

**Republic of Serbia**  
**Ministry of Environmental Protection**  
**1 Omladinskih Brigada**  
**11070 Belgrade - New Belgrade**

*In 1 (one) copy with 4 (four)  
appendices*

**Submitter:** **The Renewables and Environmental Regulatory Institute**, an association headquartered at 30-3 Dositejeva St. in Belgrade, legally represented by Mirko Popović

**Subject:** **Opinion on the Request for Establishing the Scope and Contents of the Environmental Impact Assessment Study of the Project for the Underground Exploitation of Lithium and Boron Deposits “Jadar”, at cadastral parcels within the cadastral municipalities of Gornje Nedeljice, Brnjac, Veliko Selo, Jarebice, Slatina, Stupnica, Šurice and the City of Loznica.**

Based on the published public review of the Request for Establishing the Scope and Contents of the Environmental Impact Assessment Study of the Project for the Underground Exploitation of Lithium and Boron Deposits “Jadar”, at cadastral parcels within the cadastral municipalities of Gornje Nedeljice, Brnjac, Veliko Selo, Jarebice, Slatina, Stupnica, Šurice and the City of Loznica (hereinafter referred to as “**the Request**”), submitted by RIO SAVA EXPLORATION d.o.o. Belgrade (hereinafter referred to as the “**Project Developer**”), the Renewables and Environmental Regulatory Institute (“**RERI**”), an association working on environmental protection issues, hereby submits an Opinion on the Request, pursuant to the notification published on September 17, 2024 in the “Novosti” daily newspaper, and pursuant to the instructions published on the Ministry of Environmental Protection’s website on September 17, 2024 (<https://www.ekologija.gov.rs/lat/obavestenja/procena-uticaja-na-zivotnu-sredinu/zah-tevi/zahtevi-za-odredjivanje-obima-i-sadrzaja/%E2%80%9Eerio-sava-exploration%E2%80%9C-d.o.o.-beograd%3A-zahtev-za-odredjivanje-obima-i-sadrzaja-studije-o-proceni-uticaja-na-zivotnu-sredinu-projekta-podzemne-eksploatacije-lezista-litijuma-i-bora-%E2%80%9Ejadar%E2%80%9C>) as it follows:

## **I It is unclear which project is the subject of the Environmental Impact Assessment**

Article 3, Paragraph 1 of the Law on Environmental Impact Assessment (Official Gazette of the Republic of Serbia no. 135/04 and 36/09) prescribes that **the subject of the**

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**environmental impact assessment** shall include projects being planned or implemented, changes in technology used, reconstruction, expansion of capacity, termination of work, and removal of projects that may have a significant environmental impact. Additionally, Article 3, Paragraph 3 of the Law on Environmental Impact Assessment stipulates that impact assessments shall be conducted for **projects** in the areas of industry, mining, energy, traffic [...]

Article 3 (32) of the Law on Mining and Geological Exploration (Official Gazette of the Republic of Serbia no. 101/15, 95/18, and 40/21) prescribes that ***exploitation of mineral raw materials shall be defined as undertaking mining operations to prepare, open, develop, unearth, transport, store, dewater, ventilate, and prepare mineral raw materials, as well as the other mining work undertaken underground and, on the surface*** [...]

Article 89 of the Law on Mining and Geological Exploration prescribes that ***mining operations shall be implemented in accordance with the main mining project, supplemental mining project, technical mining project, simplified mining project, technical mining project for the exploitation of mineral resources to obtain natural building materials and mining project to undertake mining operations for the purpose of geological exploration of solid mineral raw materials.***

The Submitter points out that the previously quoted provisions clearly state that the **subject of an environmental impact assessment** for the purpose of undertaking the exploitation of raw material deposits, i.e., undertaking mining operations, **may only be a mining project, or more specifically, the main mining project.**

Having inspected the Request at hand, in addition to the accompanying documentation submitted for public review, the Submitter concludes that **no information on the name of the mining project, the technical documentation number, the organization responsible for drafting the project, or the licensed persons who drafted the project is contained therein.** Additionally, the Request does not contain excerpts from the textual and graphical sections of the main mining project that is the basis for the Request, which violates Article 12, Paragraph 2 (2) of the Law on Environmental Impact Assessment.

Based on the above, the Submitter points out to the addressed public institution that there is no basis for the further implementation of the process of establishing the scope and contents of the environmental impact assessment study, because the existence of the project documentation necessary to prepare the Request has not been noted, and consequently, could not be appropriately analyzed.

