

## ABSTRAK

Coastal areas, especially coastal areas and their surroundings, hold significant natural resource potential and are the most heavily utilized areas. This utilization can lead to pollution, which can decrease the quality and quantity of coastal and marine resources, necessitating water quality monitoring. Water quality monitoring is crucial, particularly in coastal waters, which are generally vulnerable to water pollution. One method used to assess the level of pollution or water quality status is the pollution index (IP). The dense human activity in the Lancok Beach area, such as the presence of boat berths that emit oil and grease, and the presence of residential areas that emit household waste such as detergents and plastic bags, are feared to have a polluting impact on water quality. To improve seawater quality management, a study of seawater quality and pollution index based on oceanographic parameters is required. This study aims to analyze the water quality of Lancok Beach from an oceanographic perspective and to analyze the status of seawater quality based on the Lancok Beach water pollution index. The benefits of research on water quality and pollution index in Lancok coastal waters, Syamtalira Bayu District are as information material for the public and as consideration for other parties to always manage the coastal area properly, especially in the Lancok coastal area, Syamtalira Bayu District. The method used in this research is a survey method with the determination of station points using purposive sampling. The results of the pollution index analysis show that the Lancok Coastal area, Syamtalira Bayu District, North Aceh at stations 1, 2, and 3 are included in the category of heavily polluted for the designation of marine biota quality standards.

**Keywords:** Beach, pollution index, oceanographic parameters, water quality status.