



## **Concentration and distribution of mercury in the West Siberian peatlands**

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The analysis of mercury distribution in soils has shown that the highest concentration of Hg is characteristic for organic soil especially for peaty soil. The peat deposit can accumulate industrial pollutant due to its high sorption properties. Results of experimental study of mercury concentration in peat of different peatlands of the West Siberia are presented in this paper. Concentration of mercury in peat does not exceed the maximum permissible concentration (2100 ng/g). Depth distributions of mercury in different peatlands are similar. Maximum amount of mercury (305 ng/g) contains in upper layers of peat deposit. Botanical composition of peat and degree of peat decomposition are influences on mercury distribution. Contents of mercury in bottom layer of peat correspond to concentration in the mineral base (about 20-35 ng/g). Raise of mercury concentration in top layers of peat in the West Siberian peatlands is the evidence of global atmospheric transport of mercury and high volatility of mercury. Known features of paludification process and information on mercury production can be used for development of a method for dating of peat deposits similarly to dating using Pb concentration.