

ABSTRACT

Dilla Sinta Agnesia Putri, 2020. Analysis of the Heavy Metal Content Lead (Pb) in Water, Sediment and Fish in Saguling Reservoir Waters. Guided by Drs. H. Ahmad Mulyadi, M.Pd. dan Gurnita, S.Si., M.P.

Research on "Analysis of the Heavy Metal Lead Content (Pb) in Water, Sediment and Fish in Saguling Reservoir Waters" was conducted in June 2020. This study aims to determine the content of the lead (Pb) in water, sediment and fish in the waters of the Saguling Reservoir. Method used for this research was descriptive method with research design in sampling using purposive sampling. The research stations are consisted by 3 stations, namely at the inlet, around the floating net cages and outlet. Data that be used was the content of the lead (Pb) in water, sediment, fish and supporting data. Content of the lead (Pb) test was carried out at the Central Laboratory of Padjadjaran University. The lead (Pb) was tested using Inductively Coupled Plasma - Optical Emission Spectrometry (ICP-OES) method. Analysis content of lead (Pb) data for water is referred to the Government Regulation of the Republic of Indonesia Number 82 of 2001, then for sediment is referred to the Standard Quality of Heavy Metals IADC / CEDA 1997, while for fish is referred to the Food and Drug Supervisory Agency Regulation No. 5 of 2018. The results of the research in the water of the Saguling Reservoir showed that the content of Lead (Pb) in the water were <0.0001 mg/L, <0.0001 mg/L, and 0.1179 mg/L, content of Lead (Pb) in the sediment were 8.3903 mg/kg, 4.9520 mg/kg and 7.1081 mg/kg, content of Lead (Pb) in fish were 0.2668 mg/kg, 0.1482 mg/kg and 0.2456 mg/kg. Analysis of the content of Lead (Pb) in water compared to the quality standard at station I and station II were below the limit, meanwhile at station III it was above the limit. Analysis of the content of Lead (Pb) in the sediment compared to the quality standard at both three stations were below the limit. Analysis of the content of Lead (Pb) in fish compared to the quality standard at stations I and III were above the limit, meanwhile at station II was below the limit. Based on the results, climatic factor in the water of the Saguling Reservoir met the Government Regulation of the Republic of Indonesia Number 82 of 2001 standards.

Keywords: Heavy metals, Lead (Pb), Saguling Reservoir, Water, Sediment, Fish