

## THE PHYSICAL-CHEMICAL TREATMENT OF THE AQUEOUS SYSTEMS WITH THE CYANIDE CONTENT

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## Abstract

The concept of the sustainable development of Romanian economy –horizon in 2025 assumed the preservation and enhancement of the natural resources to be used by the future generations.

From this point of view we must preserve the quality of water, in front with the industrial pollution.

We obtain the gold-silver alloy with the cyanide process, but this proceeding has a weak point concerning the cyanides neutralize, in fact the sodium cyanide.

The cyanide concentration must be reduce under 5-7 mg/l under the maximum limit impose by the Romanian environmental legislation and of course European Union legislation.

We applied the epuration processes for all categories of used water which a high or basic level of cyanides . The processes may be destroyers, recuperations, biological of precipitation, etc.

The aqueous systems with cyanide content are: the aqueous sterile obtain from the extraction of gold process, the water from the decantation basin and the infiltrations from the decantation basin.

All the processes of epuration increase the economic cost of the extraction of gold-silver from the ores. The potential ecological consequences involve technological, high economic and social risk.

Keywords: Processes, cyanides, epuration, gold-silver alloy

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