

The Evolution of Wastewater Treatment in India: Transformation towards Environmental and Economic Efficiency

Abstract

The theme of the paper is to talk about how have the methods of wastewater treatment in the industrial sector evolved in India. In talking about this the main emphasis has been laid on two types of treatment techniques- The Common Effluent Treatment Plants and The Zero Liquid Discharge techniques of wastewater treatment. Both these treatment methods are relatively new and the experimentation with these techniques is still in progress so that an efficient way of waste treatment for industries can be found. Talking about the merits and shortcomings of the aforementioned treatment techniques particularly in the Indian context is the main objective of this research.

Keywords: Wastewater Treatment, Common Effluent Treatment Plants, Zero Liquid Discharge

1. Introduction

The year 1991 is marked as the year of liberalization of the Indian economy. In the same year World Bank sanctioned the Industrial pollution control project which allowed an International Bank for Reconstruction and Development loan of \$124 million along with an IDA credit of \$31.6 million. The key agenda for this project was financing of Common Effluent Treatment Plants at industrial estates and other sites with a heavy concentration of chemical and related industries, in particular small size. Initially, the project was phased out for four