

POLYCHLORINATED DIBENZO-P-DIOXINS (PCDDS) AND POLYCHLORINATED
DIBENZOFURANS (PCDFS) COMPOUNDS IN SEDIMENTS OF TWO SHALLOW
RESERVOIRS IN CENTRAL POLAND

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Abstract: The objectives of this research were to 1) measure the concentrations of PCDDs/PCDFs in sediments from two reservoirs located in Central Poland, 2) illustrate the pollution level, and 3) identify sources affecting these contaminations. Sediment samples were collected during spring period of 2007 from Barycz Reservoir situated on the Grabia River and Lower Pond located on the Sokołówka River. Almost all of analyzed homologues were identified, except for two the most toxic congeners: 2,3,7,8-TCDD and 1,2,3,7,8-PeCDD, which were not observed. The total concentrations of PCDDs/PCDFs were 213.727 $\text{pg}\cdot\text{g}^{-1}$ d.w. for Barycz Reservoir and 536.266 $\text{pg}\cdot\text{g}^{-1}$ d.w. for Lower Pond, with dominant OCDD congener. WHO-TEQ concentrations based on TEF values ranged from 2.323 to 7.984 $\text{pg}\cdot\text{g}^{-1}$ for Barycz Reservoir and Lower Pond, respectively.