

**Mo-99 2016 TOPICAL MEETING ON
MOLYBDENUM-99 TECHNOLOGICAL DEVELOPMENT**

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**U.S. Nuclear Regulatory Commission Licensing Activities Related to
Molybdenum-99 Production**

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ABSTRACT

This paper provides an update on U.S. Nuclear Regulatory Commission (NRC) licensing activities related to establishing a domestic molybdenum-99 (Mo-99) supply in the United States. Since issuing a construction permit to SHINE Medical Technologies, Inc. (SHINE) in February 2016, the NRC is engaged in activities such as reviewing the Northwest Medical Isotopes construction permit application, developing construction and operation inspection programs, ensuring applicability of regulations, and applying lessons-learned from the SHINE review. Within the next year, the NRC expects to receive its first operating license application for a Mo-99 facility. The NRC will continue to hold public meetings on proposed applications; discuss and develop guidance; and inform the development of high-quality applications. The NRC regulatory activities support the national initiative to establish a reliable, domestically-available supply of Mo-99 while ensuring the safe use of radioactive materials to protect public health and safety, promote the common defense and security, and protect the environment.