



**REPUBLIC OF BULGARIA**  
**MINISTRY OF ENVIRONMENT AND WATER**

99-00-286 - 22  
7 July, 2025, Sofia

**Subject:** Notification pursuant to Article 10 of the Protocol on Strategic Environmental Assessment to the Convention on Environmental Impact Assessment in a Transboundary Context for the Strategy for the Management of Mineral and Other Geological Resources of the Republic of Serbia for the period 2025 to 2040, with projections to 2050

**DEAR MINISTER PAVKOV,**

We hereby confirm the receipt of your letter Ref. No. 002372991 2025 dated 28 May 2025, received at the Ministry of Environment and Water of the Republic of Bulgaria on 3 June 2025, informing us of the final phase of the Strategic Environmental Assessment (SEA) procedure for the Strategy for Management of Mineral and Other Geological Resources of the Republic of Serbia for the period 2025 to 2040, with projections to 2050.

The notification pursuant to Article 10 of the Protocol on Strategic Environmental Assessment (SEA Protocol) to the Convention on Environmental Impact Assessment, the Strategic Environmental Assessment Report and the draft Strategy were received by e-mail at the Ministry of Environment and Water on 29 May 2025.


**H. E. Sara Pavkov**  
**Minister of Environmental Protection**  
**Republic of Serbia**  
**Belgrade**



Sofia 1000, 22 Maria-Luisa Blvd



Phone: +359 2 940 6194, Fax: +359 2 986 25 33



*After thorough consideration of the submitted documentation, pursuant to Article 10, paragraph 3 of the SEA Protocol, I would like to inform you that the Republic of Bulgaria is willing to participate in the transboundary Strategic Environmental Assessment procedure for the Strategy for the Management of Mineral and Other Strategic Geological Resources of the Republic of Serbia for the period 2025 to 2040, with projections to 2050.*

*The notification, as well as the environmental assessment report, state that "the proposed activities and measures in the Strategy may have negative impacts on the environment of other countries, taking into account that there are plans and projects located in border areas with other countries or whose mode of operation may cause certain transboundary impacts", without specifying or assessing the possible transboundary impacts, in particular regarding the assessment of environmental and public health impacts in the territory of the Republic of Bulgaria..*

*The Strategy constitutes a framework for the sustainable development of the mining sector in the Republic of Serbia, which outlines the objectives and priorities, the implementation of which will contribute in the long term to a stable and sustainable supply of mineral and other geological resources (metallic mineral raw materials, non-metallic mineral raw materials, energy mineral raw materials, as well as groundwater and geothermal water) to the Republic of Serbia by 2050 and it is expected, along with other objectives, to establish a balance between economic development and environmental impact.*

*In this regard, taking into account the existing environmental problems arising from mining activities on the territory of the Republic of Serbia and the negative impact on the environment, mainly on water (impact on the Danube, Timok and Dragovishtitsa rivers) and the health of the population on the territory of the Republic of Bulgaria, we consider that the SEA report of the Strategy should be supplemented and the Strategy itself should include measures to ensure the prevention or minimization of potential negative transboundary impacts.*

*The SEA report has identified key environmental and human health issues. It states that "The continuation of mining activities in their current state, i.e. using current practices (without application of modern sustainable mining principles and standards), will in most cases lead, in the areas where the activities take place, to environmental degradation (mainly of water and soil), deterioration of air quality and landscape disturbance, especially in opencast mining. Potential threats to public health and impacts on human settlements may manifest themselves as long-term local problems. Existing open cast energy resource mines, as well as the planned*



exploitation of mineral resources, may place some strain on the capacity of the area in terms of: contamination of key environmental components, public health impacts, changes to landscape appearance, biodiversity, geodiversity and social impacts that may manifest as negative public health effects."

With regard to the water component, which is of particular importance to Bulgaria, given the existence of impacts from mines in operation on the territory of the Republic of Serbia on the Danube, Timok and Dragovishtitsa rivers, as well as on groundwater bodies, the following is noted:

- On page 14 of the Report it is stated that water pollution has been detected in areas with active mines. According to the data of the Environmental Protection Agency - Ministry of Environmental Protection, concentrations of heavy metals exceeding the permissible limits have been recorded in the monitored watercourses. For example, in the Pek River, 200 m downstream of the confluence of the Mali and Velika Pek, the concentration of lead was  $<2.1 \mu\text{g/l}$ , arsenic was  $2.9 \mu\text{g/l}$ , and cadmium was measured at values up to  $1.3 \mu\text{g/l}$  (Institute of Mining and Metallurgy Bor, 2023).

