Sections

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED

Applicant/Licensee: TRIGON ENGINEERING CONSULTANTS, INC  
Received Date: 950609  
Docket No.: 3033165  
Control No.: 256477  
License No.: 45-25249-01  
Action Type: Amendment

2. FEE ATTACHED

Amount: \$360  
Check No.: 45374

3. COMMENTS

Signed Clayton E. Blaine  
Date 6/13/95

8. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered)

1. Fee Category and Amount: 3p \$360  
2. Correct Fee Paid. Application may be processed for:  
Amendment \_\_\_\_\_  
Renewal \_\_\_\_\_  
License \_\_\_\_\_

3. OTHER

Signed Clayton E. Blaine  
Date 6/13/95

Log	John B. J.
Remitter	TRIGON
Check No.	45374
Amount	\$360
Fee Category	3p
Type of Fee	Ampl
Date Check Rec'd.	6/13/95
Date Completed	6/13/95
By:	CB