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**PAPER TITLE** Radioecological Characteristics Determining Radiation  
Exposure of the Population around Mayak Facility

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**ABSTRACT (See instructions overleaf)**

The paper discusses quantitative estimations of different radioecological factors which determine exposure doses to population residing on the territory contaminated with Sr-90. The internal doses of Sr-90 result from Sr-90 intakes with diet and depend to a great degree on the content of this radionuclide in the food which, in its turn, is governed by many radioecological factors: level of contamination of the territory, distribution of radionuclides, topography, land-use practices. Additional factors influencing Sr-90 intakes with food are chemical composition of the soil (depending on soil type), soil moisturing, radioactive surface water run-off, accumulation of dung and ashes from firewood at certain sites, etc. In terms of food it has been established that the main contributor is milk which is due to using hay from contaminated lands to feed the animals. The peculiarities of forage production, the contribution of pastures and haylands and other ecological factors to Sr-90 ingestion are analyzed.