- With regard to mine waste, there is a conclusion that older tailings **impose some impact on soil and water quality in the vicinity** due to their disposal method, no specific values are provided.

- The SEA report states that "it can be noted that there is a lack of more detailed assessment of the impact of individual facilities and activities in the mineral and mining sectors, as the Strategy itself has not reached the level of detail required for such analysis. This level of detail will be achievable when documentation is prepared at a lower hierarchical level, i.e. for each planned facility." However, this is only applicable **to new facilities**, while no detailed assessment is made of the status and impact of existing operational facilities and therefore no mitigation measures are prescribed, which in terms of water is also a transboundary impact for the transboundary rivers with Bulgaria.

- In point 2.1. **Overview of current status and environmental quality** of the Report in the **Water Quality** section (on page 19) information on surface water quality is provided **only in terms of the Serbian Water Quality Index (SWQI)**, which **includes only nine physicochemical parameters** (water temperature, pH value, electrical conductivity, oxygen saturation percentage, BOD-5, suspended solids, total oxidized nitrogen [nitrate + nitrite], orthophosphate and ammonium) and one microbiological parameter. **No information is presented on priority, hazardous substances and specific pollutants, which are in fact expected as impacts from mining activities.** No information has been provided on biological indicators, the status of which can be used to assess whether there is an impact, including from accidental pollution.





- **Section 2.2 Environmental Elements Exposed to Mining Activities** (page 25) states that water pollution often results from the discharge of untreated wastewater into rivers and streams near mining facilities. In some cases, wastewater treatment plants are not operating due to financial constraints or technical malfunctions. Environmental pollution from the mining industry in Serbia is not evenly distributed, but concentrated in certain regions where the exploitation of mineral resources is most intense. According to data from the Environmental Protection Agency and the Ministry of Mining and Energy, the **highest pollution has been recorded in the following parts of the country - the Bor-Maidanpek region** (a long-standing copper and gold mining centre), the Kolubara Basin (coal mining and thermal power plants) and the Kostola Basin (opencast coal mines and thermal power plants).

- With regard to the **Bor-Maidanpek Region**, the report indicates that sporadic spikes in pollutant concentrations in air, water and soil represent a clear environmental problem, and in Bor, the environmental impact of mining activities is combined with that of the processing industries. It has been pointed out that the Maidanpek region is known for copper and other metal mining. Due to long-term mining activities and dust dispersion from active mining areas (workings, mine waste dumps, flotation tailings dumps), **elevated concentrations of lead and cadmium in soil have been recorded. Information on groundwater quality and whether it is also affected by contamination is not provided.**

- The waters around the old open-pit Bor mine are characterised by high concentrations of dissolved heavy metals copper, zinc and iron. Regulatory limits for heavy metals (mainly copper and nickel) and for suspended solids have been exceeded in the Bor, Krivelska and Bela rivers (copper concentrations up to 16 mg/l, while the limit is 0.1 mg/l).


- For the Kolubara basin, the SEA report notes that surface and groundwater are exposed to potential pollution from major concentrated pollutants in the complex, as well as from diffuse sources represented by numerous smaller discharges of used wastewater into receiving waters.

- For the Kostola Basin, it is indicated that groundwater in the vicinity of the Sgur landfill is characterised by increased mineralisation (increased water hardness, sulphate content, etc.) and elevated levels of total solids, fats and oils.

#### **Environmental impact of underground mining:**

Impacts associated with underground mineral extraction have also been reported in relation to groundwater and surface water pollution due to mine water run-off (so-called acid mine drainage). These waters often contain heavy metals such as arsenic, lead and mercury, which can have long-term toxic effects on humans, plants and animals.





