عنوان مقاله:

INVESTIGATION OF THE EFFECT OF ANOXIC SELECTOR ON SLUDGE BULKING IN SBR SYSTEM(case study: SHIRAZ WasteWater Treatment Plant IN South-Western of IRAN

محل انتشار:

نهمین کنگره بین المللی مهندسی عمران (سال: 1391)

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خلاصه مقاله:

One method of biological wastewater treatment is activated sludge. The activated sludge process is the most commonly used technology for biological wastewater treatment. Bulking sludge is a complicated and unpredictable challenge for many wastewater treatment plants globally. The sludge will not settle properly and huge amounts of soft foam can float all over the plant. One of the methods to prevent bulking sludge is use of selector before main aeration basin. In this paper the effect of use of anoxic selector in activated sludge process was investigated. Experiments were conducted in batch culture with use of Sequential Batch Reactor (SBR) system. Three reactors, each with 4 liter volume, and different initial floc loading were used. Different anoxic feeding time which shows contact time in the selector were applied in terms of 0,20,30,40 min. Parameter sludge volume index (SVI) was measured for different initial floc loading and contact time in the selector. Results from this study showed that selector with contact time of 40 min and floc loading 0.4 has good effect on sludge stability

کلمات کلیدی:

Activated Sludge, Anoxic Selector, Sludge Bulking, Floc Loading

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