

***Analysis of Arsenic (As) Heavy Metal Content in Water, Sediment and Fish
in the Waters of Saguling Reservoirs***

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Abstract

Arsenic (As) heavy metals are non-essential heavy metals that are dangerous and can interfere with human health. This research aims to analyze the heavy metal content of arsenic (As) in water, sediment and fish found in the waters of Saguling Reservoir. This research was conducted on June 30, 2020 with descriptive methods. Arsenic (As) heavy metals in water, sediment and fish samples were analyzed at the University of Padjadjaran Central Laboratory using the Inductively Coupled Plasma-Optical Emission Spectrometry (ICP-OES) method. The results of the water sample study at station I = <0.0001 mg/l, station II = <0.0001 mg/l and station III = 0.0933 mg/l. Sediment samples at station I = 1.0425 mg/kg, station II = 1.1505 mg/kg and station III = 1.1364 mg/kg. Fish samples at station I = 0.2063 mg/kg, station II = 0.1629 mg/kg and station III = 0.1339 mg/kg. The results showed that the concentration of arsenic (As) heavy metals in the water at station III has exceeded the standard quality value set, while the concentration of arsenic (As) in the water at station I and station II has not exceeded the standard quality value set. While the concentration of arsenic (As) in sediment and fish on the whole station has not exceeded the standard value of the set quality.

Keywords: Arsenic (As), Reservoir, Water, Sediment, Fish