

Health Polytechnic of the Ministry of Health in Bandung

DIV- Environmental Health Program

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Abstract

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***THE DIFFERENCE OF DISSOLVE AIR FLOTATION
CONTACT TIME TOWARD DECREASING OF OIL AND
GREASE LEVEL OF DOMESTIC LIQUID WASTE
IN PT EVOLUZIONE TRYES
SUBANG REGENCY***

ix + 80 pages + 14 tables + 8 pictures + 7 appendix

PT Evoluzione Tyres uses grease trap method on installation domestic liquid waste. Beside on the first investigation result of Laboratory is obtained the result of grease and oil level results exceed quality standard of PermenLH No.68 year of 2016 which set maximum limit of oil and grease are 5 mg/L. Therefore, this researcher tries to apply Dissolved Air Flotation by contact time of 60, 70, and 80 minutes. The research purpose is to know The Difference Of Dissolve Air Flotation Contact Time Toward Decreasing of Oil And Grease Level of domestic liquid waste in PT Evoluzione Tryes Subang Regency. Kind of Experiment is with the plan of pre and post test without control. Its population is all of kitchen waste water, its sample is half of from population. Technique of sample taking is used by grab sampling, technique of data collection is used by laboratory investigation of gravimetri, amount of sample is 24 samples. Tool of data collection is a set of laboratory tools, litmus pH and thermo hygrometer. Data analysis univariate and bivariate with Kruskal Wallis continued Mann-Whitney. The presentation of decreasing oil and grease level is average by contact time 60, 70, and 80 were (52,7%), (64,5%) and (86,4%) respectively. There is significant difference among of three that variations toward decreasing oil and grease level. Decreasing oil and grease level high is 80 minutes 5th repetition by decreasing as 93,3% which is able to decrease oil and grease above threshold value is up to 3 mg/L. Suggestion which is given to industry in order to apply Dissolve Air Flotation Method according grease trap size and discharge of domestic liquid waste. To the next researcher can complete this method by adding component for comparing bubbles.

REFERENCES : 48 (2000-2019)

KEYWORDS : *Contact Time, Dissolve Air Flotation, Kitchen Waste Water, Decreasing Level, Oil and Grease.*