

Study for the humic acid elimination by contact infiltration or adsorption-settling-filtration

This study aims the reduction of humic acids contained in surface waters. Firstly, the study that focuses on the influence of certain parameters, namely the solution pH, the filtration speed and the addition of raw bentonite on the efficiency of humic acids reduction by contact filtration was considered. Secondly, a study of humic acids interaction with a sodium montmorillonite and a H-montmorillonite, within a static system with a goal to define the parameters reacting this interaction, namely pH, equilibration time and adsorbent concentration, is performed. In addition, an adsorption-settling–filtration test is performed under the process conditions previously described to follow the effectiveness of this treatment process.