

서·남해안 소형어선 수리작업장 주변의 중금속 오염도 평가에 관한 연구

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Assessment of Heavy Metal Contamination in Sediments Induced by Small Ship Around Small Dock in Southwest Sea, Korea

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Heavy metal contamination in soil, ground water, and costal area is significantly issued because of their common usage in many anthropogenic processes and release into environmental systems. However, there are few field studies for sediment or seawater contamination around coastal area due to no population and low concentration.

In this study, source identification for heavy metal contamination in sediment around small dock, where small ships were anchored and repaired on and off, was investigated. The contamination level of heavy metal using ICP-OES was measured, enrichment factor (EF) based on Fe and Al was calculated, and statistical analysis of metal correlation by Pearson was conducted to investigate anthropogenic source related in small ship. In the results, metal contamination was observed in some samples, especially Zn, Pb, and Cu. And, enrichment factor for lead (Pb) in almost samples was over the 5 which indicated moderate pollution level. For the further study, it is need to conduct more detailed study for this site using extensive sampling and advanced technique such as metal isotope analysis.

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