

THE PROBLEM OF MECHANICAL DEWATERING OF OBSOLETE SEDIMENT OF MUNICIPAL WASTEWATER AND THE PROSPECTS FOR USING FLOCCULANTS BEFORE SEPARATION

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Purpose. To probe influence of flokulyantiv on the structure of fallouts of communal flow waters for development in future of technical decisions and organization of their use before mechanical dehydration.

Results of exploration. Research of dehydration is on the press of silt and silt with filler. Fillers: straw, sawdusts, abscised leaves, arboreal fuel wood chips.

Effect of separation almost absents.

Material is gelatinous, without flocculants is not divided into press of this type. The change in the structure of sediments leads to the redistribution of forms of moisture connection, it allows you to achieve deeper and faster dehydration.

A wide range of polyacrylamides allows you to choose the optimum polymer for sludge treatment processes.

The studies were conducted with three types of flocculants:

- cationic polyacrylamides: ECOFLOC CR-7, ECOFLOC CR-8;

- polidadmah ECOFLOC D - 101B.

Humidity of silt sediment of sewage: $W_{s.s.} = 70\% \text{ i } 80\%$.

Concentration of the working solution of each flocculant 0,05%.

The dose of each added flocculant is: 2,0 g per kg of dry matter; 5,0 g per kg of dry matter i 8,0 g per kg of dry matter.

All tested flocculants act in the same way in sieges of different humidity. Increasing the doses of flocculants in the tested range positively impacted the phase separation process. But the influence is not cardinal.

Further tests on the press will help to find a brand that will provide a more complete separation.

Conclusions. 1. Powder-like flocculants based on polyacrylamide should be considered promising.

2. There is no noticeable difference between the performance of the ECOFLOC CR-7 i ECOFLOC CR-8 brands. The solid phase accumulates in the flakes-like form.

3. The action of the flocculant ECOFLOC D-101B differs significantly in the structure of the solid phase layer, the solid phase layer is compact, high density, free of flakes.

4. For further use, we recommend the brand ECOFLOC D-101B.