

From: [Ullrich, Betsy](#)
To: [Sumlin, Jeffrey](#)
Subject: acceptance of cost estimate submitted August 20, 2021
Date: Tuesday, August 31, 2021 10:47:00 AM

Jeff,

I reviewed the most recent cost estimate that was sent August 20, 2021, and it is acceptable.

You will need to submit a new Statement of Intent (SI), and a new Certification of Financial Assurance (CFA) document. Please be sure that the following items are corrected from the CFA dated April 5, 2021:

- The cost estimate covers only your UNsealed materials. Please make sure that is clear in the wording on the CFA.
 - “Any” form covers unsealed materials as well as sealed.
 - However, there are separate financial assurance requirements for Unsealed materials with half-lives greater than 120 days (greater than 1E+3, 1E+4 or 1E+5 the table quantities) than there are for SEALED materials (greater than 1E+10 or 1E+12 times the table quantities). The amount of material authorized for you sealed sources does not exceed the 1E+10 quantities, even with the unity rule. If it did, you would do a separate calculation for the sealed material and ADD it to the unsealed. So you do not need to list the sealed sources on the CFA. Also, I did not see any costs estimated for the disposal of those irradiators...
 - Likewise if you were authorized for source or SNM...they would be separate costs added to that of the byproduct material, if you did not already include them in the cost estimate (which you have).

Issued to: United States Nuclear Regulatory Commission, Region 1

Statement: I certify that AFRR1 is licensed to possess the following types of sealed sources with a half-life greater than 120 days licensed under 10 CFR Part 20. I also certify that financial assurance in the amount of \$272,120 will be obtained for the purpose of decommissioning as prescribed by 10 CFR 30.

| Type of Material | Form | Amount of Material |
|--|--|--|
| Any byproduct material with atomic numbers <83 with exceptions | Any | 1 curie per radionuclide and 30 curies total |
| Any byproduct material with atomic numbers 84 through 103 | Any | 10 millicuries per radionuclide and 10 millicuries total |
| Hydrogen 3 | Any | 15 curies total |
| Carbon 14 | Any | 2 curies total |
| Cobalt 60 | Sealed Sources (J.L. Shepherd and Sealed Sources (J.L. Shepherd and Associates, Inc. Model 7810) | 120 curies per source and 120 curies total |
| Cobalt 60 | Sealed Sources (International Isotopes, Inc. Model INIS-SF-XX | 12 curies total |

-
- You don't need to list the materials with half-lives less than or equal to 120 days on the CFA.

You will need to update the amount of the cost estimate stated on the CFA

- You will need to submit a new, separate Statement of Intent with the new amount of the cost estimate.

I think that is everything. Email me if you have any questions.

Betsy