## **II Inappropriately represented project scope and description**

Chapter 2.1. *Description of the physical characteristics of the project and land use conditions during construction and regular operation* states that *with regard to the concept of spatial development, future functions, purpose of land use, and the rules for spatial arrangement and construction, the space required for the Jadar project is*

*subdivided into multiple zones and sub-zones.* However, this chapter goes on to list merely the **mining activity zone** (with two sub-zones), the **production and industrial activity zone** (with two sub-zones), and the **industrial waste storage zone** (with two sub-zones).

The Submitter points out the inconsistency in the representation of relevant information contained in the Spatial Plan of the Special Use Area for the Implementation of the “Jadar” Project for the Exploitation and Refining of the Jadarite Mineral (Official Gazette of the Republic of Serbia no 26/20, 8/22, 60/24) (“**Jadar Spatial Plan**”) which, in Chapter 2.3. Jadar Project Spatial Development Concept establishes a *traffic and infrastructure corridor zone* (planned roads C1, C2, C3, planned 110 kV power line protection zone, regulation of a section of the Korenita River, and clay borrow pit). **In addition to the fact that the zone description established in the Jadar Spatial Plan was left out of the textual portion of the Request, their scope was not described, nor illustrated in any way in graphical appendices.**

The Submitter points out that the Jadar Spatial Plan clearly states that the *spatial development of the Jadar project includes previous exploration and amendments to land use purpose and regulation, the construction of facilities, roads, and infrastructure, implementing mining activities, ore processing, production, material storage, safety measures, and development of other activities on an area of roughly 2.030,69 ha.*

Based on the above, it can be concluded that the Request does not contain an appropriate and truthful **location description**, and consequently, no appropriate and truthful **project description**, and that it has been drafted in violation of the provision contained in Chapter 12, Paragraph 2, Points 1a and 2 of the Law on Environmental Impact Assessment.

### **III The Project Developer has resorted to an artificial subdivision of a single project into several smaller units**

In the Request, the Project Developer claims that *the Request for Establishing the Scope and contents of the Environmental Impact Assessment Study exclusively concerns sub-zones 1A and 1B, which contain the area and surface necessary to access the underground mine and construct surface facilities servicing the underground mine, i.e., the space wherein core mining activities would take place, i.e., the space delineated by the ore body where the underground mine will be formed and ore excavation and exploitation (of the Jadarite ore) will be performed, as well as that sub-zones 2A and 3A (Image 2.2) would be treated in a separate process concerning the mineral processing facility.* The production and industrial activity sub-zone (2A), as the Project Developer further explains, encompasses the area and surface required to construct and form a complex for ore processing and further production (of lithium-carbonate, sodium-sulfate, and boric acid) and production and industrial activities encompassing a protection zone of 1000 m around the ore processing and chemical production complex.

**However, the Submitter points out that the project treated by the Request is only a part of the Jadar project which the Project Developer plans to implement at the site in question, and that it is impossible to separate the exploitation of the ore**

**body from ore processing and present it as a separate project. The Request for Establishing the Scope and Contents of the Environmental Impact Assessment Study must encompass all processes, including ore exploitation and ore processing, as well as tailings and industrial waste storage in the valley of the stream. Furthermore, producing final products, storing and transporting them, as well as transporting and storing the necessary raw materials and hazardous materials necessary to produce final products.**

The above is also confirmed by the Project Developer, stating in the Request that *the Jadar project, **viewed holistically**, includes opening an underground mine for the exploitation of the jadarite ore and the construction of a concentrate processing facility and that the project plan includes an underground mine, consisting of a materials shaft, a ventilation shaft, underground and surface infrastructure for the mine's operation, including backfill preparation, a surface ore enrichment facility with accompanying infrastructure, as well as a tailings landfill, a concentrate processing facility for producing lithium-carbonate, boric acid, and sodium-sulfate, an industrial waste landfill, as well as connections with traffic and communal infrastructure.*

The Project Developer also confirms their functional connection, stating that *the present Request relates to one part of the entire Jadar project, more precisely, the project for the underground exploitation of the Jadar lithium and boron deposits with accompanying facilities and infrastructure, that for the purpose of organizing, using and processing jadarite ore, three zones which are functionally connected have been conceptually separated (the mining sub-zone (1A), the production and industrial sub-zone (2A) and the industrial waste storage zone (3A)), as well as that the planned project consists of two connected unit, the mining part, and the processing part, so technical documentation will be drafted in accordance with legislation in the areas of mining and planning and construction.*

However, the Law on Mining and Geological Exploration regulates project management in the mining sector, while the Law on Planning and Construction regulates spatial development conditions, the use of construction land, and the construction of facilities, so in that regard, one cannot refer to the aforementioned documents when attempting to justify splitting projects in the area of mining into smaller projects. The fact that the investment and technological documentation is being developed in line with the Law on Mining and Geological Exploration and the Law on Planning and Construction has no bearing on this matter, having in mind that the Law on Environmental Impact Assessment defines the process for environmental impact assessment, as well as the scope and contents of the environmental impact assessment study.

