UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

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MEMORANDUM FOR: William J. Walker
Material Licensing Branch
Division of Fuel Cycle & Material Safety, NMSS

THRU: G. K. Tomlin, Chief GKT
Regulatory Analysis Branch
Division of Risk Analysis, RES

FROM: J. J. Henry
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SUBJECT: IMPACT OF PROPOSED REVISION OF 10 CFR PART 35 ON 10 CFR 40.25

As the Task Leader and author of 10 CFR 40.25, General license for use of certain products or devices, it is my duty to alert you to potential problems stemming from your proposal to add new 10 CFR 35.607, Authorized inventory, to the proposed revision of 10 CFR Part 35, "HUMAN USE OF BYPRODUCT MATERIAL."

In my view, "authorized inventory" is a euphemism for a "general license for depleted uranium shielding" that lacks terms and conditions similar to those in 10 CFR 40.25 that would prohibit abandonment or other uncontrolled transfer of the depleted uranium shielding after the teletherapy source has been removed from a decommissioned teletherapy unit.

One solution to the problem would be to revise proposed new § 35.607 to state clearly that uranium shielding contained in a teletherapy unit is licensed material within the meaning of § 35.32, Responsibilities of the Radiation Safety Officer. This would require the RSO to establish written procedures for inventory of the uranium and written policy and procedures for disposal of uranium shielding from a decommissioned teletherapy unit. (As an aside, I can find no mention in the preamble, the authority citation, or the purpose and scope of 10 CFR Part 35 to indicate any coverage of uranium shielding in a specific license authorizing the human use of byproduct material.)

The general license in 10 CFR 40.25 avoids mention of the activity "import" for a very good reason: 10 CFR 110.11, Import of nuclear equipment, source material and byproduct material, exempts any person from the requirements for an import license to the extent that he imports any source material that he is authorized to possess under a specific or general license issued by the Commission or an Agreement State. Accordingly, proposed new § 35.607 need not mention import in its list of authorized activities.

Based on the above factors, it appears that proposed new § 35.607 should be amended or, preferably, deleted from the proposed revision of 10 CFR Part 35 to eliminate the potential problems.

If the depleted uranium shielding material contained in a teletherapy unit cannot be possessed and used under the general license in 10 CFR 40.25, please consider the following alternative:

1. Revise item 19, TELETHERAPY UNIT, of proposed new Form NRC-313MH to require the applicant to list the maximum number of kilograms of depleted uranium in the teletherapy unit. (As you know, 10 CFR 30.32(d) states that an application for license filed pursuant to 10 CFR Parts 30 through 35 will be considered also as an application for licenses authorizing other activities.)

2. NRC, as appropriate, would issue a medical standard license containing a condition authorizing possession, use, etc. of a specified number of kilograms of depleted uranium in the teletherapy unit and requiring transfer of the depleted uranium only as provided in 10 CFR 40.51, Transfer of source or byproduct material.

I believe the schemes outlined above would eliminate the possibilities of conflict and redundancy in the Commission's regulations and ensure that holders of the medical standard license do not become unwitting vectors for uranium contamination of steel and other alloys in the nation's secondary metals industries.

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