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Different radioactive wastes with relatively high contents of some elements (U, Rn, ^3H) have large influenced the environment, contaminating water and land. Same promising approaches were identified: a) sorption of mobile uranium by a peat moss-based geochemical barrier in the zone disposal, b) stabilization of uranium as low solubility oxides by hydrated lime addition.

The specific method chosen to reduce indoor-radon levels depend on the initial radon concentration, and house design and construction. Methods of radon reduction is the following: (1) removing radon or decay products after entry with preventing this element from entering, (2) increasing ventilation, (3) cleaning air to remove solid radon-decay products, (4) the use of clay granules for restricting flow of soil gas into a house.

The field and laboratory data evidence that clay minerals with high content Li can be safe mineralogical barrier to tritium contamination. In situ neutron irradiation of ^6Li in the rock matrix produces atoms tritium which can readily diffuse until they form molecular $^3\text{H}_2$ by mutual collision, ^3HH by exchange with H_2 or much more likely until they exchange for OH, H on hydroxyl sites in clay minerals, zeolites and other natural adsorbers. Stabilization of tritium in this minerals available include: chemical binding of the adsorbed ^3H in the crystal structure matrices of minerals resulted from hydration of additional compounds ($\text{CaSO}_4 \cdot 0,5\text{H}_2\text{O}$, CaO , etc) mixed with the adsorbers. Tritium water will be bound much more rigidly, then the merely adsorbed one.