

bertahan hingga minggu ke 4, sementara pengomposan secara artifisial fase termofil berlangsung cukup cepat dan hanya berlangsung pada minggu pertama. Dengan dapat dinyatakan bahwa pada percobaan ini laju dekomposisi pengomposan secara artifisial lebih cepat dibanding pengomposan pada lingkungan alami.

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PENENTUAN KADAR MERKURI PADA AIR, SEDIMEN, DAN BIOTA AIR DAS KAPUAS DENGAN TEKNOLOGI ANALISIS PENGAKTIFAN NEUTRON (APN)

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Abstract

The aim of this research were: 1) to determinate mercury disposition in water, sedimen, and biota in Kapuas river, and 2) to evaluate whether mercury disposition of the sample have been exceeded the threshold value which permitted to be consumed by animal an human. The sample of this research were water, sediment, and biota (algae and fish) in Kapuas river. The research was carried out by experiment with neutron activation analysis (NAA) method. The determination of the elements in sample was conducted by gamma spectroscopy. The mercury disposition in sample was determined by comparing the cps of sample and the cps of standard (20 ppm). The results showed that the mercury disposition in water at TPI pier, KPLP pier, Depluh pier, and Kampung Mendawai were 0,25 ppm, 0,14 ppm, 0,19 ppm, and 0,09 ppm respectively. The mercury disposition at sediment in TPI pier and Depluh pier were 1,56 ppm and 0,63 ppm respectively, on the other hand the disposition of the mercury in KPLP pier and Kampung Mendawai were not detected. The mercury disposition at algae in a cross of Pertamina office, Taman Alun-Alun Kapuas, Kapuas bridge, and near Sidarso hospital were 0,41 ppm, 0,59 ppm, 0,58 ppm, dan 0,68 ppm respectively.

Keywords: The mercury disposition, water, sediment, water biota, and NAA.

