

## ABSTRACT

**Dessy Nasri Rahayu. 2020. AnalysisA Of The Heavy Metal Content Of Chromium (Cr) In Water, Sedment and Fish In The Waters Of The Saguling Reservoir. Supervisor I, Drs, H. Ahmad Mulyadi, M.Pd. Supervisor II, Gurnita, S. Si., M.P.**

*Saguling Reservoir is one of three reservoirs in Citarum river. Initially this reservoir was built to generate electrical energy for Java-Bali electricity supply but now its function has developed into a place for tourism and fisheries called floating net cages (KJA). This study was conducted to understand and update the information about heavy metal chromium (Cr) found in water, sediment and fish in the waters of the Saguling Reservoir. The research method used is descriptive method and for sampling used purposve sampling method with three stations. The first stations (inlet) located in Cililin Subdistrict, the second station (the floating net cages/KJA) located Karang Anyar Subdistrict, and the third station (outlet) located in the dam area (DAM). The data were taken include water, sediment and fish which analyzed using ICP-OES at Padjajaran University Laboratory. Supporting data environmental factors include water temperature, water Ph, oxygen degree and water transparency. The results showed that the content of the heavy metal kromium (Cr) in water, sediment and fish in Saguling Reservoir Waters were all still below the quality standard or were tolerable so it could be used. The results show that the concentration of heavy metal chromium (Cr) in water from stations one to three respectively  $<0,0001$  mg/L,  $<0,0001$  mg/L and  $<0,0180$  mg/L. The results show that the concentration of heavy metal chromium (Cr) in sediment from stations one to three respectively 4,0373 mg/kg, 10,4492 mg/kg and 11,6560 mg/kg. The results show that the concentration of heavy metal chromium (Cr) in fish from stations one to three respectively 0,0384 mg/kg, 0,0301 mg/kg and 0,0166 mg/kg. When compared with the quality standard that ha been determined, the concentration of heavy metal chromium (Cr) in water, sediment and fish is still below the quality standard.*

*Keywords : heavy metal analysis, chromium, Waduk Saguling*