ABSTRACT

The Indonesian Ministry of Health Surabaya Health Polytechnic Ministry of Health Department of Environmental Health Sanitation Study Program, Diploma III Program Magetan Campus Scientific Papers, May 2020 Jihan Pitri Andinita

EFFECT OF OPTIMUM DOSAGE PAC (Poly Aluminum Chloride) AND SUPERFLOC (Poly Dadmac) FOR LIQUID FABRICATION OF FACTORS TO KNOW UNTUNG PONOROGO 2020.

Untung ponorogo tofu factory is a home-based food industry owned by Mr. Untung. Tofu factory is one of the industries that produces smelly liquid waste that causes turbidity. In the factory, Untung Ponorogo itself already has an WWTP but it has not been effective due to limited costs. As a result, the level of turbidity is still high at the disposal of wastewater. The purpose of this study is the purification of tofu liquid waste by using varying doses of PAC (Poly Aluminum Chloride) and Superfloc (Poly Dadmac).

This research is reviewed from the nature of the study, including the type of Analytical research. Data collection was obtained from observations and sampling and examination of data after that the data was entered into the SPSS application with the One Way Annova inspection method. The required sample volume at the WWTP outlet was 30 liters because in this study there were 3 treatments. By using varying doses of 100mg / l, 200mg / l, 300mg / l, 400mg / l and 500 mg / l PAC (Poly Aluminum Chloride) and 1 drop (0.05cc) Superfloc (Poly Dadmac). The sampling technique used in the study was grab sampling technique. Turbidity parameter values before coagulation-flocculation of 10.55 NTU research results can be seen on the graph that the optimal decrease in turbidity parameters after coagulation-flocculation occurs at variations of 200mg / l PAC (Poly Aluminum Chloride) and 1 drop (0.05cc) Superfloc (Poly Dadmac) had a value of 7.94 NTU with a percentage decrease of 24.73%.

For this reason, it is recommended for the factory to increase the effectiveness of WWTP for the community to help supervise and maintain cleanliness in the river around the tofu factory.

Keywords: Tofu waste, PAC, Superfloc, Coagulation-flocculation

References: 20 Year : 2002-2018