

8.7.2 Authorized User

Regulations: 10 CFR 20.1101(b), 10 CFR 30.33(a)(3), 10 CFR 40.32, 10 CFR 70.22

Criteria: Authorized users (AU) must have adequate training and experience with the types and quantities of licensed material they propose to use.

Discussion: An AU (also known as "principal investigator," "permit holder," "source custodian," or by other licensee designations) is an individual whose training and experience have been reviewed and approved by the NRC, who is named on the license, and who uses or directly supervises the use of licensed material. The AU's primary responsibility is to ensure that radioactive materials used in his or her particular lab or area are used safely and according to regulatory requirements (see Figure 8-5). The AU is also responsible for ensuring that procedures and engineering controls are used to keep occupational doses and doses to members of the public ALARA.

- (1) Please provide a description of the types (radionuclide, form, and purpose of use) and quantities (maximum amount per container, maximum quantity per use, and overall limits per radionuclide, in microcuries or millicuries or curies, as appropriate) of material that you are requesting that Adam Gibson-Even, Ph.D., be authorized to use, under NRC Lic. No. 13-06711-01.

AUs must have adequate and appropriate training to provide reasonable assurance that they will use licensed material safely. Training for AUs should include: maintaining security of, and controlling access to, licensed material; and responding appropriately to events or accidents involving licensed material to prevent the spread of contamination.

- (2) Please provide a description of training Dr. Gibson-Even has had (formal training courses; hands-on training; RSO training courses; etc.) in:
 - (a) Maintaining security of, and controlling access to radioactive material, and
 - (b) Responding appropriately to events or accidents involving licensed material to prevent the spread of contamination

An AU should have (i) a college degree at the bachelor's level or equivalent training and experience in physical, chemical, biological sciences, or engineering; and (ii) training and experience commensurate with the scope of proposed activities. Training should include the following subjects:

- (3) Please provide the date and institution from which Dr. Gibson received a Ph.D. in nuclear and elementary particle physics.
 - radiation protection principles
 - characteristics of ionizing radiation

- units of radiation dose and quantities
- radiation detection instrumentation
- biological hazards of exposure to radiation (appropriate to the types and forms of byproduct material to be used)

(4) Please provide the date(s), format (lecture, online, etc.), and provider of training in the five radiation safety topics outlined above.

- hands-on use of radioactive materials

The amount of training and experience needed will depend upon the type, form, quantity, and proposed use of the licensed material requested, but it should cover the subjects stated.

(5) Please provide date(s), institution(s) & location(s) where Dr. Gibson-Even had hands-on experience. Include isotopes and quantities.

An AU is supervising the use of radioactive materials when he or she directs personnel in operations involving the licensed material. Although the AU may delegate specific tasks to supervised users (e.g., conducting surveys, keeping records), he or she is responsible for the safe use of radioactive material to ensure that areas are not contaminated.

Applicants must name at least one individual who is qualified to use the requested licensed materials. In general, AUs must demonstrate training and experience with the type and quantity of material they propose to use. For example, someone with training and experience only with sealed radioactive sources may not be qualified to use or supervise the use of unsealed licensed material. In addition, someone with experience using only trace quantities may not understand the risks of working with much larger (e.g., 10 or 100 times larger) quantities of the same substance. Applicants should pay particular attention to the type of radiation involved. For example, someone experienced with gamma emitters may not have appropriate experience for high-energy beta emitters.

Response from Applicant:

Applicants should provide the following:

- name of each proposed AU with the types and quantities of licensed material to be used
- information demonstrating that each proposed AU is qualified by training and experience to use the requested licensed materials; information should include, as a minimum:
 - formal training or education in radiation safety [topics covered; duration of training; when training was received; identity and location of training provider (note: a course outline may be provided)]
 - experience using licensed materials (types; forms; quantities handled; activities performed; duration of experience)

Applicants should provide information about the proposed AU's training and experience relative to the licensed material requested in the application. Applicants should not submit extraneous information, such as unrelated lists of publications, research grants, committee and society memberships, etc. Submittal of unrelated material serves only to slow the review process.

