

THE INFLUENCE OF BATIK INDUSTRY WASTEWATER ON THE WATER QUALITY OF LOJI RIVER IN PEKALONGAN

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ABSTRACT

Waste is one of the materials that can pollute the river. Most waste is disposed of into the river so that it will cause pollution in the river. The problem of river pollution, one of which occurs in the Loji River located in Pekalongan City, which still discharges a lot of batik waste carelessly into rivers and waterways. The research was conducted in Loji River, Pekalongan City. The purpose of this study was to determine the water quality and level of water pollution in Loji River Pekalongan due to batik industry waste. Determination of location using survey method. Sampling method using purposive sampling method based on land use activities and ease of access to water collection which is divided into three segments, namely segment I, segment II, segment III. Each segment was taken two sample points. Water quality is determined based on Government Regulation Number 22 of 2021 according to river water quality standards. The level of water pollution is determined by the Pollution Index (IP) method. The results showed that based on the parameters that have been tested, the water quality of Loji River no longer meets the class II water quality standards. Tingkat pencemaran air pada Sungai Loji masuk dalam kategori cemaran ringan berdasarkan indeks pencemaran. Nilai indeks pencemaran air Sungai Loji yang terendah 0,731 yang masuk dalam kategori baik dan nilai tertinggi 1,725 yang masuk kategori cemaran ringan.

Keywords: *batik industry, waste, water quality, pollution*