SYSTEM FOR DYNAMIC MONITORING AND WARNING IN CASE OF ECOLOGICAL RISK FOR SURFACE WATERS

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Abstract

The dynamic monitoring system continuously performs the monitoring of physicochemical quality indicators of water quality in investigated areas. In case of ecological risk due to accidental pollution situations, the system alarms in real time the decision factors for the diminution of the environmental impacts and other negative effects. The distributed networks of the system are composed of floatable structures of Buoya Monitoring (BM) type, autonomous and adaptable to the environmental conditions specific to a continental climate. They are able to work with reduced maintenance in isolated locations. The BM floatable structure incorporates the sensors and the hardware-software system of data acquisition, processing and transmission. So equipped, BM becomes operational instrument in the infrastructure of the networks of surface waters quality monitoring. The BM model developed allows the continuous in situ evaluation of the health status of the monitored surface water with the scope of warning in case of ecological risk.

Key words: buoy monitoring system, floatable structure, network, quality indicators, water pollution monitoring

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