

Evaluation of Water Quality for Clean Water PDAM in Manggala Sub-district, Makassar City, South Sulawesi

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Abstract. Sufficient water quality is a major challenge in meeting clean water needs in Manggala Sub-district, Makassar, South Sulawesi. This study aims to analyze water quality with a focus on the physical parameters of TDS (Total Dissolved Solids), pH, and DO (Dissolved Oxygen) in several important locations in Makassar City. The analysis method was carried out by taking water samples periodically and analyzing the physical parameters using standard laboratory techniques. The results showed an average TDS value of 91 ppm, pH 6.8, and DO 11 mg/L. The implication of these findings is the need for better management of water resources in Manggala Sub-district of Makassar City, with efforts to improve monitoring and protection of water quality. The findings can also support sustainable and evidence-based water management policies. Thus, this research makes an important contribution to understanding and maintaining water quality for environmental sustainability and public health.

Keywords: PDAM, Physical parameters, Quality standards, Water quality

