

**2017 Mo-99 TOPICAL MEETING ON
MOLYBDENUM-99 PRODUCTION TECHNOLOGY DEVELOPMENT**

**SEPTEMBER 10-13, 2017
MONTREAL MARRIOTT CHATEAU CHAMPLAIN
MONTREAL, QC CANADA**

**U.S. Nuclear Regulatory Commission Activities Related to the
Establishment of Molybdenum-99 Production in the United States**

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ABSTRACT

The U.S. Nuclear Regulatory Commission (NRC) continues to actively review license applications related to the production of molybdenum-99 (Mo-99) in the United States. In 2017, the NRC staff expects to complete its safety evaluation report for the Northwest Medical Isotopes construction permit application and continue its review of a license amendment application supporting low enriched uranium target irradiation at the University of Missouri-Columbia as part of a collaborative Mo-99 production project with General Atomics and Nordion. Within the last year, the NRC staff has also engaged with SHINE Medical Technologies on its proposed demonstration unit and Niowave on its Mo-99 production project. In preparation for anticipated construction activities and submission of license applications, the NRC staff is updating its construction inspection procedures, developing operation inspection procedures; writing guidance for supplementing environmental reports; finalizing guidance for the NorthStar Medical Radioisotopes RadioGenix technetium-99 generator system; and considering the impact of proposed rulemakings on potential medical isotope facilities.