Namely, mining projects are prepared for various phases of mining activity implementation:

- Geological exploration;
- Preparatory work (opening mines, forming overburden landfills, and infrastructure construction);

- Mine exploitation (constructing a mine on the exploitation field, storage of mining waste);
- Mine closure and monitoring.

The Law on Environmental Impact Assessment does not foresee the possibility of developing an environmental impact assessment by implementation phases or by the phases of construction of certain facilities: open pit mine or surface mine, or preparation and processing facilities; wastewater and gas purification facilities; mining overburden, tailings, sludge, solid waste, emulsion, packaging, and other waste landfills, energy facilities, infrastructure facilities, electrical grid, roads, railways, plumbing, sewage, etc.

These are the project phases for which separate environmental impact assessment studies can be drafted:

- 1. The geological exploration phase** (if activities planned within this phase of project implementation are on List I or List II of the Regulation on Determining the List of Projects for which the Impact Assessments is Obligatory (List I) and List of Projects for which the Environmental Impact Assessment can be Required (List II))
- 2. A unified impact assessment for the following phases: preparatory work, expectation, processing, and mine closure.**

The Submitter also points out that these provisions must be interpreted pursuant to the purpose and goal of the Law on Environmental Impact Assessment, which states in Article 2 Paragraph 1 (5) that *an environmental impact assessment shall be conducted with the goal of obtaining data and forecasting any adverse impacts of certain projects to public safety and public health, the flora and fauna, the land, water, air, the climate, and the landscape, material and cultural goods and the interaction between these factors, as well as to determine and suggest measures to prevent, mitigate or remove adverse impacts, having in mind the feasibility of these projects.* This goal cannot be reached by such a Request to Establish the Scope and Contents of the Environmental Impact Assessment.

The Request at hand **does not demonstrate the environmental impact of ore processing**, which is an essential material flaw of this Request. The ore processing procedure is not described, even though it has the greatest impact on the production of wastewater since the ore processing description is absent, it is unknown which types of reagents will be used, and it is also unknown what kinds of waste will be generated. With regard to this flaw, the Request also lacks a characterization of the waste. The fact that these processes are connected is also confirmed by Appendix 6 of the Request which describes the locations of the mine and the concentrate processing facility.

Storing sludge from the processing of lithium-carbonate, boric acid, and sodium sulfate also has significant long-term environmental impact, but this Request avoids assessment of its impact on public health and the environment.

Additionally, the Project Developer **has failed to include a description of the water supply system from the Drina alluvium.** The Project Developer states in the Request that the details regarding the water supply will be described in a separate project within the concentrate processing facility. Considering the fact that the Request to Establish the

Scope and Contents of the Study encompasses a project for the underground exploitation of the lithium and boron deposit “Jadar”, ore enrichment facilities, and tailings storage facilities, **it is clear that the water supply system regulated by a system of wells from the Drina alluvium and its transportation to the facilities described in the Request represents an integral part of the project and cannot be treated separately, but must be included in this Request, including a description of the amounts and nature of the use of natural resources, a description of alternative water supply, a description of environmental factors that can be exposed to significant risk, especially with regard to water, flora and fauna and climate factors that can be exposed to risk due to the exploitation of water resources from the Drina alluvium.**

