Abstract

Persistent organic pollutants causes a big safety risc for natural ecosystems and exposed human population because of their physical and chemical properties and the high – leve toxicity. One of the important mechanisms of their transport is spreading by the rivers and all the surface waters. An easy sorption on the organic material permits just a slow mobility of contamination, which is limited by the volume of organic compound in soils and sediments. But the body of contaminated sediments can became a long – life pollution source for the surroundings. On the Jizera catchment area is an important water accumulation, which serves as the used or potentional water sources with the high quality, endangered by the POP's contamination . The most vulnerable water source is the catching object Káraný. The surface water catched by the waterworks on the lower part of the catchment area is with serious quantity polluted by the POP's, which are concentrated the rivers from all the country into the lower catchment. Because of the industry developement the content of the POP's in the catchment area's water doesn't decreace in spite of safety arrangements. So it is necessary make the steps to effective decreasing the dotation of area by the contaminants and to the restriction of their infiltration into the surface waters and their transport through the rivers as soon as possible. The first of the steps must be an increasing of the POP's monitoring frequency and density in the surface water and a localization of all the single pollution sources on the Jizera catchment area.