



Issue No. 256-ED/29.05.2026
Sofia City

To: Eng. Valentin Buhov, Research Manager

"TINTYAVA EXPLORATION" AD

Subject: Your Ref. No. 66/26.05.2026 Dear Eng. Buhov,

GI-BAS received a letter with your Ref. No. 66/26.05.2026. In this regard, the experts of GI-BAS, Senior Asst. Prof. Milen Stavrev and Prof. Svetoslav Georgiev, familiarized themselves in detail with the attached documents related to the investment proposal for "Extraction and processing of polymetal ores from the Rozino Deposit in the Tintyava PLA, located in the lands of the village of Rozino and the village of Gugutka, Ivaylovgrad municipality, Haskovo District". The experts prepared an opinion on the issues within the competence of GI-BAS, which I am attaching with this letter.

The main conclusion in the opinion is that from a geological, geochemical and hydrogeological point of view, the available data do not justify any grounds to expect significant negative environmental impacts from the implementation of the investment proposal in compliance with the envisaged design solutions, management measures and monitoring programs.

Respectfully,
PROF. DR. SVETOSLAV GEORGIEV

Director of the Geological Institute
Bulgarian Academy of Sciences
Date: 29.05.2026
Sofia

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OPINION

on

“Strashimir Dimitrov” Geological Institute,
Bulgarian Academy of Sciences

Subject: Investment proposal for "Extraction and processing of polymetal ores from the Rozino Deposit in the Tintyava PLA, located in the lands of the village of Rozino and the village of Gugutka, Ivaylovgrad municipality, Haskovo District"

The Geological Institute of the Bulgarian Academy of Sciences has reviewed the Environmental Impact Assessment Report (EIA) of the investment proposal, its accompanying specialized annexes and the submitted geological, geochemical, mineralogical, hydrogeological and radiological data. This opinion was prepared in relation to the issues falling within the scope of the Institute's scientific expertise and concerns the geological, geochemical and hydrogeological aspects of the project.

The Rozino deposit is a low-sulphide epithermal gold-silver mineralization located in the Eastern Rhodopes - a region with intensive development of Paleogene volcanism and hydrothermal processes, which led to the formation of diverse polymetallic ore mineralizations with characteristic geochemical anomalies. In this context, the presence of elevated contents of individual elements, including arsenic and mercury, is well known for a number of areas in the Eastern Rhodopes and should be considered in light of the specific mineralogical, geochemical and hydrogeological features of the area.

The analysis of the available data shows that a detailed geochemical characterization of the ore, rock outcrop and flotation tailings has been carried out. The laboratory tests and leaching tests conducted do not indicate the presence of properties that would define the waste as hazardous, nor do they establish any significant mobility of arsenic, mercury, lead, chromium and other potentially toxic elements under the conditions considered in the documentation.

The presented results show that a significant part of the metals is transferred into the concentrate during the flotation process and is removed for subsequent processing outside the production site, while significantly lower concentrations remain in the flotation tailings. Based on the available data, no prerequisites for significant migration of potentially hazardous elements to the environment are established.

It should also be noted that the available information indicates that some of the higher arsenic concentrations recorded in the area are related to the natural geochemical background and ore formation processes characteristic of the region. The attached materials do not reveal any data indicating that future exploitation of the deposit will lead to a significant increase in the risk of spreading these elements beyond the boundaries of the project area.

Particular attention was paid to the issue of the potential formation of acid mine drainage. The presented geochemical characteristics of the ore, rock outcrop and flotation tailings indicate low sulphide sulfur contents and the presence of significant neutralization potential. Mineralogical data show presence of carbonate minerals that contribute to the natural neutralization of any acidity that may have formed.

The results of the static tests and leaching tests indicate neutral to slightly alkaline conditions and do not provide grounds to assume the development of active acid formation processes. Based on the documentation provided, no data are established for the presence of significant potential

for the formation of acid rock runoff and the associated mobilization of metals.

From a hydrogeological perspective, the documentation examines in detail the conditions of groundwater and surface water in the area. Engineering solutions are envisaged to limit seepage, to collect and control contact water, and to prevent uncontrolled ingress of surface water into the production facilities.

The planned closed water cycle is of great importance, as is the fact that no direct discharge of wastewater into surface water bodies is envisaged. The project also includes a system for monitoring water and mining waste facilities, which creates conditions for timely identification and control of possible deviations from the design parameters.

As regards radiological aspects, no radiologically significant mineralization or prerequisites for emergence of a radiology risk for the population and the environment were established during the studies.

It can be concluded from the submitted documents that the investment proposal has been developed on the basis of a significant amount of geological, geochemical, mineralogical and hydrogeological information. The conducted studies and assessments do not establish data on the presence of a significant risk of contamination with arsenic, mercury or other potentially hazardous elements, nor on the presence of a significant potential for the formation of acid mine drainage under the conditions considered.

Given the submitted materials, the results of the conducted research, engineering solutions and control and monitoring measures, no scientifically substantiated data have been established that would suggest significant adverse impacts on groundwater and surface waters, soils, ecosystems and the population in the area as a result of the implementation of the investment proposal.

From a geological, geochemical and hydrogeological point of view, the available data do not give grounds to expect any significant negative environmental impacts from implementation of the investment proposal in compliance with the envisaged design solutions, management measures and monitoring programs.