
Poster

Evaluation of different chemical agents as settling enhancers in an activated sludge of a WWTP.



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ABSTRACT

Currently, the few studies carried out on the sedimentability of activated sludge from a WWTP, make it possible to continue to act on them using different chemical agents that can positively influence the solution of various problems caused by poor sedimentability. To do this, a pilot plant was built to simulate a phase of the WWTP, constituted by a tank of water supply decanted from the Tablada WWTP, a biological reactor, a decanter and a reservoir where we collected the treated water. To carry out the study, first, was started the plant in which the flocules typical of an active sludge were formed gradually. A study of V30 and V60 was done on them to observe the capacity of sedimentability and to obtain an optimum. It was not possible to obtain the optimum sought, so that finally active sludge was used from the tanks of the Tablada WWTP. On this mud, progressive additions of different chemical agents such as talc, bentonite and TW 4650 VHM polymer were made at different concentrations, carrying out a subsequent study of the treated water obtained after the addition. The analysis made in the treated water were COD, Matches and Nitrogens, to verify that they were within the optimal parameters valid in a WWTP.

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