

96-0033

The invention relates to the technology of treatment and utilization of compound sludges comprising multicomponent hydroxide precipitation of heavy metals and may be used at industrial enterprises having galvanic productions.

The summary of the invention consists in the fact that in the proposed process of extraction of heavy metals from the drainage water precipitations by dissolution thereof in the sulfuric acid and subsequent reagent extraction, the dissolution in the sulfuric acid is carried out with an additional treatment by means of gaseous anhydride sulfide taken in stoichiometric quantity to the quantitative content of iron compounds (III) and attainment of pH treated medium to 4,5-6,5, and as reagents for metals extraction is used a mixture of reductants: sodium hypophosphite and sodium borane at their rate (5-10):1 and the process is carried out in a canal having a linear rate of 0,05-0,1 m/min. for the superposition of r.f. current at specific power expenses of 1,5-2,0 kJ/dm³ and magneto-liquefaction of the treated medium carried out at the expense of the spherical bodies heavy traffic, sintered of barium hexaferrite and magnetized till saturation. For that the introduced quantity of reagent-reductants mixture to the summary content of ion metals into the solution consists of (1,5-2,0):1 from the reaction stoichiometry of restoration thereof.

The technical result of the invention consists in rendering harmless of the sewage slime, comprising compounds of heavy metals by restoration thereof to the common state in a dispersed form.