Preface

The aim of my present study is to explore the pivotal role of water for any developed or developing nation and further the demand and the scarcity of water globally. Almost every day we are finding a news and article in the news papers, magazine and short films & advertisements on T.V regarding the value of water and day by day diminishing level of surface and groundwater.The fresh water may be the most unforgiving source amongst all the planet's renewable resources.A rapidly growing economy and a large agricultural& industrial sector stretch India's supply of water even thinner and the steel industry, one of the most important assets of a nation uses a tremendous amount of water for waste transfer, cooling and dust control.

The development of innovative technologies for treatment of wastewaters from steel industries is a matter of alarming concern for us. The tragedy of India's water scarcity is that the crisis could have been largely avoided with better water management practices. There has been a distinct lack of attention to water legislation, water conservation, efficiency in water use, water recycling, and infrastructure.This Paper discusses evolution of **Common Effluent Treatment Plants (CETPs)** in Indian context and their performance evaluation. A section in this report also presents the implementation of Membrane technology, Ion-exchange, de-chlorination and reverse osmosis for the better results towards getting clean water from the steel wastewater. The focus of the study is about the solid waste management, re-utilization of sludge from steel industry, reuse and disposal of sludge and conversion of the sludge into Thermophilic compost by adding raw sawdust.

Vikas Kumar Sinha