

**From:** [Laura Cender](#)  
**To:** [kbierk@baerengineering.com](mailto:kbierk@baerengineering.com)  
**Subject:** NRC License Renewal Request - Baer Engineering, LLC - Additional Information Required  
**Date:** Wednesday, May 10, 2023 2:18:00 PM  
**Attachments:** [NRC Portable Gauge Renewal Application.pdf](#)  
[Model Delegation of Authority to Radiation Safety Officer.docx](#)

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Hello Kyle,

Thank you for taking time out of your day to discuss your pending NRC license renewal request. As we discussed, please provide a signed and dated response to the following items.

1. Please provide a leak test for the density gauge that was previously stored at 313 N. Jackson St.
2. Please clarify the density gauge model to be listed on the license, or indicate if the overall possession limits should increase to accommodate new device models.
3. Please complete and submit the attached portable gauge renewal application. Additional information relating to each question is described in Section 8 of NRC guidance document [NUREG 1556 Vol. 1 Rev. 2](#)
4. I forgot to mention this during our call, but please also include a Delegation of Authority memo formally re-affirming your acceptance of Radiation Safety Officer responsibilities. A model memo is attached for your convenience and should be signed by both you and a member of your senior management.

Please feel free to reach out to me through email or by phone at 630-829-9712 with any questions. Please submit your signed and dated response by no later than Friday, June 2, 2023.

Take care,  
Laura

Laura Cender  
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Materials Licensing Branch  
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**APPENDIX B**

**SUGGESTED FORMAT FOR PROVIDING INFORMATION REQUESTED IN  
ITEMS 5 THROUGH 11 OF  
U.S. NUCLEAR REGULATORY COMMISSION FORM 313**

**Suggested Format for Providing Information Requested in  
Items 5 through 11 of  
U.S. Nuclear Regulatory Commission Form 313**

**Items 5 and 6: Materials To Be Possessed and Proposed Uses**

Yes	No	Radionuclide	Manufacturer or Distributor Model No.	Quantity	Use as Listed on SSD Registration Certificate	Specify Other Uses Not Listed on SSD Registration Certificate
		Cesium-137	Gauge manufacturer (or distributor) and model number:	Specify activity per source and number of gauges requested.	Yes <input type="checkbox"/> Specific description of the gauge use:	<input type="checkbox"/> Not applicable <hr/> <input type="checkbox"/> Uses are: <hr/> (Submit safety analysis supporting safe use.)
		Americium-241	Gauge manufacturer (or distributor) and model number:	Specify activity per source and number of gauges requested.	Yes <input type="checkbox"/> Specific description of the gauge use:	<input type="checkbox"/> Not applicable <hr/> <input type="checkbox"/> Uses are: <hr/> (Submit safety analysis supporting safe use.)

Yes	No	Radionuclide	Manufacturer or Distributor Model No.	Quantity	Use as Listed on SSD Registration Certificate	Specify Other Uses Not Listed on SSD Registration Certificate
		Californium-252	Gauge manufacturer (or distributor) and model number:	Specify activity per source and number of gauges requested.	Yes Specific description of the gauge use:	<input type="checkbox"/> Not applicable <hr/> Uses are: <hr/> (Submit safety analysis supporting safe use.)
		Radium-226	Gauge manufacturer (or distributor) and model number:	Specify activity per source and number of gauges requested.	Yes Specific description of the gauge use:	<input type="checkbox"/> Not applicable <hr/> <input type="checkbox"/> Uses are: <hr/> (Submit safety analysis supporting safe use.)
		Other Isotope (Specify):	Gauge manufacturer (or distributor) and model number:	Specify activity per source and number of gauges requested.	Yes Specific description of the gauge use:	<input type="checkbox"/> Not applicable <hr/> <input type="checkbox"/> Uses are: <hr/> (Submit safety analysis supporting safe use.)
Is financial assurance required? If yes, submit evidence of financial assurance.						

**Items 7 through 11: Training and Experience,  
Facilities and Equipment, Radiation Safety Program,  
and Waste Disposal**

Item No. and Title	Suggested Response	Yes	Alternative Procedures Attached
<p><b>7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE— RADIATION SAFETY OFFICER</b></p> <p>Name: _____</p>	<p>Documentation demonstrating the proposed radiation safety officer's training and experience (e.g., certificate of completion of the RSO's course and/or the authorized user's course).</p>	<p>Submit applicable documentation.</p>	
<p><b>8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS</b></p>	<p>Before using licensed materials, authorized users will have successfully completed one of the training courses described in the "Criteria" part of the section titled, "Training for Individuals Working in or Frequenting Restricted Areas" in NUREG-1556, Vol. 1, Rev. 2, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Portable Gauge Licenses."</p>	<p align="center"><input type="checkbox"/></p>	<p align="center"><input type="checkbox"/></p>
<p><b>9. FACILITIES AND EQUIPMENT</b></p>	<p>Provide a facility diagram for each permanent portable gauge storage location. Include on the diagram the use of adjacent areas (including above and below), and information relevant to public dose and security as discussed in Sections 8.10.5, "Public Dose," and 8.10.6, "Operating, Emergency, and Security Procedures," respectively, in NUREG-1556, Vol. 1, Rev. 2, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Portable Gauge Licenses"</p>	<p>Submit applicable documentation.</p>	

