

Radiation protection issues with actinide targets at ISOLDE

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In the ISOLDE facility, radioactive isotopes are produced by proton bombardment of a thick target. The products are subsequently ionized, accelerated, mass-separated and transported to experimental stations. The use of two target types made from actinides (depleted uranium and natural thorium oxides) involves radiation protection issues and the talk will focus on the migration of the radioactive contamination during operations. Actinide target change involves a specific procedure for the environmental release assessment, related to the contamination of target and front-end. The contamination of the vacuum system will be also developed.