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## Radioecological situation in areas of uranium legacy of Uzbekistan

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Central Asia Countries were the main supplier of the uranium in former USSR and one of them was the Republic of Uzbekistan. As a mining activity and conversion of uranium ores had resulted to formation large amounts of radioactive wastes, that had have make an exigency problem, as provide a radiation safety on the territories of uranium mines, tails and are close lying settlements.

In this work, the results of measurements of the radon concentrations on the territories former uranium mines and nearby populated sites are presented.

For radon measurements were used electronic units of RRA-01M (Russia) and PRM-145 (Sloveniya), acting on semiconductor detector and scintillation cells, respectively. Both units records alpha particles of daughter radionuclide Po-218. For reliable estimation of the annual efficient doses (AED) of inhabitants and its lifetime fatal risks (LFR) a long time registration alpha particles of radon by nuclear solid track detectors CR-39 (Italy) have been carried out. Dwellings and worker premises were selected on free basis and radon exposure with CR-39 was two and three months at summer and winter time.

In settlement Yangiabad, volume activity of indoor radon were - 60-100 Bk/m<sup>3</sup>, values of AED of radon for inhabitants 1.7-2.8 mSv/year and LFR estimation at  $(1.3 - 2.3) \times 10^{-4}$ .

In village Chorkesar in windless and matutinal period radon activity on territory of the mine reached 70-100 Bk/m<sup>3</sup> on distance 50-70 cm from ground. Indoor radon level are range from 60 to 450 Bk/m<sup>3</sup> and 1.7-12.6 mSv/year for AED,  $(1.3 - 10.5) \times 10^{-4}$  for LFR at summer and from 250 to 1200 Bk/m<sup>3</sup> and 7.0-33.6 mSv/year for AED,  $(5.6 - 27) \times 10^{-4}$  LFR at winter time.

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