



## **Distribution of Polychlorinated Biphenyls in Lake Shkoder, River Buna and Velipoja Coast Surface Water**

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**Abstract:** Lake Shkodra is the largest lake in the Balkans region. Its surface is 368 km<sup>2</sup>, from which 149 km<sup>2</sup> are included in Albanian territory and the other part belongs to Montenegro. The Buna is a short 44 km river that originates from lake Shkodra and meanders its way to the Adriatic sea. Velipoja coast lies along the Adriatic coastline in the North – West of Albania, near Buna River, which is the only navigable river in Albania.. PCBs are among the most widely known class of persistent organic pollutants (POPs) because of their ubiquity, potential for magnification in the food chain, and harmful effects on humans and wildlife. The results of chemical analyses presented in this paper show the presence of the polychlorinated biphenyls (PCBs) in the Velipoja coast water and delta Buna in 36 surface water samples at 8 sampling sites were collected in three seasons of 2011-2012. The PCBs were identified and quantified in the water by using L/L extraction combined with GC- $\mu$ ECD instrumental analyses. Gas chromatography (GC) technique equipped with micro electron-capture detector ( $\mu$ ECD) was technique for polychlorinated biphenyls residue analyzes.

**Keywords:** PCBs, POPs, GC- $\mu$ ECD, harmful effects

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