

Abstract

Monique Mezhani Harnova, 2021. Test of Heavy Metal Lead (Pb) Content in Water, Sediment and Fish in Cirata Reservoir Waters. Guided by. Dr. Yusuf Ibrahim, M.Pd., M.P. and Mimi Halimah, S.Pd., M.Si.

Cirata Reservoir is the largest reservoir in Southeast Asia, located in West Java Province, supplying electricity to the islands of Java and Bali. Cirata Reservoir is spread over three districts: Cianjur, Purwakarta, and West Bandung. This study aims to determine how much lead (Pb) heavy metal content in water, sediment and fish in the waters of the Cirata Reservoir. On June 15, 2021, this research was conducted using a descriptive analysis approach and purposive sampling technique with three locations, namely station I (Babakan Garut Pier), station II (KJA Cirata Citata) and station III (BPWC Cirata). The samples brought, namely water, sediment, and fish, will then be analyzed using the Inductively Coupled Plasma-Optical Emission Spectrometry (ICP-OES) method at the Padjajaran University laboratory. The results of the main data analysis of the measurement of Lead (Pb) in water in the waters of the Cirata Reservoir from station I to station III showed <0.0001 mg/l from the three stations, none of which exceeded the quality standard; the size of Lead (Pb) in sediments respectively 5.2271 mg/kg, 2.4668 mg/kg, and 3.7026 mg/kg from all stations were still within normal limits; and the size of Lead (Pb) in fish from the three stations, namely <0.0001 mg/kg, 0.0993 mg/kg and 0.0833 mg/kg from the three stations were still within normal limits. Climatic data such as water temperature, pH, dissolved oxygen, and water clarity are for supporting data.

Keywords: *Cirata reservoir, Lead (Pb), Water, Sediment, Fish*