

Analyzing and Reducing the Environmental Impact of the Waste Waters from the Locomotives Repair Industry

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Abstract— The aim of this paper is to elaborate a model of analyzing the impact of waste water from railway industry, to propose a treatment method of those and to study the effect of the treatment of the industrial waste waters. For this, the waste waters from the locomotives repair industry and the method of treatment named dissolved air flocculation (DAF) are two of object of study. The paper starts with a short analysis of the locomotives repairs industry and the first objective is to illustrate the relationship between pollutants and industrial activity. The second step of this study was to make different histograms to illustrate the effect of treatment of the waste waters on different indicators, such: total solids suspended, chemical demand in oxygen, pH, heavy metals, minerals, grease and solvents. The tools used in this analyze are those specific: Environmental Systems Analysis (ESA) tools, critical synthesis of the processes and theirs modeling, observation and the experiment and statistic calculus. The research and its implementation is the work of the coauthor as a team manager. The form presentation is completely original. So the paper is original and actual.