



Contribution ID: 86

Type: Poster

Qualification of low and intermediate level radioactive wastes (L/ILW) within the framework of the “Demo” project by a Triathler type portable liquid scintillation spectrometer in Püspökszilág, Hungary

Thursday, 22 April 2010 12:00 (20 minutes)

In the Püspökszilág Radioactive Waste Treatment and Disposal Facility, Hungary being in operation since 1976 many works began to solve the storage of the non-power plant radioactive waste of Hungary to fulfil the increasing safety demands. In the framework of this procedure the exhumation of 66 pieces of reinforced concrete near-surface vaults with the size of 70-140 m³ each (called vault “A”) was launched together with further renewal works. The exhumation of the A11, A12, A13 and A14 vaults were included in the “Demo” project, in the course of which the aim was to find the proper measurement and waste-backfilling technique to adapt them in the case of the further vaults. To identify the H-3, C-14 and Sr-90 isotopes a Triathler type portable liquid scintillation spectrometer was used together with a rapid and well-reproducible swipe sampling method. At the evaluation of the 4000 samples taken the expected total activity value was obtained. The removal of certain waste packages was fulfilled to gain room to allow the disposal facility to accept further waste in the future. The measurement technique is therefore well-applicable in the case of the “A type” vaults.

Primary author: Mr NAGY, Tamás (Isotoptech Co. Ltd., Debrecen, Hungary)

Co-authors: Mr VODILA, Gergő (Institute of Nuclear Research of the HAS, Debrecen, Hungary); Mr BARNABÁS, István (Public Agency for Radioactive Waste Management, Paks, Hungary); Dr MOLNÁR, Mihály (Institute of Nuclear Research of the HAS, Debrecen, Hungary); Mr VERES, Mihály (Isotoptech Co. Ltd., Debrecen, Hungary); Mr ORMAI, Péter (Public Agency for Radioactive Waste Management, Paks, Hungary); Mr KAPITÁNY, Sándor (Public Agency for Radioactive Waste Management, Paks, Hungary); Mr BIHARI, Árpád (Institute of Nuclear Research of the HAS, Debrecen, Hungary)

Presenter: Mr NAGY, Tamás (Isotoptech Co. Ltd., Debrecen, Hungary)

Session Classification: Poster Session - Chemistry of Nuclear Fuel Cycle, Nuclear Waste Management

Track Classification: Chemistry of Nuclear Fuel Cycle, Radiochemical Problems in Nuclear Waste Management