

**ANALYSIS OF MAINTENANCE PLANNING TO REDUCE
DOWNTIME COSTS IN CLEAN WATER PRODUCTION
MACHINE UNIT USING AGE REPLACEMENT METHOD
IN BENGKALIS PAVED TIRTA DRINKING WATER
PERUMDA**

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Abstract

The clean water treatment production process is an important element that must operate stably to obtain maximum results, So that it takes good and planned maintenance activities. Including drinking water. Based on the analysis that has been carried out to determine the preventive schedule for the clean water process, an interval of 4 days is determined for the intake process, 30 days for the flocculation process, 30 days for the sedimentation process and 6 days for the determination process. For the distribution process, the determination of this time interval is based on the number of replacements and the time required for repair. The minimization ratio obtained from the data processing process is 0.00629 or 5% for the intake process, 0.00122 or 1% for the flocculation process, 0.00147 or 1% for the distribution process, and 0.00469 or 7% for the process. distribution.

Keywords: Age Replacement, downtime, optimal maintenance planning and preventive maintenance.