## ABSTRACT

Abstract. Industries and activities handling NORM are identified and TENORM levels assessed in Slovenia. The identification is based on (1) survey of historical information available, (2) results published in scientific papers, (3) research reports made by research institutions within Slovenia and (4) original research aimed at obtaining more detailed picture of the areas investigated carried out. For this purpose, on-site gamma dose-rate measurements were performed, and TENORM/NORM materials sampled followed by high-resolution gamma spectrometry measurements for the determination of 210Pb, 238U, 232Th, 228Th and 226Ra. Waste water and ground water samples were assayed for 238U, 226Ra and 210Pb using RNAA, LSC and beta proportional counting. The inventory of the investigated sites is presented, giving the information on amounts of the deposited wastes, specific activities of the natural radionuclides and geographical distribution of the inventories in Slovenia. The TENORM sources identified and characterised pose negligible radiological risk to the general population.