Flocculation Processes by Polyacrylamide Flocculants Coupled With Coagulant For Potable Water Treatment

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Coagulants have two types; first, inorganic coagulants are as aluminium sulfate, PAC, and PACS. Second, synthesized organic coagulants are polyamine and polyDADMAC. The both are widely used to treatment the wastewater, drinking water, and so on. Polyacrylamide flocculant is a type of high molecular weight compound that is soluble in water and it has major advantages such as, flexible and effective in treating wastewater, paper, sedimentation, and flotation with wide range of concentrations, due to rapid reaction, low dosage. In many countries, the polyacrylamide is adapted for drinking water treatment. Because it has superior performance than inorganic and organic coagulant and the problems are caused by the poor quality and can not solve using coagulant as high concentration of green algae and overflow of activated carbon. But it is not permitted for the residual mononer in Korea In the research, the removal efficiency of SS (suspended solid) as turbidity and toxicity as residual acrylamide were estimated using polyacrylamide flocculants supplied Eyang PWG grade and prepared in lab. The polyacrylamide floccualnts coupled with coagulants were investigated.