

SAFETY EVALUATION REPORT

DOCKET NO.: 70-7019

LICENSE NO.: SNM-2013

LICENSEE: Oregon State University

SUBJECT: SPECIAL NUCLEAR MATERIALS LICENSE NUMBER SNM-2013 CHANGE OF RADIATION SAFETY OFFICER LICENSE AMENDMENT REVISION – OREGON STATE UNIVERSITY, ENTERPRISE PROJECT IDENTIFICATION NUMBER L-2025-NFA-0002

I. INTRODUCTION

By submittal dated March 25, 2025 (Agencywide Documents Access and Management System Accession No. ML25101A293), the Oregon State University (OSU) submitted a license amendment request. Specifically, OSU requested U.S. Nuclear Regulatory Commission (NRC) approval of Mr. David Horn as OSU's new radiation safety officer (RSO). With its submittal, OSU enclosed the individual's qualifications – that enclosure is non-public since it contains personally identifiable information.

II. REGULATORY REQUIREMENTS

The regulation in Title 10 of the *Code of Federal Regulations* (10 CFR) Section 70.22, "Contents of applications," (a)(6) requires that each application for a license shall contain the technical qualifications, including training and experience of the applicant's staff members for engaging in the proposed activities.

The regulation in 10 CFR 70.23(a) states that an application for a license will be approved if the Commission determines, in part, that the applicant is qualified by reason of training and experience to use licensed material for the purpose requested.

III. REGULATORY GUIDANCE

The NRC staff evaluated the qualifications of the nominated RSO following the guidance in section 8.7.3, "Radiation Safety Officer," of NUREG 1556, "Consolidated Guidance About Materials Licenses," Volume 11, "Program-Specific Guidance About Licenses of Broad Scope" (ML17059D332), and associated guidance in section 2.1.2, "Radiation Safety Officer," of draft NUREG-2212, "Standard Review Plan for Applications for 10 CFR Part 70 Licenses for Possession and Use of Special Nuclear Materials of Critical Mass but not Subject to the Requirements in 10 CFR Part 70, Subpart H," dated September 2022 (ML22335A087).

IV. STAFF REVIEW AND ANALYSIS

In its submittal, OSU requested NRC approval for Mr. David Horn as the new RSO. Mr. Horn would replace Mr. Daniel Harlan, the current RSO. Based on the information provided by OSU in the enclosure to its submittal, Mr. Horn has 10 years of experience in radiation safety programs at OSU including 7 years as the Assistant RSO. It was noted that he has thorough

knowledge of radioactive materials management, x-ray safety, laser hazard analysis, and radioactive materials shipping.

With his resume, OSU included a list of Mr. Horn's work experiences. The list includes, amongst others, the following:

- Assesses radiation dose measurements to maintain safe standards for employees and the public.
- Consults with Radiation Safety Committee to review proposed use of radioisotopes.
- Manages radioactive waste collection, storage and disposal.
- Inspects and audits radioactive material and radiation machine labs; performs special surveys, exit surveys, and other non-routine tests and inspections. Works with Principle Investigator's and lab personnel to institute corrections and procedures.
- Develops and maintains office and lab procedures for Radiation Safety Program. Maintains a computer database of inspection information.
- Oversees the x-ray program, state x-ray compliance, and personnel training.
- Maintains inventory of nuclear gauges, sealed sources, and required semiannual leak tests.
- Maintains calibration of radiation detection equipment.
- Supervises dosimetry program.
- Provides lead work for student workers when required.
- Conducts training for radioactive materials and x-ray users.
- Administers radioisotope inventory, organize semiannual inventory review.
- Consults with labs on the use of lasers and other non-ionizing radiation sources, and provides safety evaluations and procedures.
- Coordinates shipment and receipt of radioisotopes on OSU campus.
- Consults with OSU Ship Operations, Newport, and the OSU College of Earth, Ocean, and Atmospheric Sciences to support worldwide use of radioisotope mobile laboratories.
- Works with other Health & Safety program staff to maintain safe operations.

OSU also included a list Mr. Horn's radiation safety trainings, skills, and qualifications. This list includes:

- Laser Safety Officer Training Course
- Successfully passed American Board of Health Physics (ABHP) Certified Health Physicist (CHP) Part 1
- Experienced and certified in Department of Transportation (DOT)/International Air Transport Association (IATA) Hazardous Material Shipper Regulations
- Proficient in Microsoft Office, SciShield

V. EVALUATION FINDINGS

Based on the review of the information provided by OSU in its submittal dated March 25, 2025, the NRC staff finds that OSU provided the necessary information for the NRC staff to evaluate the nominated RSO in accordance with the requirements in 10 CFR 70.22(a)(6). In addition, the NRC staff finds that the nominated individual meets the training and experience requirements discussed in section 8.7.3, "Radiation Safety Officer," of NUREG-1556, "Consolidated Guidance About Materials Licenses," Volume 11, "Program-Specific Guidance About Licenses of Broad Scope" (ML17059D332), and section 2.1.2, "Radiation Safety Officer," of draft NUREG-2212, "Standard Review Plan for Applications for 10 CFR Part 70 Licenses for Possession and Use of

Special Nuclear Materials of Critical Mass but not Subject to the Requirements in 10 CFR Part 70, Subpart H,” dated September 2022 (ML22335A087).

Therefore, in accordance with the regulation in 10 CFR 70.23(a), and as discussed above, the NRC staff finds that Mr. David Horn is qualified by reason of training and experience to use licensed material for the purpose requested.

VI. ENVIRONMENTAL REVIEW

The regulation in 10 CFR 51.22(c)(14)(v) states that a proposed action is excluded from an environmental review if it is an amendment to a license issued pursuant to 10 CFR Part 70 authorizing the use of radioactive materials for research and development and for educational purposes. The NRC staff determined that OSU's authorized activities fall under this category and, therefore, meet the above requirement. The NRC staff also determined that the proposed license amendment does not adversely impact public health and safety or the environment. Therefore, NRC staff determined that, in accordance with 10 CFR 51.22(c)(14)(v), OSU's request does not require the preparation of an environmental assessment or an environmental impact statement.

VII. CONCLUSION

As discussed above, the NRC staff finds that OSU has nominated, as RSO, an individual with extensive experience, education, and training in the radiation field and with the necessary qualifications to oversee the safe operation of its NRC-licensed program activities. The NRC staff also concludes that the nominated individual is qualified to use licensed material for the activities authorized by the license and, therefore, should be approved

VIII. PRINCIPAL CONTRIBUTOR

Stephen Poy, NMSS/DFM