The Submitter especially points out that the conditions issued by the Nature Conservation Institute of Serbia no. 021-2918 from August 21, 2024, which were attached to the Request, prescribes the obligation to implement an environmental impact assessment procedure for the entire project of the exploitation and processing of the Jadarite ore. Namely, point 6 of the aforementioned Nature Conservation conditions prescribes that *the nature of the activities obliges the Project Developer to initiate a decision procedure on the need to draft an environmental impact assessment study, and consequently **the drafting of an environmental impact assessment study for the main mining project which would include all phases of the exploitation and processing of the Jadarite ore.*** Therefore, by resorting to the artificial subdivision of the project, the Project Developer has acted contrary, not only to the Law on Environmental Impact Assessment, but to the Law on Nature Conservation as well (Official Gazette of the Republic of Serbia, no. 36/09, 88/10, 91/10, 14/16, 95/18 and 71/21) which prescribes that an act on nature conservation conditions shall be obtained in the process of drafting projects, construction work, and activities, which prescribes measures, prohibitions, and limitations that apply during project implementation in the area of mining. On the other hand, the question may be raised of how the Nature Conservation Institute of Serbia even issued an act on nature conservation conditions and how it established the measures, conditions, and limitations keeping in mind that its explanation states that *the feasibility study excerpt only shows part of the activities related to mining activities planned as part of the regulation on establishing a Spatial Plan of the Special Use Area for the Implementation of the “Jadar” Project for the Exploitation and Refining of the Jadarite Mineral add that the remaining activities related to the metallurgical processing of ore were not presented in the excerpt.*

Additionally, it is impossible to determine with any certainty from the water conditions no. 002323353 2024 14843 001 001 325 024 issued by the Republic Water Directorate, which were submitted along with the Request, whether these were issued for the project in its entirety and all the activities planned at the site, or exclusively for the exploitation process covered by the Request. Thus, certain points of the conditions contain statements such as *hazardous substances that will be present in other phases of project realization, which constitute a technological unit with ore exploitation activities.*

The aforementioned mining activities and technological processes will take place at the same time, and not in phases. The Project Developer plans to use these facilities in a

single production and technological process. Therefore, it is impossible to separate these projects, presenting them as independent units for which separate environmental impact assessment studies can be developed, because they have no independent function, but rather constitute a single functional unit. Additionally, it is also impossible to draft environmental impact assessment studies for phases 1, 2 and 3 (and potentially 4 and 5 as well).

The fact that this is a facility which requires issuance of an integrated permit is an important one, having in mind the definition of a facility from Article 2, Paragraph 1 (Official Gazette of the Republic of Serbia no.135/04, 25/15, and 109/21), which states: *a facility is a stationary technical unit wherein one or more activities determined by a special regulation, for which an integrated permit is issued are implemented, as well as any other activity where there is a technical connection to activities undertaken at the sites and that may produce emissions and pollution.* **Therefore, an integrated permit will be issued for the entire facility, so the flaws of the Request are not only of a formal but also of a fundamental nature.** Likewise, as the Project Developer also recognizes, *regarding SEVESO analysis, it is important to emphasize that according to environmental protection regulations, the identification of possible project or activity impact on the environment is not conducted partially for each facility within the complex (which are functionally and technologically linked), but for the entire complex, which is defined as a spatial unit under an operators control, with hazardous materials present at one or multiple facilities, including individual or common infrastructure, or individual or common activities.* the Law on Environmental Protection defines a SEVESO facility as a technical unit within a complex where hazardous materials are produced, used, stored, or handled. In that regard, a facility includes all of the equipment, buildings, pipelines, machines, tools, internal railways, as well as depots, docks, unloading docks, warehouses, and similar constructions, on water or land, which are necessary for the operation of the facility. **With that in mind, measuring points for the oversight of all processes and activities must be established, without which it is impossible to determine the impact of all planned activities on individual parts of the project and the environment.**

If the Project Developer leaves out a description of certain integral parts of the project from this Request, it means that the **Request is incomplete and does not contain all of the elements foreseen by the Rulebook that regulates its contents, which makes it incomplete** pursuant to Article 59 of the Law on General Administrative Procedure (Official Gazette of the Republic of Serbia no. 18/16 and 95/18), the applicability of which is clearly defined in Article 34a of the Law on Environmental Impact Assessment, so the addressed public institution was obliged to act in accordance with Article 13, related to Article 9 of the Law on Environmental Impact Assessment, which stipulates that *if a Request on the need to conduct an impact assessment is incomplete, the competent authority shall Request that the Project Developer provides additional information and documentation and shall set a deadline for its delivery*, which, in this concrete case, the competent Ministry has neglected to do.

