

A Progress Report on Mallinckrodt's Conversion to Low Enriched Uranium (LEU) Targets for the Production of Mo-99

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ABSTRACT

Tc-99m is the most widely used radionuclide in nuclear medicine. Its parent radionuclide, Mo-99, has been produced by Mallinckrodt at its facility in The Netherlands since the 1990's, using High Enriched Uranium (HEU) targets irradiated in research reactors. Since 2010 Mallinckrodt has been focused on converting that process to the use of Low Enriched Uranium (LEU) targets. That conversion process has had many major successes and several challenges along the way. A review will be made of the program successes achieved and the obstacles which have been overcome to allow for the conversion to LEU targets.