
Abstract: Bottom sediment samples from the Potok Bielszowicki (the Kłodnica basin) were examined due to their potential utilization after reclamation from the Kłodnica river. Analysis of the bottom sediment samples included determination of humidity concentration, total sulfur, ash content, volatile material, loss on ignition (LOI), degradable organic substances and trace metals (arsenic, cadmium, chromium, copper, mercury, nickel, lead and zinc). The study results showed that the bottom sediments could be qualified as uncontaminated excavated material, allowing for its further management. It was demonstrated that the properties of bottom sediments from the Potok Bielszowicki were similar to those of hard coal used in power industry. Trace metal content was negligible in these sediments, thus their management required no special precaution measures.

Keywords: Coal slurry, elemental analysis, surface waters, sludge management, trace metals.