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Heavy Metal Pollution in Mining Regions – Case Study of Sonebhadra District

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Abstract

Mining activities as well as thermal power plant operations release a large number of heavy metals into the atmosphere in the form of dust, which reaches back to the earth surface as fallouts or washout again polluting aquatic/terrestrial ecosystems. Heavy Metals do not remain soluble in water, and therefore, reach the sediment where they become bound to various components of the sediments. This study is an attempt to assess the basic parameters and toxic heavy metals, including Fe, Hg, Zn,

tween the coal seams (Goodell, 2007). The quality of any coal is determined by the calorific value, expressed as the amount of heat energy (in kcal/kg) present in the fuel liberated on complete combustion. Sulphur content in Indian coals is below 1.9%, less than that observed in the United States (1.0-1.8%) and China (0.5-1.0%) (Reddy and Venkataraman, 2002). The mining of coal as well as its burning releases much amount of carbon emissions and contributes to Global Warming and eventually heatwaves as well (Singh et al., 2021a; Singh et al., 2021b).

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