NRC Finalizes Rules on Using and Distributing Uranium and Thorium

The Nuclear Regulatory Commission is amending its regulations for products and materials containing unenriched uranium and thorium, also known as source material. The changes include new requirements for distributing source material and licensing its use.

Manufacturers and importers of products that can be used without a license—such as welding rods and gas lantern mantles that contain thorium, and decorative glassware containing uranium—will now need to apply to the NRC for specific licenses to distribute these products. Such licenses will impose new requirements for labeling, quality control, reporting and recordkeeping.

The new regulations also modify distribution, possession and use requirements for small quantities of source material that can be used or transferred without a specific license. Distributors of small quantities must now apply for specific licenses. For source material being processed or in a dispersible form, such as liquid or powder, the limit on the use or transfer at any one time without a license is decreasing from 15 to 3.3 pounds; the annual limit will drop from 150 to 15.4 pounds. Limits are not changing for anyone possessing source material in a solid, non-dispersible form (such as display samples of depleted uranium metal), removing uranium from drinking water, or determining the concentration of uranium and thorium in a material at a laboratory.

Finally, the new regulations expand the exemption from licensing for optical lenses containing thorium to include lenses and mirrors coated with or containing uranium or thorium. These products are typically used in lasers or other high-technology optical systems.

These new license requirements and possession limits are intended to ensure those who possess source material do so safely, and that the NRC has a better understanding of how much source material is being distributed annually.

The final rule was published in today’s Federal Register. The NRC received 15 comment letters from 10 parties on the proposed rule, published for public comment July 26, 2010. Those comments are addressed in the Federal Register notice of the final rule. Changes will take effect August 27, 2013.