The Submitter, on the other hand, highlights that, while acting on the same or similar administrative cases in the past, the Ministry of Environmental Protection has made different decisions. With that in mind, the Submitter points to the acting authority's

decision to approve an environmental impact assessment study for a mining project on the exploitation of solid mineral ore at the Čukaru Peki site, where it is evident that processes that the Project Developer tried to separate were treated as a single project for which a single environmental impact assessment study was developed. This was also confirmed by the decision of the supervising authority, i.e., the Government of the Republic of Serbia no. 353-9695/2021-006 from October 20, 2023, which explicitly states that when it comes to the opening of a new exploitation field and the construction of plants within it, i.e., when an environmental impact assessment is conducted for a mining project, plants and facilities must be treated as a whole. Additionally, this was confirmed by the Ministry of Environmental Protection, which, in its decision no. 353-02-2526/2020-03 from January 26, 2021, rejected a Request to decide on the need for an environmental impact assessment for preparatory work, stating that these *are not considered to be an independent project, and are not a goal in themselves, but constitute an integral part of a wider, complete project and that this requires the drafting of an impact assessment for the entire project to increase the capacity of the Bor copper smelter, rather than a partial impact assessment.*

**Appendix:** *The Ministry of Environmental Protection Decision no. 353-02-2877/2019-03 from March 6, 2024;*

*The Government of Serbia Administrative Commission Decision no. 353-9695/2021-006 from October 20, 2023;*

*The Ministry of Environmental Protection Decision no. 353-02-2526/2020-03 from January 26, 2021.*

## **V The Request was not drafted in accordance with the water conditions of the Republic Water Directorate**

The Request fails to consider and does not contain the answers to some fundamental questions, as well as technical and other Requests contained in the water conditions issued by the Republic water directorate, which are significant for determining the possibility of environmental pollution. The shortcomings described hereinafter primarily concern the preventive protection of strategically significant water sources for the Republic of Serbia in the Drina Valley and the right bank of the Sava (Mačva), and the risk management measures foreseen in case of environmental pollution due to accidents caused by earthquakes, traffic accidents during the transportation of or processing raw materials to the mine site or the transportation of industrial waste to the landfill, protection against extreme floods.

1. The construction of a tailings **landfill** is foreseen at the very site of the mine (tailings and low-grade ore) on an area of 278,000 m<sup>2</sup>, 60 m in height with a truck-bulldozer storage system. The Project Developer states that this landfill will be defended from floods by an appropriate embankment (an embankment near the river Korenita, specified in Appendix 2 of the Request), but the documentation submitted with the Request does not specify its **dimensions, the construction material, nor method of defense from the penetration of surface water behind the embankment body** (regardless of the plan to use foil and geotextile),



all of which create the risk of damage to the landfill and the transfer of polluting materials downstream in the direction of the Drina valley.

2. The Request **does not specify which location will be secured for preparing the backfill** which the Project Developer is planning to use on the excavated sections of the mine after the ore extraction has been completed. This must also be contained within the Request.
3. The Request also lacks **information on the effective infiltration of rainwater into the underground sections of the mine**, so the total water balance and the activity of the hydraulic connection of surface and groundwater is unknown, as is the degree of their interaction (quantity - quality).
4. The Request lacks an analysis of the **processes resulting from soil subsidence** and the vertical percolation of groundwater caused thereby from the Jadar and Korenita alluvia into the deeper layers where it will mix with mine water, as well as the mine body before being pumped back out onto the surface. This percolation will be the result of subsidence and blasts in underground areas causing roof vibrations, two connected wide shafts cutting through aquifers and aquicludes, as well as underground areas spanning tens of kilometers in the access zone alone, according to the documentation. This sort of anthropogenic influence will significantly increase the total mine drainage, as well as the degree of the necessary purification of water that is pumped out onto the surface.
5. The Request does not contain **an analysis of the role of fault structures** which the Project Developer states are numerous in the mine area, as well as the possible role of paleosurface rocks (primarily Triassic limestones) of the Jadar basin (below the planned 650 m depth of the mining activities), which could cause sudden (possibly catastrophic) water flow into the immediate roof or lateral mine areas.
6. The Request does not answer the questions of which analyses will be conducted to assess the possible scale and effects of catastrophic events on mine facilities, especially the tailings landfill, ore processing raw materials reservoirs, lagoons for unprocessed mine water storage, as well as preventive measures in the case of:
  - Magnitude 7 earthquakes for a period of 100 years,
  - Accidents occurring between the loading site and the Jadar River In the course of usual rail transport of sulfuric acid via rail composition consisting of a large number of cistern cars (the previously mentioned reservoir volume in situ is only sufficient for five days' worth of ore processing),
  - Accidents occurring during the transportation of other ore-processing raw materials between the loading site and the Jadar river (ex. hydrochloric acid),
  - Accidents occurring due to traffic collisions during tailings transportation to the landfill planned to be situated in Štavice.
7. The Request does not contain information about the possible consequences of accidents and the intensity of the possible pollution of soil, surface, and groundwater, at the Jadar site and during transportation to more remote sites, as

well as public health and animal health risks, for each of the contaminants listed in Appendix 10 of the Request (SEVESO Analysis).