*The Strategy (p.50) foresees the development of a new mine at Karamanitsa, while the SEA report does not examine the impact of the existing pilot plant, which has a transboundary impact on Bulgaria.*

*In Table 3.2. Selection of general and specific objectives of the SEA and selection of relevant indicators in relation to water, several indicators are listed, but there are no indicators related to surface water quality in terms of priority, hazardous and specific substances, and in terms of groundwater quality.*

*In section 4. Assessment of Potential Environmental Impacts (p.45) it is concluded that the proposed activities and measures in the Strategy may have negative impacts on the environment of other countries, given that there are plans and projects located in border areas with other countries or whose mode of operation may cause certain transboundary impacts, but these have not been assessed/considered separately.*


*Measures for water protection in the exploitation of energy mineral resources have been proposed, which only address future activities and do not foresee measures to bring existing activities in line with environmental standards, which is necessary in order to stop pollution, especially in the transboundary rivers with Bulgaria.*

*In point 6. Environmental monitoring programme during the implementation of the strategy in Table 6.1. Environmental indicators by EC domains, indicators are proposed for "Water", but no indicators are proposed for river quality for priority and hazardous substances and specific pollutants, and for groundwater quality, which are essential for reporting on the impact of strategy implementation. These indicators need to be complemented, in particular with regard to transboundary rivers with Bulgaria where there are mining sites, and with regard to groundwater near the border with Bulgaria.*

*In section 7.2. Challenges encountered in the preparation of the Strategic Environmental Assessment, it was assessed by the preparers of the report that "the data used are outdated and incomplete with regard to the assessment of the current state of the environment, as only available public information is mentioned without requesting additional data from the competent monitoring institutions necessary for the assessment and, accordingly, the assessment in the "water" part is incomplete, which does not allow to assess the presence of transboundary impacts from existing activities".*

*The SEA report lacks an assessment of the health risk, in particular for the population in the territory of the Republic of Bulgaria. It is specified that, given the comprehensiveness of the mineral resource management strategy and the large number of activities in all mining sectors, only strategically relevant and general measures to prevent and mitigate negative environmental impacts are presented.*





*In relation to the findings set out above, we consider that the SEA report on the Strategy is incomplete and needs to address the transboundary impacts of the activities and measures in the Strategy on the environment and health of the population in the territory of the Republic of Bulgaria (possibly as a separate chapter).*

*The SEA Report needs to be completed with regard to:*

*1. State of the environment - to analyse and provide an analysis of the state of the surface and groundwater bodies in the scope of the Serbian part of the river basins shared with Bulgaria on the basis of water quality monitoring data, including for surface waters the results of monitoring of priority and hazardous substances and specific pollutants in surface waters, tributaries of the of the Danube, Timok, and Dragovishtitsa rivers.*

*2. To analyse and propose measures to stop pollution and eradicate old pollution resulting from the exploitation of mineral and other geological resources (e.g. mines in Bor and mines in the Dragovishtitsa catchment area, exploration activities near the Bulgarian border) and to foresee the necessary measures to stop possible transboundary transport of pollution into Bulgarian territory.*

*3 To complement the monitoring programme by providing indicators for transboundary rivers with Bulgaria for priority and hazardous substances and specific pollutants and quality indicators for groundwater near the Bulgarian border corresponding to the risk of pollution from mining and exploration activities.*

*4. Provide for measures for periodic provision of information to Bulgaria on the results of the monitoring of transboundary rivers and groundwater near the border and for coordination on the assessment of transboundary rivers and groundwater.*

*5. Provide, as a condition, that the Bulgarian Ministry of Environment and Water be notified of all investment proposals, plans and programmes related to mining activities that could have an impact on the environment and the health of the population on the territory of Bulgaria.*

*I would like to inform you that during the consultations with the competent authorities in Bulgaria, the Municipality of Kyustendil has submitted the request for the public discussion meeting on the draft Strategy for the Management of Mineral and Other Geological Resources of the Republic of and the SEA Report in Bulgaria.*

*In view of the above, we kindly ask you to submit the supplemented SEA Report (or the chapter on Transboundary Impacts) and the draft Strategy for the Management of Mineral and Other Geological Resources of the Republic of Serbia for the period 2025 to 2040, with projections to 2050 also in Bulgarian.*



*Please find enclosed the Objection from the Association "Eko Surdulica" (in Bulgarian and Serbian), received in the Ministry of Environment and Water by e-mail on 20 June 2025.*

*Please accept, Madam Minister, the assurances of my highest considerations and readiness for successful future cooperation.*

***Yours sincerely,***

***Manol Genov***  
***Minister of Environment and Water***