

## **HEAVY METAL CONTAMINATION OF WATER IN MAHESHWARAM MANDAL, RANGAREDDY DISTRICT, TELANGANA STATE -INDIA**

Ch. Venkateshwarlu\*, I. Panduranga Reddy\* and Agre. Harishkumar\*\*

*\*Department of Geology, University College of Science, Osmania University, Hyderabad, Telangana State – India*

*\*\*School of Interdisciplinary Sciences, Symbiosis Skills and Professional University, Pune, India*

*E-mail: venkyoberai@gmail.com*

### **Abstract**

A study was conducted to investigate heavy metal contamination in waters in the vicinity of industries around Maheshwaram Town in Rangareddy district, Telangana State. The study area carries anthropogenic pollutants, mainly heavy metal concentrations like Cu, Pb, Zn, Cr, Co, Ni, and As, released from industrial effluents, agricultural return flows and domestic sewage. The concentration of total Cu, Ni, Pb and Zn has decreased with increasing distance from the disposal points of tannery and textile dying industries. The risk of heavy metal contamination is pronounced in the environment adjacent to large industrial complexes. The main sources of metals include effluents from wastewater treatment plants, treated and untreated waste waters from surrounding industrial establishments as well as agricultural activities. Protecting agricultural soil is a formidable challenge in the study area as it requires modernization of the industries, thereby resulting in efficient recovery and recycling of waste waters.

*Keywords:* Maheshwaram, Contamination, Heavy metals, Water pollution, Industrial effluents, Toxic elements and Background values