

Induced Radioactivity of NUCLOTRON Beam Slow Extraction Septum Magnet, A.A. ASTAPOV, L.N. ZAITSEV, JINR - Calculation results of the induced gamma radioactivity levels at the NUCLOTRON slow extraction septum magnet for the protons, deuterons and ^{12}C , ^{56}Fe , ^{207}Pb nuclei with the energy 5 GeV/nucleon are presented. Projectile particle, secondary hadron and projectile nucleus fragment contributions to the induced gamma radiation dose rate for the septum magnet are calculated. The comparison of the data, obtained by Monte Carlo and other methods, are discussed. It is shown that for heavy primary nuclei the main contribution to the septum induced radioactivity caused by the projectile nucleus fragments and secondary hadrons. The maximum induced gamma radiation dose rate is corresponded to the ^{12}C nuclei for the linear variation of the beam intensity from 10^{12} (deuterons) to 10^9 (Pb nuclei) particle/second.