

# NELSON ENGINEERING since 1964

Professional Engineers & Land Surveyors

JACKSON, WY • BUFFALO, WY •

WWW.NELSONENGINEERING.NET

April 9, 2013

United States Nuclear Regulatory Commission  
C/o R. Rick Munoz, Health Physicist- Inspector  
1600 E. Lamar Blvd.  
Arlington, TX 76011-4511

ATTN: Licensing Branch



Dear Licensing Director,

I would like to amend Nelson Engineering's Nuclear License number 49-19036-01(copy enclosed). Nelson Engineering has acquired a second office located at 381 North Main Street in Buffalo, Wyoming. Please include this address as a second permanent storage lockdown area under Section 10 of our license. Based on NUREG-1556, Vol. 1, I would like to incorporate this requested change into our complete application. This complete application is an amendment request to take advantage of the new guidance without changing the expiration date of June 30, 2015. Nelson Engineering's Radiation Safety Program will be in full compliance at both offices. One nuclear density gauge will be stored in a locked storage room with the required radiation signage. A layer of bricks will line the closet and an office radiation exposure study will be performed using our calibrated radiation dosimeter. Due to the increased workload, we are requiring a nuclear density gauge to be dispatched from this location to temporary construction work sites in the adjacent vicinity.

I will be the Radiation Safety Officer for both offices and will make annual inspections of our Buffalo, Wyoming office. In addition, our Professional Engineer in charge of our Buffalo office and the technicians who use the gauges are trained and certified in the safe use of nuclear sealed sources. We will conduct our radiation-licensed programs at both offices with meticulous attention to detail and a high standard of compliance.

I understand a fee will be applied to this amendment request but could not find the correct fee in 10 CFR 170.31. Please send billing inquiries to the below address, ATTN: Accounting.

If you have any questions or need further documentation regarding this matter, please feel free to contact me at 1-307-690-2088 or [pete@nelsonengineering.net](mailto:pete@nelsonengineering.net) Please send NRC correspondence to me at the below address.

Sincerely,

Pete Test  
Radiation Safety Officer  
Enc.

**PUBLIC**

- ☐ Immediate Release  
☒ Normal Release

**NON-PUBLIC**

- ☐ A.3 Sensitive-Security Related  
☐ A.7 Sensitive Internal  
☐ Other: \_\_\_\_\_

Reviewer: *FMQ*

Date: *04/16/13*

11 580395



**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.

<p>Licensee</p> <p>1. Nelson Engineering</p> <p>2. P.O. Box 1599 Jackson, Wyoming 83001</p>	<p>In accordance with application dated January 7, 2005</p> <p>3. License number 49-19036-01 is amended in its entirety to read as follows:</p> <p>4. Expiration date June 30, 2015</p> <p>5. Docket No: 030-15260 Reference No.</p>	
<p>6. Byproduct, source, and/or special nuclear material</p> <p>A. Cesium-137</p> <p>B. Americium-241</p>	<p>7. Chemical and/or physical form</p> <p>A. Sealed sources (AEA Technology/QSA, Inc., Model No. CDCW556; Isotope Product Laboratories Model No. HEG-137)</p> <p>B. Sealed neutron sources (AEA Technology/QSA, Inc., Model No. AMNV.997; Isotope Product Laboratories Model Nos. Am1 NO2-3021 or 3027)</p>	<p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>A. No single source to exceed the maximum activity specified in the certificate of registration issued by NRC or an Agreement State</p> <p>B. No single source to exceed the maximum activity specified in the certificate of registration issued by NRC or an Agreement State</p>
<p>9. Authorized use:</p> <p>A. and B. In Troxler Electronic Laboratories, Inc., Model No. 3411B portable gauging devices for measuring physical properties of materials.</p>		

**CONDITIONS**

10. Licensed material may be used or stored at the licensee's facilities located at:
- A. 430 South Cache Street, Jackson, Wyoming 83001.
  - B. Temporary job sites anywhere in the United States where the U.S. Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material.



**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number

49-19036-01

Docket or Reference Number

030-15260

Amendment No. 09

11. Licensed material shall only be used by, or under the supervision and in the physical presence of individuals who have received the training described in application dated January 7, 2005.
12. The Radiation Safety Officer (RSO) for this license is Pete Test.
13. 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 financial assurance for decommissioning.
14. A. Sealed sources shall be tested for leakage and/or contamination at intervals not to exceed the intervals specified in the certificate of registration issued by U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or by an Agreement State.
- B. In the absence of a certificate from a transferor indicating that a leak test has been made within the intervals specified in the certificate of registration issued by U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or by an Agreement State prior to the transfer, a sealed source or detector cell received from another person shall not be put into use until tested.
- C. Sealed sources need not be leak tested if they 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 shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.
- D. The leak test shall be capable of detecting the presence of 0.005 microcurie (185 becquerels) of radioactive material on the test sample. If the test reveals the presence of 0.005 microcurie (185 becquerels) or more of removable contamination, a report shall be filed with the U.S. Nuclear Regulatory Commission in accordance with 10 CFR 30.50(c)(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 IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011, ATTN: Director, Division of Nuclear Materials Safety. The report shall specify the source involved, the test results, and corrective action taken.
- E. Tests for leakage and/or contamination shall be performed by persons specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services. In addition, the licensee is authorized to collect leak test samples but not perform the analysis; analysis of leak test samples must be performed by persons specifically licensed by the Commission or an Agreement State to perform such services.
- F. Records of leak test results shall be kept in units of microcuries and shall be maintained for 3 years.
15. Sealed sources or source rods containing licensed material shall not be opened or sources removed or detached from source rods or gauges by the licensee, except as specifically authorized.