Item No. and Title	Suggested Response	Yes	Alternative Procedures Attached
<b>10.1 RADIATION SAFETY PROGRAM—AUDIT PROGRAM</b>	The applicant should not submit its audit program to the NRC for review during the licensing phase. The audit program will be reviewed during NRC inspections.	Need Not Be Submitted with Application	
<b>10.2 RADIATION SAFETY PROGRAM—RADIATION MONITORING INSTRUMENTS</b>	We will either possess and use, or have access to and use, a radiation survey meter that meets the criteria in the section titled, “Radiation Safety Program—Radiation Monitoring Instruments” in NUREG–1556, Vol. 1, Rev. 2, “Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Portable Gauge Licenses,” in the event of an incident.	<input type="checkbox"/>	<input type="checkbox"/>
<b>10.3 RADIATION SAFETY PROGRAM—MATERIAL RECEIPT AND ACCOUNTABILITY</b>	Physical inventories will be conducted every 6 months or at other intervals approved by the NRC to account for all sealed sources and devices received and possessed under the license.  AND  We will develop, implement, and maintain procedures for ensuring accountability of licensed materials at all times.	<input type="checkbox"/>	<input type="checkbox"/>
<b>10.4 RADIATION SAFETY PROGRAM—OCCUPATIONAL DOSE</b>	We will maintain, for inspection by the NRC, documentation demonstrating that unmonitored individuals are not likely to receive a radiation dose in excess of the limits in 10 CFR 20.1502(a).  OR  We will provide and require the use of individual monitoring devices (dosimetry). All personnel dosimeters that require processing to determine the radiation dose will be processed and evaluated by a NVLAP-approved processor.	<input type="checkbox"/>          <input type="checkbox"/>	<input type="checkbox"/>







Item No. and Title	Suggested Response	Yes	Alternative Procedures Attached
<p><b>10.8 RADIATION SAFETY PROGRAM— MAINTENANCE</b></p>	<p><i>Routine Cleaning and Lubrication</i> We will implement and maintain procedures for routine maintenance of our gauges according to each manufacturer's written recommendations and instructions.</p> <p><i>Nonroutine Maintenance</i> The gauge manufacturer or other person licensed by the NRC or an Agreement State will perform nonroutine maintenance or repair operations that require detaching the source or source rod from the gauge.</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/> The information listed in Appendix F of this NUREG supporting a request to perform nonroutine maintenance in house is attached.</p>
<p><b>10.9 RADIATION SAFETY PROGRAM— TRANSPORTATION</b></p>	<p>The applicant is <i>not</i> required to submit a response about transportation during the licensing process. The NRC will review this issue during inspection.</p>	<p>Need Not Be Submitted with Application</p>	
<p><b>11. WASTE MANAGEMENT— GAUGE DISPOSAL AND TRANSFER</b></p>	<p>The applicant is <i>not</i> required to submit a response about waste management during the licensing process; however, the licensee should establish and include gauge transfer and waste disposal procedures in its radiation safety program.</p>	<p>Need Not Be Submitted with Application</p>	

**Model Delegation of Authority to Radiation Safety Officer**

Memo To: Radiation Safety Officer

From: Management Representative

Subject: Delegation of Authority

You, \_\_\_\_\_, have been appointed radiation safety officer and are responsible for ensuring the safe use of radiation. You are responsible for managing the Radiation Protection Program; identifying radiation protection problems; initiating, recommending, or providing corrective actions; verifying implementation of corrective actions; stopping unsafe activities; and ensuring compliance with regulations. You are hereby delegated the authority necessary to meet those responsibilities, including prohibiting the use of byproduct material by employees who do not meet the necessary requirements and shutting down operations, when justified, to maintain radiation safety. You are required to notify management if staff does not cooperate and does not address radiation safety issues. In addition, you are free to raise issues with the U.S. Nuclear Regulatory Commission at any time. It is estimated that you will spend \_\_\_\_\_ hours per week conducting radiation protection activities.

\_\_\_\_\_  
Signature of Management Representative (Name)  
*Manager Title*

\_\_\_\_\_  
Date

I accept the above responsibilities,

\_\_\_\_\_  
Signature of Radiation Safety Officer

\_\_\_\_\_  
Date

cc: Affected department heads