

DOCKET NUMBER FR-30, 32, 70, 150
PROPOSED FILE (45 FR 70374)
SMELTED ALLOYS

Orthopedic Surgery Clinic
1900 Telshore Blvd.
Bldg. A
Las Cruces, NM 88001
December 10, 1980



Secretary of the Commission
U.S. NRC
Washington, DC 29555

001971

Re: Federal Register Notice: 10 CFR Parts 30, 32, 70, and 150;
Exemption of Technetium-99 and Low Enriched Uranium as Residual
Contamination in Smelted Alloys

Dear Commissioner:

I have just recently noted the above proposed ruling in the Federal Register, Vol. 45, no. 209, page 70875, regarding exempting Technetium-99 and uranium-235 contamination in smelted alloys from licensing as contaminated nuclear waste.

As a physician and specialist in orthopedics, I strongly urge that these materials not be exempted from licensing. As stated in the Register, exemption would stimulate the commercial sale of these radioactively contaminated metals, and subsequent use of these materials in consumer products. Members of the public would then be exposed to unnecessary radiation.

Of special concern to me would be the use of these metals in orthopedic appliances, for example joint prostheses or plates. In the section entitled "Benefits and Costs," a maximum individual contact bone dose of 20 Rads over 50 years for an "implanted pin" is estimated. I feel that this is not an insignificant dose to bone, and could increase the risk of radiation induced cancers or sarcomas in my patients. Additionally, hip prostheses would lead to gonadal doses of radiation, an unacceptable hazard to my patients of reproductive age. As well, larger appliances may give much larger doses than "pins," to soft tissue as well as bone.

On behalf of my patients, I object to the exemption of these radioactively contaminated metals from being considered nuclear waste, for to do so might ultimately lead to unnecessary radiation exposure and increased risk to them.

Thank you for considering the health and well being of my patients, and for your attention to this important matter.

Yours truly,

Robert Stack, M.D.

cc: Hon H. Schmitt; Hon. P. Domenici; Hon. M. Lujan

8102020233