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## Comparison of Radionuclide Activity in the NuMI Decay Pipe to Results from the MARS Monte Carlo Code

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The production of tritium is a radiological concern in the operation of accelerators as it has been shown to be relatively mobile; able to move from one medium to another. Tritium produced in shielding could transfer to the environment under the right conditions. Having a reliable inventory on the amount of tritium that will be produced in the shielding is therefore important. The production of radionuclides other than tritium can be used in the estimation on the amount of tritium generated. Presented is a method of inventory of the radionuclide production in the shielding. The activity in samples taken from the NuMI decay pipe shield has been measured and compared to MARS results for the radionuclide distribution and production in a simple model of the NuMI beam line.

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