The invention relates to chemistry, in particular to a process for recovery of sulphide and hydrosulphide ions from various solutions, including various types of water, and can be used for purification of drinking, process and waste waters.

Summary of the invention consists in that the process for recovery of sulphide and hydrosulphide ions from solutions provides contacting the solution containing sulphide and hydrosuphide ions, with a highly basic anionite, premodified with Bi(III) by treating 5 g of polymer with 250 mL of 0.016 M Bi(NO₃)₃ solution with pH 0.25, at the temperature of 55°C for 5.5 hours.

The technical result consists in that the proposed process does not contaminate the purified water with oxidized sulphur compounds – sulphate, sulphite and thiosulphate ions, and colloid sulphur, which is difficult to remove from the water.

Claims: 1