

**CHEMICAL MONITORING OF SEDIMENT UNDER WATERFRAME WORK
DIRECTIVE AND THE ASSESMENT OF APPLICATIONS IN TURKEY**

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EXPERTISE THESIS ABSTRACT

In our country, studies about water quality monitoring are carried out by some institutions and organizations, however; except research studies, chemical monitoring of sediment are not held on and these studies do not comprise chemical monitoring of sediment under Waterframe Work Directive (WFD). Since accumulation of chemical substances in sediment can lead to the deterioration of ecological and chemical status of water, chemical monitoring of sediment should also take place at water quality monitoring programmes. Selection of monitoring stations and chemical parameters that will be monitored in sediment, technical specifications regarding to analysis of these chemicals in the scope of WFD, are explained with the aid of guidance documents. In the concept of this study, by examining WFD and related guidance documents, technical specifications related to chemical monitoring of sediment were explained. By reviewing studies conducted in EU countries, the drawbacks in Turkey were detected. Moreover, for Gediz and Ergene Basins, in which chemical monitoring of surface waters were done in the scope of Basin Monitoring and Determining Reference Points Project, the chemical parameters that have tendency to accumulate in sediment were determined and the chemicals that have the potential accumulate in sediment in the draft list of spesific pollutants for Turkey were idendified. Also, it is thought that the document “Sediment Sampling Manual for Chemical Analysis” prepared in the scope of this study, will be a guide to chemical monitoring of sediment studies in Turkey. By detecting the deficiencies of used sampling record sheet for sediment sampling, the new sediment sampling record sheet to use in field is prepared.

Keyword: Sediment, Water Framework Direktive, Water Quality, Chemical Monitoring