8. The water conditions issued by the Republic water directorate submitted alongside the Request state that the Project Developer is obliged to *conduct a study on how the project could impact the source of the planned regional water supply system in Mačva and Srem*, but it does not state precisely that, according to the Water Management Strategy or the Republic of Serbia until 2034 (Official Gazette of the Republic of Serbia no. 3/17), the groundwater source in the Drina alluvion and in Mačva is considered to be of key importance for supplying the Sava-Belgrade as well as the Mačva regional systems, highlighting its importance and the need to consider the possible impacts of the mine's operations, those of the processing facilities and landfills, as well as accidents of any other kind.
9. The Water Management Strategy of the Republic of Serbia until 2034 presents a map of the groundwater pollution risk in the Republic of Serbia as an appendix (no. 6). Though this graphical appendix marks Jadar, the Drina, and Mačva valleys as **high and very high risk zones**, the water conditions attached to the Request do not require that the impacts of polluting material transportation and the infiltration of various pollutants (see list in the SEVESO analysis, Appendix 10 of the Request) on the Jadar region as well as the downstream zones located less than 20 km from the planned mine (the Drina alluvium and the right bank of the Sava in Mačva) are considered;
10. The water conditions attached to the Request practically accept the Project Developer's suggestion that mining wastewater purification should be conducted based on a system of *double-pass reverse osmosis and ion exchange with additional mineralization*. The Project Developer is not queried how the sludge generated during the purification process will be stored, secured, processed, transported, and manipulated in a way that is safe for the environment. According to the submitted data on the expected life cycle of the facilities, around 500 tons of this sludge is expected to be generated.

**V The Request does not contain all of the elements prescribed by the Law on Environmental Impact Assessment and the Rulebook specifying its contents**

The Law on Environmental Impact Assessment and the Rulebook on the Contents of the Request on the Need for Environmental Impact Assessment and Contents of the Request for Defining the Scope and Content of Environmental Impact Assessment Study (Official Gazette of the Republic of Serbia no. 69/05) (hereinafter referred to as "the Rulebook"), regulate the contents of the Request to establish the scope and contents of the study on the need to conduct an environmental impact assessment in detail. With that in mind, the Submitter points out that the Request contains a series of shortcomings, which make the submitted Requests incomplete pursuant to Article 59 of the Law on General Administrative Procedure, which is directly referenced by Article 34a of the Law on Environmental Impact Assessment. Therefore, the Submitter points out to the addressed public institution that it was obliged to act in accordance with Article 9 of the Law on Environmental Impact Assessment, which it failed to do.

## 1. The Request does not contain an appropriate project description

The request to establish the scope and contents of the environmental impact assessment study must contain a project description (Article 12 Paragraph 2 (2) of the Law on Environmental Impact Assessment), which, *inter alia*, contains a description of the physical characteristics of the projects and the land use conditions in the construction phase and in the regular operation phase of the project (Appendix 2, Point 2a of the Rulebook). However, the Request does not include a representation of the land use conditions in the construction phase and in the regular operation phase. The project description must also contain an account of the main characteristics of the production process (the nature and amount of material use) (Appendix 2, Point 2b of the Rulebook), which is not present in the Request. Appropriate information assessing the type and amount of expected waste materials and emissions resulting from the regular operations of the project (Appendix 2, Point 2v of the Rulebook) is also missing.

