

INVESTIGATION OF CHERNOBYL RADIONUCLIDES BEHAVIOR IN RESEARCHED GROUND AT THE NEAREST ChNPP ZONE

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Researches of Chernobyl radionuclides vertical migration were carried out inside the 5-km area of ChNPP in «Red forest» and «Lake Glubokoe» territories. Presence of ^{60}Co , ^{90}Sr , $^{134,137}\text{Cs}$, $^{154,155}\text{Eu}$, ^{241}Am and $^{238-240}\text{Pu}$ isotopes was determined to the 30 cm depth. Similarity of isotopes behavior was shown in moistened automorphed soils. Periods of semiclearing of upper 5-cm soil layer was obtained for the researched soils. The periods of semiclearing of upper 5-cm soil layer from transuraniums (^{241}Am and $^{238-240}\text{Pu}$ isotopes) are similar to the periods of semiclearing from ^{137}Cs , ^{90}Sr and are equal to 30 years.

Keywords: radionuclides, migration, soils, plutonium, americium.