



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

October 21, 2026

ALL AGREEMENT STATES
WEST VIRGINIA

NOTIFICATION OF ISSUANCE OF THE TARGETED ALPHA THERAPIES
RADIOISOTOPE LICENSING AND OVERSIGHT MEMORANDUM (STC-26-065)

Purpose: To inform the Agreement States that the U.S. Nuclear Regulatory Commission (NRC) issued the Targeted Alpha Therapies Radioisotope Licensing and Oversight Memorandum.

Background: The NRC has conducted a comprehensive review of the medical use of therapeutic radiopharmaceuticals that emit alpha particles. This review included an evaluation of radiation safety protocols and regulatory requirements, such as radiation detection and monitoring, personnel training, patient handling, dose administration, and radioactive waste management. The NRC determined that current licensing requirements under Title 10 of the *Code of Federal Regulations* (10 CFR) Part 35, Subpart E, "Unsealed Byproduct Material—Written Directive Required" ([10 CFR 35.300](#)), adequately cover these medical applications. The memorandum addresses some regulatory and practical considerations for the use of all currently known alpha-emitting radioisotopes administered under [10 CFR 35.300](#). However, specific emphasis is placed on the five most widely researched isotopes: Actinium-225 (Ac-225), Astatine-211 (At-211), Lead-212 (Pb-212), Radium-223 (Ra-223), and Thorium-227 (Th-227). The memorandum covers only regulatory topics previously documented by the NRC. If needed, the NRC will issue separate guidance on new topics, such as financial assurance for impurities.

The enclosure provides the Targeted Alpha Therapies Radioisotope Licensing and Oversight Memorandum. The guidance document has been reviewed by the Standing Committee for Reviewing Emerging Medical Technologies (SCREMT) and the Advisory Committee on the Medical Uses of Isotopes (ACMUI). It has also been sent out to the regions and agreement states for review.

The attached licensing guidance has been posted on the NRC's Medical Licensee Toolkit/Emerging Medical Technologies public website at <https://www.nrc.gov/materials/miau/med-use-toolkit/emerg-licensed-med-tech.html>.

If you have any questions regarding this correspondence, please contact the individual named below:

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Sincerely,

 Signed by Adelaide Giantelli on
10/21/26

Adelaide S. Giantelli, Chief
State Agreement and Liaison Programs Branch
Division of Materials Safety, Security,
and State Programs
Office of Nuclear Material Safety
and Safeguards

Enclosures:
Targeted Alpha Therapies Radioisotope
Licensing and Oversight Memorandum