Additionally, **the Request does not include accurate information on waste types.** Table 2.4. *Expected types of waste at the Jadar project site* include *sludge left over after wastewater treatment, generated after the dewatering of the underground mine and the process of mineral raw material enrichment, under the column nomenclature according to the waste catalog, classified as 19 - waste from waste processing facilities, wastewater treatment facilities outside of the generation site and preparation of water for human and industrial use.* However, the Submitter asserts that the classification was not implemented in accordance with the Rulebook the Waste Categories, Examination, and Classification (Official Gazette of the Republic of Serbia no. 39/21 and 65/24), because, according to the index, this type of waste should be categorized as *19 08 13\* Sludge containing hazardous substances from other methods of wastewater processing as well as 06 01 Waste generated in the production, formulation, supply, and use of acids 06 01 01\* sulfuric and sulfurous acids,* because the processing method within the ore processing facility uses sulfuric acid. Additionally, it does not list all of the types of waste generated during the project implementation, categorized according to the Rulebook on the Waste Categories, Examination, and Classification such as Q8 - industrial process leftovers, Q9 - pollution reduction leftovers, Q11 - raw material extraction and processing leftovers, Q12 - materials whose original contents have been spoiled (waste oil, etc.), Y22 - Y31 - waste containing metals, Y34 - waste containing acids or solid acids, C22 - the following alkali metals and alkaline earth metals: lithium, calcium, magnesium, C23 - acid solutions or solid acids, waste types on list X of the hazardous properties of waste, as well as list D related to storage activities. Consequently, the impact of this waste has not been adequately assessed, nor were adequate measures suggested for preventing, removing, or reducing any significant adverse impact on the environment.

The Submitter points out that Article 44 of the Law on Waste Management (Official Gazette of the Republic of Serbia no. 36/09, 88/10, 14/16, 95/18, and 35/23) prescribes the methods for managing hazardous waste. With that in mind, Article 2 Paragraph 1 of the Rulebook on the Manner of Storage, Packaging, and Labelling of Hazardous Waste (Official Gazette of the Republic of Serbia no. 92 /10 and 77 / 21) prescribes that *hazardous waste shall be stored in such a way as to minimize the risk of endangering public health and the environment.* Paragraph 2 of the same article of the Rulebook on the Manner of Storage, Packaging, and Labelling of Hazardous Waste prescribes that

*hazardous waste storage facilities must be constructed in accordance with the law and by-laws regulating planning and construction and in accordance with technical requirements and standards.* However the Request in sub-chapter 2.1 *Description of the main characteristics of the production process (amounts and nature of material use)* provides a list of surface mining facilities in zone 1A, but there is no information on the planned construction of a hazardous waste storage facility, even though the Project Developer has stated that hazardous waste will be generated in sub-chapter 2.3 *Assessment of the type and amounts of expected waste materials and emissions resulting from the regular operation of the project*, in the section titled *Hazardous materials - waste*.

The Submitter points out that the Request, in sub-chapter 2.1. *Description of the main characteristics of the production process (amounts and nature of material use)*, inter alia states that the *process of underground ore exploitation also yields low-grade ore, a material containing smaller concentrations of valuable minerals. The project plans to additionally process this low-grade ore in the final years of its operation, to obtain valuable elements.* With that in mind, the Submitter points out that Article 3 of the Law on Mining and Geological Exploration defines the terms regulated by the Law, but it does not list “low-grade ore”, as mentioned in the Request, as one of the products of a planned production process, which requires that additional information on its characteristics be provided.

The Submitter points out that, bearing in mind the shortcomings described in Chapter III of this Opinion, related to the artificial subdivision of the project, the entire project description chapter was not drafted in accordance with the Law on Environmental Impact Assessment and the Rulebook. This is exacerbated by the fact that it is unknown which project is treated by the environmental impact assessment study, and the fact that the Project Developer seems to be confused in several sections, unsure of whether the Request was submitted for the entire project or only for the extraction of mineral raw materials.

## **2. The Request does not contain a complete and appropriate description of the project’s possible adverse environmental impact**

Article 12, Paragraph 1 (5) of the Law on Environmental Impact Assessment prescribes that *the Request to establish the scope and contents shall be submitted in the prescribed form and shall contain a description of the possible adverse environmental impact of the project.* Additionally, Appendix 2, Point 5v of the Rulebook on Contents of the Request on the Need for Environmental Impact Assessment and Contents of the Request for Defining the Scope and Contents of the Environmental Impact Assessment Study prescribes that *the Request must contain a description of the possible significant impacts the project may have on the environment due to the emission of polluting materials, creating discomfort, and **waste removal**.* However, the Submitter points out that the Project Developer has failed to provide information on the removal of the generated waste within the Request.

