

Polychlorinated biphenyls (PCBs) as a significant persistent toxicant in the Slovak environment

Jaroslava Maroszová

Faculty of Chemical and Food technology, STU in Bratislava, Slovakia, Radlinského 9, Bratislava, Slovakia

Polychlorinated biphenyls (PCBs) are stable organic substances with serious negative impacts on health. Due to their optimal physicochemical properties, they have been mass produced worldwide in the past. In the Czechoslovakia, the Chemko Stražské plant was a major producer of these substances. After the discovery of serious toxic effects on health and the environment, the production of PCB substances was gradually phased out worldwide (Czechoslovakia was one of the last countries to do so). After years of inaction, the Ministry of the Interior (MISR), in cooperation with the municipality and the Slovak University of technology in Bratislava (STU), decided to finally address the issue of PCB disposal in residual solid waste and the environment after more than 30 years. It is estimated that more than 500 tons of toxic waste is involved. STU, as a partner of the MVSR, has been tasked with assisting in the design of appropriate decontamination techniques in relation to the solid waste improperly stored on the former plant site. It is also tasked with addressing the issue of PCB contamination of water and soil and finding appropriate solutions for environmental decontamination.

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