



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Institute of Standards and Technology**  
Gaithersburg, Maryland 20899

June 29, 2007

U.S Nuclear Regulatory Commission  
Attn: Document Control Desk  
Director of Nuclear Material Safety and Safeguards  
US NRC  
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Attn:  
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Ref: Docket # 70-0398  
License No. SNM-362

License Renewal Application for SNM-362 Docket # 70-398

Enclosed are three copies of the text for the NIST Special Nuclear Materials License renewal application. This license application follows much of the format and commitments required via NUREG 1556 vol. 11 Consolidated Guidance about Materials Licenses – Program Specific Guidance About Licenses of Broad Scope.

This application serves as NIST's filing for a timely renewal. We will continue to operate under the terms and conditions of the existing license until this application is fully reviewed and authorized by the Nuclear Regulatory Commission as the renewed license.

Any Request for Information or further clarifications may be directed to the NIST RSO, Timothy Mengers. We look forward to your review and comments.

Sincerely,

Timothy F. Mengers, CHP, PE

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**NIST**

CC:

James Turner PhD, - Deputy Director of NIST

Patrick Gallagher PhD. – Chairman of the NIST Ionizing Radiation Safety Committee

Rosamond Rutledge- Burns – Chief, NIST Safety Health and Environment Division

NIST's primary mission is to promote U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology in ways that enhance economic security and improve our quality of life. An important part of this work is developing, maintaining, and disseminating the national standards for ionizing radiation and radioactivity to meet national needs for health care, U.S. industry and homeland security. This license authorizes use of radiation sources for many of NIST's research, development, calibration, and testing activities in ionizing radiation.

Typical examples of this work include:

- Developing widely used reference materials and measurement calibration services for radiopharmaceuticals. NIST provides the national standards for nuclear medicine radionuclides used in more than 13 million diagnostic procedures and 200,000 therapeutic procedures annually in the U.S.
- Maintaining and disseminating the standards used by hospitals to calibrate the systems that measure a patient's absorbed radiation dose from high-energy beams. Nearly 700,000 cancer patients per year are treated in the U.S. with high-energy radiation beams.
- Leading a national effort to develop standards and protocols for radiation measurement instruments used in homeland security, ranging from the portal monitors that scan incoming cargo containers for nuclear materials to the handheld instruments used by first responders in the event of a terrorist attacks using radiological or nuclear weapons.