Pavon, Sandy

From: Forster, Sara
Sent: Monday, July 02, 2018 12:30 PM
To: Sandrik, Lauren; Song, Taehoon; Pavon, Sandy
Subject: FW: Additional Information Request re Valparaiso University, NRC Lic. No. 13-06711-01, CN608869
Attachments: 22110.608869.13-06711-01.NUREG1556Vol7Rev1_RFIattachment.pdf

Please scan in and return to me. The docket number is 030-00701.

Thank you!

Sara x9892

From: Forster, Sara
Sent: Monday, July 02, 2018 12:26 PM
To: 'Shirvel Stanislaus' <shirvel.stanislaus@valpo.edu>
Subject: Additional Information Request re Valparaiso University, NRC Lic. No. 13-06711-01, CN608869

Dear Mr. Stanislaus,

We have reviewed your May 24, 2018 letter (NRC Accession No. ML18145A074) requesting to list Adam Gibson-Even, Ph.D. as an Authorized User (AU) on the referenced license. Upon review, we have noted that this request is lacking specific details as to the authorizations requested for Dr. Gibson-Even. It also appears to be lacking details as to Dr. Gibson-Even's specific training (dates, locations, course outlines, etc.) and hands-on experience (dates, locations, radionuclides, quantities, etc.) in the use of radioactive materials commensurate with those to be authorized under the license. Additional information from you is still needed for our office to complete our review of your request.

As described in NUREG 1556, Volume 7, revision 1, "Consolidated Guidance about Materials Licenses: Program-Specific Guidance about Academic, Research and Development, and Other Licenses of Limited Scope – Including Electron Capture Devices and X-ray Fluorescence Analyzers," pages 8-16 to 8-18, the licensee should submit specific details regarding a proposed AU's training and experience, commensurate with uses proposed under the license.

To facilitate our continued review of your request, please provide additional information – via a signed and dated cover letter as noted below:

1. A description of the types and quantities of material that Dr. Gibson-Even should be authorized to use, under the license, including:
 - Radionuclide(s) to be authorized;
 - Form(s) and purpose(s) of use to be authorized, specific to each listed radionuclide
NOTE: If the AU will be authorized for sealed sources, please provide the manufacturer(s) and/or model number(s), if known. Please also provide the specific Subitem(s) (i.e. Item 6.H. – plutonium-239 for teaching of students) that you would like Dr. Gibson-Even to be authorized to use;
 - Maximum radioactive quantity per container;
 - Maximum quantity per use; and
 - Maximum overall total possession limits anticipated, by radionuclide;

2. Dr. Gibson-Even's security and emergency-preparedness training including:

- Date, format, instructor, and location of any training courses covering maintaining security of, and controlling access to radioactive material; and
- Date, format, instructor, and location of any training courses covering responding appropriately to events or accidents involving licensed material to prevent the spread of contamination;

3. Date on and institution from which Dr. Gibson received a Ph.D. in nuclear and elementary particle physics;

4. Date(s), format (lecture, online, etc.), and provider of training in topics noted below:

- Radiation protection principles;
- Characteristics of ionizing radiation;
- units of radiation dose and quantities;
- radiation detection instrumentation; and
- biological hazards of exposure to radiation (appropriate to the types and forms of byproduct material to be used); and

5. Description Dr. Gibson-Even's hands-on experience with radionuclides, commensurate with authorizations to be listed on the license, including details noted below:

- Date(s) of experience;
- Location(s) of experience;
- Radionuclide(s) used;
- Form(s) of radioactive material(s) used;
- Purpose of use for each radionuclide used; and
- Quantities of radioactive material(s) used.

For your convenience, an annotated copy of the applicable guidance text is attached. Please provide the requested information within 14 days of this message (on or before July 16, 2018). Include a signed and dated cover letter transmitting your response. Submission of your response as a pdf file attached to an email or via facsimile will allow for the quickest processing. Please call or email me with any questions you may have, or if you are unable to respond by the date suggested above. Thank you for your prompt attention to this matter.

Sincerely yours,

Sara A. Forster, Health Physicist Licensing Reviewer
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