

Oxidation treatment impacts on organic matter disposal from natural water by coagulation-flocculation

This work aims to observe the repercussion of two types of oxidative treatment using chlorine, alone or in combination with potassium permanganate, on elimination by coagulation-flocculation of humic substances.

Experimental results show that oxidation treatments with chlorine or potassium permanganate influence on the performance of coagulation-flocculation by reducing the removal efficiency of the coagulation-flocculation.

The promoter effect of mineral elements contained in the water only slightly improves the removal efficiencies. An application of the combined method prechloration-coagulation-flocculation to an Algerian surface water leads to similar results.

The changeover from chlorine to potassium permanganate in peroxidation leads to a clear decrease in final chlorine consumptions.