

13. DYNAMIC OF THE CONTENT OF RADIONUCLIDES IN WATER OF COOLING-POND OF CHERNOBYL NPP (1978 - 2004)

O. L. Zarubin

Dynamic of the artificial radionuclides content of in water of the cooling-pond of ChNPP was studied starting from 1978 till 2004. The total content of radionuclides was founded within the limits of 0,005 - 0,05 Bq/l in the period of 1978 - 1984. After the accident in 1986 the total content of radionuclides in water amounted to $3,7 \cdot 10^5$ Bq/l. The main contribution in radionuclides' pollution of water introduces ^{137}Cs and ^{90}Sr from the end of 1986. Their content is sharply decreased till 1990 - 1992, and then the decrease occurs more smoothly. Seasonal dynamic of the content of ^{137}Cs is revealed. In by autumn its quantity in water is increased. The abnormal low relation $^{90}\text{Sr}/^{137}\text{Cs}$ in water of cooling-pond on comparison with other reservoirs 30-km Zone is registered during 1987 - 2004. The content of radionuclides in water of the cooling-pond of ChNPP in 2004 approximately in 100 times exceeds the levels of content before the accident.