



Licensing Assistance Team
Division of Nuclear Materials Safety
U.S. Nuclear Regulatory Commission, Region I
2100 Renaissance Boulevard, Suite 100
King of Prussia, PA 19406-2713

Amendment Request for License 08-35447-01 Mail Control NO. 627066

C&C Irradiator Service, LLC is requesting an amendment to license 08-35447-01. This response is provided in reference to the request for additional information. We have included your requests with our answers after each.

1. You requested to add a custom device, a Mk 1-30 SN 668 located at University of Wisconsin Madison, for decommissioning and stated that there will be no source handling, transfer, cutting, or grinding near the source or source assembly.

a. Your current license does not list decommissioning as an authorized activity. On your list of "Authorized Work Activities" attached to the amendment request, you list this irradiator in the first group for which preventive maintenance and service work will be performed. Please review the authorized uses listed in Item 9 of the license and explain if "decommissioning" is covered by the current authorized uses. Alternately, describe the activities that will be performed during decommissioning, and the radiological safety procedures for decommissioning.

RESPONSE: C&C Irradiator Service, LLC would not be performing the decommissioning and shipping/transportation activities associated with this recovery. C&C would be preparing the device for shipment (dismantling and securing the source inside the existing shield) and removing it from the facility. Another entity would package the device inside a Type B Cask and then provide shipping/transportation services. The required work would fall under category 9.A.(1) "For use and storage incident to:(1) device installation, relocation, dismantling, alignment, replacement, repair, and servicing of authorized irradiator."

b. You stated that this device has been retrofitted with a tower not supplied by the original equipment manufacturer. Confirm if a custom sealed source and device (SSD) registration was issued for this device and provide the SSD registration number. If no registration was issued, please provide the following:

i. A description of the modification and any impact on radiation shielding or source movement.

RESPONSE: Please review the attached document that encompasses the details of the modification. As the device is currently listed on the facility's license as a Mark 1 Model 30, we do not believe a custom SS&DR was issued.

ii. A description of the training you have received on this modified device.

RESPONSE: C&C Irradiator Service, LLC authorized users have provided services for a substantially equivalent device that was located at a facility in Ann Arbor, MI and is currently listed on our NRC license under Condition 10, "Custom Device Mark I Model 25 (SN 1032)".

2. During our review of the current license, we identified the following discrepancies:

a. On your list of devices, you have listed J.L. Shepherd Model 142-MA in the first group and Model J.L. Shepherd Model 142 in the second group. However, Condition 10 of the license lists only the Model 142. Confirm if both models should be listed in Condition 10.

RESPONSE: The categories listed within CCIS AWA Revision 2 correspond to ANSI Category 1: Self-Contained, Dry Source Storage Irradiators and ANSI Category 2: Panoramic dry-source storage (we revised CCIS AWA to include the term "ANSI" for more clarity. Due to the various designs that can be encompassed within JL Shepherd models, our last amendment included the phrase, "J.L. Shepherd Series" within Condition 10 when relating to models Mark 1, 28, 78, 89, 109, 142, 143, and 149 to incorporate the entire series within each model. For example, the series in the Mark 1 models would include those of Mark 1 Model 25, Mark 1 Model 30, Mark 1 Model 68, etc. If it is specifically required to list J.L. Shepherd Model 142-MA and J.L. Shepherd Model 142 separately, then we would like to request to list both under Condition 10.

b. On your list of devices, you have listed CIS-US Model IBL 437 in the first group, but model CIS-US Model IBL 437C is listed on the license. The SSDR listed on your request is for Model 437C and we are unaware of an SSD registration for a Model 437. Confirm if Model 437 is the model you had requested, or if it should be Model 437C.

RESPONSE: We have revised CCIS AWA Revision 2 to reflect "CIS-US Model IBL 437C" so it is identical to the device listed within our license. For more compatibility and clarity between the license and CCIS AWA, we have also revised the statements,

"The irradiator makes and models on which this license authorizes preventive maintenance and service work and that apply to this procedure are:"

to

"The irradiator makes and models on which this license authorizes preventive maintenance and service work under 08-35447-01 Condition 9.A.(1-4) include:".

and

"The irradiator makes and models on which this license authorizes source loading/unloading and that apply to this procedure are:"

to

"The irradiator makes and models on which this license authorizes source loading/unloading under 08-35447-01 Condition 9.A.(5) include:"

If you have any other questions, concerns, or would like more information in order to approve our license amendment, please do not hesitate to contact us at your convenience.

Thank you,

A handwritten signature in black ink, consisting of a large, stylized 'C' followed by a horizontal line that tapers to the right.

Christopher Nostrand, CEO/RSO
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7/21/2021

Enc. (2)
CCIS – Amendment Letter 7.21.2021
CCIS AWA Revision 2