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16. The licensee shall conduct a physical inventory every 6 months, or at other intervals approved by the U.S. Nuclear Regulatory Commission, to account for all sources and/or devices received and possessed under the license.
17. Except for maintaining labeling as required by 10 CFR Part 20 or 71, the licensee shall obtain authorization from the U.S. Nuclear Regulatory Commission before making any changes in the sealed source, device, or source-device combination that would alter the description or specifications as indicated in the respective Registration Certificates issued either by the Commission pursuant to 10 CFR 32.210 or by an Agreement State.
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.
19. Any cleaning, maintenance, or repair of the gauges that requires detaching the source or source rod from the gauge shall be performed only by the manufacturer or other persons specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services.
20.
  - A. If the licensee uses unshielded sealed sources extended more than 3 feet below the surface, the licensee shall use surface casing that extends from the lowest depth to 12 inches above the surface and other appropriate procedures to reduce the probability of the source or probe becoming lodged below the surface. If it is not feasible to extend the casing 12 inches above the surface, the licensee shall implement procedures to ensure that the cased hole is free of obstruction before making measurements.
  - B. If a sealed source or probe containing sealed sources becomes lodged below the surface and it becomes apparent that efforts to recover the sealed source or probe may not be successful, the licensee shall notify the U.S. Nuclear Regulatory Commission and submit the report required by 10 CFR 30.50(b)(2) and (c). The licensee shall not abandon the sealed source or probe without obtaining the Commission's prior written consent.
21. 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."

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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 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 January 7, 2005
  - B. Facsimile dated February 3, 2005
  - C. Facsimile received June 27, 2005



FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date: June 28, 2005

By: \_\_\_\_\_

*Judith Walker*  
Judith Walker, Health Physicist  
Nuclear Materials Licensing Branch  
Region IV  
Arlington, Texas 76011



# NELSON ENGINEERING since 1964

Professional Engineers & Land Surveyors

• JACKSON, WY • BUFFALO, WY •

PO BOX 1599 • 430 S CACHE ST • JACKSON, WY 83001

United States Nuclear Regulatory Commission  
c/o R. Rick Munoz, Health Physicist - Inspector  
1600 E Lamar Blvd  
Arlington TX 76011-4511



APR 12 2013





DATE

04/16/2013

NAME AND ADDRESS OF APPLICANT AND/OR LICENSEE

Nelson Engineering  
ATTN: Pete Test  
Radiation Safety Officer  
P.O. Box 1599  
Jackson, WY 83001

LICENSE NUMBER

49-19036-01

MAIL CONTROL NUMBER

580395

LICENSING AND/OR TECHNICAL REVIEWER

cmurnahan

*cm*

This is to acknowledge the receipt of your:

☒ LETTER and/or ☐ APPLICATION

DATED: 04/09/2013

The initial processing, which included an administrative review, has been performed.

☒ AMENDMENT ☐ TERMINATION ☐ NEW LICENSE ☐ RENEWAL

- ☒ There were no administrative omissions identified during our initial review.
- ☐ This is to acknowledge receipt of your application for renewal of the material(s) license identified above. Your application is deemed timely filed, and accordingly, the license will not expire until final action has been taken by this office.
- ☐ Your application for a new NRC license did not include your taxpayer identification number. Please fill out NRC Form 531, located at the following link:

<http://www.nrc.gov/reading-rm/doc-collections/forms/nrc531.pdf>

Send the completed NRC Form 531, by facsimile, to the following number: (301) 415-5387

A copy of your action has been emailed to our License Fee and Accounts Receivable Branch, in our Headquarters office in Rockville, MD. You will be contacted separately if there is a fee issue involved.

Your application has been assigned the above listed **MAIL CONTROL NUMBER**. When calling to inquire about this action, please refer to this control number. Your application has been forwarded to a technical reviewer. Please note that the technical review, which is normally completed within 180 days for a renewal application (90 days for all other requests), may identify additional omissions or require additional information. If you have any questions concerning the processing of your application, our contact information is listed below:

Region IV  
U. S. Nuclear Regulatory Commission  
DNMS/NMSB - B  
1600 E. Lamar Blvd.  
Arlington, TX 76011-4511  
(817) 200-1103 or (817) 200-1140

*reg mail to lic  
4-16-13*

BETWEEN:

Accounts Receivable/Payable  
and  
Regional Licensing Branches

[ FOR ARPB USE ]  
INFORMATION FROM WBL

Program Code: 03121  
Status Code: Pending Amendment  
Fee Category: 3P  
Exp. Date: 06/30/2015  
Fee Comments:  
Decom Fin Assur Reqd: N

## License Fee Worksheet - License Fee Transmittal

### A. REGION

#### 1. APPLICATION ATTACHED

Applicant/Licensee: NELSON ENGINEERING  
Received Date: 04/12/2013  
Docket Number: 3015260  
Mail Control Number: 580395  
License Number: 49-19036-01  
Action Type: Amendment

#### 2. FEE ATTACHED

Amount: \_\_\_\_\_

Check No.: \_\_\_\_\_

#### 3. COMMENTS

Signed: \_\_\_\_\_

*Colleen Murnahan*

Date: \_\_\_\_\_

*4-12-13*

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

1. Fee Category and Amount: \_\_\_\_\_

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

Amendment: \_\_\_\_\_

Renewal: \_\_\_\_\_

License: \_\_\_\_\_

3. OTHER \_\_\_\_\_

Signed: \_\_\_\_\_

Date: \_\_\_\_\_