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Short Communication

Assessment of Toxic Metals in Subarnarekha River Basin in and around Jharkhand Area

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ABSTRACT

The present investigation is aimed at assessing the concentration of heavy metal ions along the Subarnarekha river in Jharkhand .Eight samples were collected along the stretches of Subarnarekha basin during the period (Water Year) June-2012 to May-2013 on the first working day of every month. The purpose of this study was to estimate eight heavy metals (Cu, Zn, Cd, Pb,Fe,As,Ni and Cr) in the surface water of the Subarnarekha river, one of the most important rivers in Jharkhand and Northern Odisha, India. In the selected research area, the Subarnarekha River is receiving the domestic, industrial, and municipal waste waters/effluents all along its course. All in all, the ascendancy of the analyzed heavy metals in the surface water of Subarnarekha followed the sequence: Cu>Fe>Pb>Zn>Cd>As>Ni>Cr>Hg. Our findings highlighted the deterioration of water quality in the rivers due to industrialization, mining and human activities.

Keywords: Heavy metals (Cu, Zn, Cd, Pb, Fe, As,Hg, Ni and Cr).