

December 13, 2019

U. S. Nuclear Regulatory Commission  
Mr. Stephen C. Baker, Licensing Officer  
Export Controls and Proliferation Branch  
Office of International Programs  
Room O14-C18  
Washington, DC 20555-0001

**Ref:** Disposition of disused industrial radiography sources

Dear Stephen,

Please let me refresh you on a conversation we had during your on-site visit to ISOFLEX Radioactive LLC (ISO-RAD™). The topic was disused sources and the “Technical Position on Import of U.S.-origin Sources” (TPI). The discussion was the need for a specific import or export license for disused sources that may or may not be classified as “radioactive waste”. The original sources distributed by ISO-RAD™ are now awaiting return to ISO-RAD™. I have read the regulations and the Branch Technical position several times and will lay out my interpretation and how ISO-RAD™ should proceed.

ISO-RAD™ is a State of Louisiana radioactive materials (RAM) licensee; license number LA-13516-L01. ISO-RAD™ is a distributor /supplier of industrial radiography sources in the United States and Internationally. ISO-RAD™ has issued SSDs covering the sources it has distributed, namely the ISO100™ source model SSD # LA-1491-S-101-S and ISO150™ source model SSD # LA-1491-S-103. ISO-RAD™ must comply with the United States Nuclear Regulatory Commission (USNRC) regulations concerning the import, export, and disposition of industrial radiography sources.

The TPI provides the following information on Page 1. The USNRC regulations contained in 10 CFR Part 110.2 state, “There are six exclusions in 10 CFR 110.2 to the definition of “radioactive waste.” The sealed source exclusion (exclusion one) is defined as radioactive material that is “[o]f U.S. origin and contained in a sealed source, or device containing a sealed source, that is being returned to a manufacturer, distributor or other entity which is authorized to receive and possess the sealed source or the device containing a sealed source.”<sup>1</sup> Disused sources that satisfy an exclusion to the definition of “radioactive waste” may be imported (returned) under the general license in 10 CFR 110.27, which requires that the U.S. consignee be authorized to receive and possess the material under the relevant NRC or Agreement State regulations and that the importer satisfy the terms for the general license set forth in 10 CFR 110.50.”

The TPI includes a Foot Note 1 on the bottom of page 1 providing additional explanation of the U.S. origin exclusions. Foot Note 1 states, “The NRC provided the following guidance on the scope of “U.S. origin” on NRC’s Export and Import Web page at (<http://www.nrc.gov/about-nrc/ip/export-import.html>): “U.S. origin was added in the first exclusion to the definition of radioactive waste to clarify that the exclusion only applies to sources of U.S. origin. U.S. origin sources may include sources with U.S. origin material and sources, or devices manufactured, assembled, or distributed by a United States company from a licensed domestic facility. Disused

sources that originated in a country other than the United States would require a specific license if being exported or imported for disposal.” I want to draw your attention to the following sentence from Foot Note 1, “U.S. origin sources may include sources with U.S. origin material and sources, or devices manufactured, assembled, or distributed by a United States company from a licensed domestic facility.” As stated above, ISO-RAD™ is a licensed U. S. distributor of industrial radiography sources and should qualify for the U.S. origin exclusion according to the information contained in Foot Note 1.

The number of sources that fall under “distribution only” exclusion category is approximately 50 with the highest curie strength of 8.6 curies. Most of the 50 sources would be less than 1 curie as of today’s date. ISO-RAD™ now has the sources assembled and manufactured in the U.S. thus would qualify under the manufactured, assembled, and distribution exclusion according to Foot Note 1.

In addition, ISO-RAD™ has informed its customers of the following information: ISO-RAD™ does not possess a specific license to receive “radioactive waste” and must satisfy the requirements of a general license and limit the return of spent industrial radiography sources to those manufactured, assembled or distributed in the United States. ISO-RAD™ will accept the following industrial radiography sources for disposition on a one-for-one basis (for each industrial radiography source ISO-RAD™ sells to the customer, the customer can return one US Origin industrial radiography source):

1. ISO-RAD™ source models ISO100™, ISO150™, and ISO880™.
2. QSA Global source models 424-9, 969, and 87703 are manufactured in the United States not in the Czech Republic.
3. SPEC source models G-60, T-5, T-5F, G-40T, and G-40F.
4. Industrial Nuclear source models 32, 7, and M706/P36.

In conclusion, ISO-RAD™ believes the industrial radiography sources distributed before its manufacturing and assembly occurred in the U.S. should be classified as U.S. origin sources and can be imported without a specific import license for “radioactive waste”. ISO-RAD™ wants to be able to instruct its customers possessing the original 50 sources to return the sources as soon as feasible. To be clear ISO-RAD will not authorize the return until we receive an answer from your department.

Thank you once again for your guidance. I look forward to your response to the information provided and the plan of action ISO-RAD plans to take regarding the return of its original distribution of industrial radiography sources. Have a great weekend.

ISOFLEX Radioactive LLC



Kevin J. Schehr, DBA  
President & RSO