ABSTRACT

ADELLYN WILLYANDA. Test The Total Coliform, Presumptive and Confirmative with MPN (Most Probable Number) Method on Domestic Waste Water. Supervised by SALINA FEBRIANY and M ZAKY.

Diseases that attack humans can be transmitted and caused through contaminated water. These diseases are caused by the higher levels of pollution entering the water. Bacteria that have the potential as a disease are pathogenic bacteria and pathogenic bacteria are total coliform bacteria. Therefore it is necessary to test the quality of waste water on the presence of total coliform bacteria. The MPN (Most Probable Number) method is a method of calculating coliform bacterial cells based on the closest approximate number of calculations within a given range and calculated as a statistically close projection value. The MPN method can detect coliform in very low numbers in the sample. The MPN's total collage test on domestic wastewater using the American Public Health Association (APHA) 17th Edition 2005 while the presumptive and confirmative methods of MPN method on domestic wastewater using SAC-SINGLAS Guidance Notes C&B and ENV 002 2002 include parameters of sensitivity, specificity, and efficiency. Based on experiments performed total coliform obtained 2.4 x 10^5 cell/100 mL, sensitivity 0.98, specificity 1, and efficiency 0.99.

Keyword: MPN method, presumptive and confirmative test, total coliform, and wastewater