



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION III
2443 WARRENVILLE RD. SUITE 210
LISLE, IL 60532-4352

August 26, 2021

David P. Nolan
Vice President / RSO
SCI Engineering, Inc.
130 Point West Blvd.
St. Charles, MO 63301

Dear Mr. Nolan:

I am reviewing your application dated July 27, 2021 (ML21218A046), requesting the renewal of U.S. NRC Materials License No. 24-20039-01.

The NRC's guidance document for your proposed type of license, which I refer to below as "the guidance", is NUREG-1556, Volume 1, Rev. 2, dated June 2016, "Consolidated Guidance About Materials Licenses - Program Specific Guidance About Portable Gauge Licenses." This guidance is available on the NRC Web site at:

<https://www.nrc.gov/docs/ML1617/ML16175A375.pdf>

Upon review of your application, I identified the following areas requiring additional or clarifying information:

1. Section 8.3, "Item 3: Address(es) Where Licensed Material Will Be Used or Possessed," identifies that applicants must provide the address(es) where portable gauging devices will be stored when the gauges are not in the field.

Your application did not identify all locations currently authorized on your license.

Clarify the status of your licensed site at 47 Saint Andrews Dr., Union, Missouri 63084. If you require continuing authorization to store portable gauging devices at this location, please state that in your response and provide a facility diagram and description for this location. Otherwise, please provide documentation supporting the release of this location to unrestricted use, including records of transfer/disposal of licensed materials and associated leak test reports.

2. Section 8.5.1, "Sealed Sources and Devices," and Section 8.6, "Item 6: Purpose(s) for Which Licensed Material Will Be Used," of the guidance states that applicants must provide information regarding the radioactive material requested and the intended purpose of use. This should include the following:
 - identification of each radionuclide and nominal activity for each portable gauge;
 - identify the manufacturer (or distributor) and model number of each type of portable gauge;
 - state the number of each type of portable gauge requested;
 - provide a description of the use of the gauges; and
 - list the activity per source and the maximum activity per gauge being requested, which must not exceed the maximum activity listed in the approved certificate of registration issued by the NRC or by an Agreement State.

Your application included a completed copy of Appendix B, "Suggested Format for Providing Information Requested in Items 5 through 11 of U.S. Nuclear Regulatory Commission Form 313," from the guidance. Upon review, I noted that the total number of requested portable gauging devices and the maximum activity per source is reduced from that currently authorized on your license.

Correct the maximum activity per source for cesium-137 and americium-241:beryllium sealed sources to be authorized for use with your Humboldt Scientific, Inc., Model 5001 portable gauging devices. Clarify if you have reduced the total number of these portable gauging devices in your inventory. If applicable, submit records of transfer/disposal of the licensed devices.

Further, please identify all compatible cesium-137 and americium-241:beryllium sealed sources to be used with Humboldt Scientific, Inc., Model 5001 portable gauging devices.

3. Section 8.9, "Facilities and Equipment," of the guidance identifies that applicants must provide a facility diagram for each permanent portable gauge storage location.

Your application did not provide a facility diagram for each requested permanent storage site. Please revise and resubmit your license application providing a facility diagram and description of all permanent storage sites. Include all 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," of the guidance.

Your facility diagrams should identify all entrances and points of access, rooms, uses of the rooms, the location of the gauge storage area and its distance from occupied work areas. Also, describe and label all adjacent areas to your facility (parking lot, neighboring buildings, streets, etc.). If the gauges are stored in a cabinet or similar container, submit a diagram and description of the container.

As depicted in Figure 8-4, "Storing Gauges," of Section 8.10.5 of the guidance, gauges should be stored away from occupied areas. Further, [10 CFR §30.34\(i\)](#) requires that portable gauges must be secured against unauthorized removal using a minimum of two independent physical controls that form tangible barriers.

4. The regulations identify three separate, but overlapping training requirements, including:
 - Instructions to Workers/Radiation Awareness training required by [10 CFR §19.12](#);
 - Authorized User training required by [10 CFR §30.33](#); and
 - HAZMAT Employee training required by [49 CFR Part 172, Subpart H](#), including refresher training required every 3 years.

Your application identifies your intent to provide an in-house Radiation Safety Training Course for your Authorized Users. Your selection is unclear with regards to whether your course will meet the criteria specified in Appendix C, "Criteria for Acceptable Training Course for Portable Gauge Users," of the guidance.

An in-house Radiation Safety Training Course that varies from the criteria specified in Appendix C must be submitted for review and approval. Your application did not include your alternate procedures as indicated in the accompanying Appendix B, "Suggested Format for Providing Information Requested in Items 5 through 11 of U.S. Nuclear Regulatory Commission Form 313."

Therefore, please either submit your alternate procedures including a detailed description of your in-house Radiation Safety Training Course or revise your selection in Appendix B to confirm that your in-house Radiation Safety Training Course meets the criteria specified in Appendix C of the guidance.

In accordance with 10 CFR §2.390 of the NRC's "Rules of Practice," a copy of this letter will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at <https://www.nrc.gov/reading-rm/adams.html>.

To continue review of your application, I request that you submit your response to this letter within 30 calendar days from the date of this letter. In your response, please refer to the license, docket, and control number specified below. I will assume that you do not wish to further pursue this licensing action if I do not receive a reply within the specified timeframe noted above.

If you have questions, require additional time to respond, or require clarification on any of the information stated above, I encourage you to contact me at Jason.Kelly@nrc.gov or at (630) 829-9737.

Sincerely,

Jason M. Kelly, MPH
Health Physicist
Materials Licensing Branch

Docket No.: 030-17675
License No.: 24-20039-01
Control No.: 628100