

**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: <u>Troxler 4640B</u>	Specify activity per source and number of gauges requested. <u>9mci</u> <u>13 Gauges</u>	Yes <input checked="" type="checkbox"/> Specific description of the gauge use: <u>Measuring density of asphalt Roadways.</u>	<input type="checkbox"/> Not applicable <input type="checkbox"/> Uses are: (Submit safety analysis supporting safe use.)
✓		Americium-241	Gauge manufacturer (or distributor) and model number: <u>Troxler 3450</u>	Specify activity per source and number of gauges requested. <u>44mci</u> <u>3 Gauges</u>	Yes <input checked="" type="checkbox"/> Specific description of the gauge use: <u>Measuring density of Asphalt Roadways.</u>	<input type="checkbox"/> Not applicable <input type="checkbox"/> Uses are: (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 <input type="checkbox"/> Specific description of the gauge use: _____ _____ _____ _____ _____	<input type="checkbox"/> Not applicable <input type="checkbox"/> Uses are: _____ (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 <input type="checkbox"/> Specific description of the gauge use: _____	<input type="checkbox"/> Not applicable <input type="checkbox"/> Uses are: _____ (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 <input type="checkbox"/> Specific description of the gauge use: _____	<input type="checkbox"/> Not applicable <input type="checkbox"/> Uses are: _____ (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>7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE— RADIATION SAFETY OFFICER</p> <p>Name: <u>Michael K. Anderson</u></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 align="center">**Attached</p>	<p>Submit applicable documentation.</p>	
<p>8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS</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 checked="" type="checkbox"/></p>	<p align="center"><input type="checkbox"/></p>
<p>9. FACILITIES AND EQUIPMENT</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
10.5 RADIATION SAFETY PROGRAM—PUBLIC DOSE	The applicant is <i>not</i> required to submit a response to the public dose section in a license application. This matter will be examined during NRC inspections.	Need Not Be Submitted with Application	
10.6 RADIATION SAFETY PROGRAM—OPERATING, EMERGENCY, AND SECURITY PROCEDURES	<p>We will implement and maintain the operating, emergency, and security procedures in Appendix G to NUREG–1556, Vol. 1, Rev. 2, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Portable Gauge Licenses." Copies of these procedures will be provided to all gauge users and will be available at each jobsite.</p> <p style="text-align: center;">OR</p> <p>Operating, emergency, and security procedures will be developed, implemented, and maintained and will meet the criteria in section 8.10.6, "Radiation Safety Program—Operating, Emergency, and Security Procedures," NUREG–1556, Vol. 1, Rev. 2, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Portable Gauge Licenses." Copies of these procedures will be provided to all gauge users and will be available at each jobsite.</p>	<p style="text-align: center;"><input type="checkbox"/></p> <p style="text-align: center;"><input checked="" type="checkbox"/></p>	<p><input type="checkbox"/> For this item, checking this box indicates that alternative procedures will be provided as part of the application and that these procedures will be provided to all gauge users and will be available at each jobsite.</p>

Item No. and Title	Suggested Response	Yes	Alternative Procedures Attached
10.8 RADIATION SAFETY PROGRAM— MAINTENANCE	<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 style="text-align: center;">✓</p> <p style="text-align: center;">✓</p>	<p style="text-align: center;"><input type="checkbox"/></p> <p style="text-align: center;"><input type="checkbox"/> The information listed in Appendix F of this NUREG supporting a request to perform nonroutine maintenance in house is attached.</p>
10.9 RADIATION SAFETY PROGRAM— TRANSPORTATION	<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>	
11. WASTE MANAGEMENT— GAUGE DISPOSAL AND TRANSFER	<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>	



HUMBOLDT SCIENTIFIC, INC.

RSO Certification

Michael K. Anderson

HAS SUCCESSFULLY COMPLETED A CERTIFIED
RADIATION SAFETY OFFICER COURSE

Subjects included were:

RSO Duties and Responsibilities

Radiation Safety Practices

Regulatory Requirements

Dose/Shielding Requirements

Accidents/Storage

Regulatory Guidance (NUREG-1556, Vol. 1)

Transportation/HAZMAT Requirements

Risk

ALARA

Radiation Measurement

Operating and Emergency Procedures

Calibration and Maintenance

Record Keeping

Date of Training: **February 25, 2011**

Location: **Richmond, VA**

Certificate Number: **8954**

HAZMAT Expiration Date: **February 25, 2014**

Instructor: Keith Earnshaw

Humboldt Scientific, Inc.

551-D Pylon Drive

Raleigh, NC 27606

Hazmat Certification
as required by U.S DOT and IATA

This certifies that

Michael Anderson

has been trained and tested in accordance with the U.S. Department of Transportation and International Air Transport Association (IATA) hazardous material requirements for general awareness/familiarization, function-specific, safety and security awareness training as related to the transportation of nuclear gauges. A description of the training course materials is available from Troxler Electronic Laboratories, Inc.

Date Oct 29, 2020 Expires Oct 28, 2023

EMPLOYER CERTIFICATION

I certify that the hazmat employee identified on this certificate has been trained and tested as required by U.S. DOT Hazardous Material Regulations (49 CFR 172 Subpart H).

Signature  Title QC Manager Date 11-2-2020



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