9. Plant for removing radioactive nuclides from water, comprising

- at least one container for the chemical pretreatment of the radium-containing water,
- at least one filtration appliance in order to purify the chemically pretreated water by filtration and also optionally
- a device for carrying out a pressure-driven membrane separation method for further treatment of the water purified by filtration,

wherein the at least one container for the chemical pretreatment of the radium-containing water is coupled to storage containers containing manganese dioxide obtained by oxidation of an aqueous manganese salt solution set to a pH between 4.5 and 9, and wherein the filtration appliance is a device comprising at least one ceramic filter membrane.

10. Plant of claim 9, characterized in that the water is radium-containing groundwater.