

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 4, Issue 5, May 2024

Hazard Identification and Risk Analysis of Liquid Effluent Treatment Plant Apply in Chemical Process Industry

Mr Pravin Tathod¹ and Mr. Nitesh Ramteke² Professor and Head of Department, Department of Fire & Safety Engineering¹ PG Scholar, Department of Fire & Safety Engineering² Shiv Kumar Singh Institute of Technology and Science, Indore, India

Abstract: The chemical process industry is one of the categories of highly polluting industries and generates strong wastewater of high COD along with hazardous waste which requires effective treatment and disposal/reuse of effluents. In this review, the various sources of wastewaters in the chemical industry are identified and the best available technologies to remove them are critically evaluated. The aim of the present research work was to determine the behavior of various parameters of the chemical wastewater. During the entire study evaluate, monitor, and check various environmental parameters whether they are complying with a given standard or not given by regulatory authority at chemical Industry. The India based industry produced bulk drugs, fatty acids, fatty alcohol, food additives, personal care products, and others. The monitoring data of the effluent treatment plant will give information on the pollutioncontrol by the company and the management of waste. Overall analysis showed that there is no significant difference in pH, BOD, COD, and ammoniacal Nitrogen. The use of conventional treatment methods along with membrane reactors and advanced post-treatment methods resulting in a Coagulation wastewater treatment technology appears to be the best

Keywords: Hazards, Risk, Effluent Treatment Plant, Coagulation wastewater treatment, COD, BOD PH etc