### **2.2. The Request does not contain an appropriate description of the impact of climate change on the project**

The Submitter especially points out that the Project Developer has failed to elaborate on the **impact of climate change** on the project within this chapter. The Project Developer cites the provisions of EU legislation several times in the Study, highlighting its commitment to implementing EU standards. However, the Project Developer has neglected to apply *Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment* with regard to describing the impact of climate change on the project, i.e. to take into account the relevant project characteristics in conjunction with climate change impact, in line with scientific knowledge. The Project Developer has failed to act in accordance with the above, and the Submitter believes that it was necessary to analyze the aforementioned factors. Namely, the Climate Change Adaptation Program for 2023 to 2030 (Official Gazette of the Republic of Serbia no. 119/23) states in Table 1 that *the number of days with heavy (daily rainfall of 20 - 30 mm) and extreme (daily rainfall of over 30 mm) rainfall has increased, as has the amount of rainfall, while the number of events with light and medium rainfall amounts is decreasing. The increase in the share of extreme rainfall has risen by over 100% in the period between 2001 and 2020 compared to the period between 1961 and 1990. There was a moderate risk of extreme rainfall in 45% of the territory of the Republic of Serbia in the period between 2001 and 2020, and a **high risk in 7% of the territory (Central/Western Serbia, partially in Vojvodina and Eastern Serbia).** It also states that extreme rainfall risks will increase in the future, and high-risk areas will proliferate and that **in the period between 2041 and 2060, it is expected that 34% will be moderate-risk areas, and 54% will be high and very high-risk areas for extreme rainfall.*** Table 11 of the same document states that *more frequent strong rainfall and its higher intensity will increase the frequency of flash floods, floods, and landslides, while also pointing out that there will be an increase in surface drainage and floods due to large aquicludes.* However, the Water Management Strategy in the Republic of Serbia until 2034 estimates that, though flood defense activities have been implemented, the state of the defense system is not satisfactory. It also states that *many anthropogenic factors have contributed to the deterioration of the state of the defense system, including damage to water facilities, deforestation, unplanned urbanization, construction of facilities on rivers (especially small bridges), etc. as well as that further deterioration can be caused by the inappropriate management of water facilities (reservoir, retentions, relief channels, dams), **as well as possible climate change.*** Additionally, the Climate Change Adaptation Program for 2023 to 2030 highlights the fact that one of the basic characteristics of climate change in the Republic of Serbia is **increased frequency and intensity/duration of droughts**, so the expected consequences for the energy sector include *irregularities in the availability of water resources for energy production and facility cooling, with the danger of large deficits during summer seasons and a contribution to the endangerment of water ecosystems due to climate change influence.* It also states that *due to droughts, certain cities are left without available water for citizen use, which is an additional and growing risk posed by climate change.* The same scenario should be expected in Western Serbia, in the Jadar valley. The Request States in Table 5.3, titled *Possible Influence of Mining Activity on the Environment*, that a moderately negative influence on water supply is expected.

Having in mind all of the above, the Request should have analyzed possible adverse environmental impacts due to climate change, as well as measures planned to mitigate those adverse impacts. This is even more important because page 125 of the Request states that *the possible lifetime of mine at this moment is an expected 71 years*. The Project Developer fails to describe scenarios taking into account the climate characteristics at the site in question, in, for example, the year 2015 (when the Project Developer still expects that exploitation will be ongoing) and its influence on the project, especially with regard to the potential flooding of storage facilities and the mine itself, as well as the measures the Project Developer is obliged to abide by in case of droughts to prevent impact on the water supply (primarily of households) and ecosystems. Bearing in mind the fact that the Project Developer does not recognize these influences, the Request lacks adequate measures to prevent, remove, or mitigate them.

### **2.3. Questionable reliability of geomechanical and hydrological process modeling results**

The Project Developer has modeled various processes in order to draft the Request, including:

- Soil subsidence due to mining, the construction of underground sections of the mine, outcrop removal, and ore and tailings exploitation;
- Mine water inflow;
- Hydraulic connections to surface waters;
- Rainwater infiltration;
- Water balance in the mine area, etc.

The results of these models were included in previously submitted draft environmental impact assessment studies which the Project Developer character provided to the public in July of 2024. A comparative analysis of the data presented in the aforementioned draft studies and the contents of the Request itself shows that a few critical parameters have been changed or updated to significantly decrease their values. For example, the intensity of soil subsidence was reduced by 60%, while the amount of mine water inflow was decreased by 56%. Acknowledging the right of the Project Developer to revise technical documentation up until the date of the official submission of the Request to the competent authorities of the Republic of Serbia, the results of the implemented models and calculations seem to be changeable. It is well known that the result of each model, hydrological, geomechanical, or hydrodynamic, depends on input data. Cherry picking project solutions to obtain a theoretically feasible concept for conducting mining operations at this site cannot be considered an example of good practice in the preparation of technical documentation. Having all of this in mind, but primarily the drastic differences between the results of models implemented one after the other in a relatively brief time frame, one can question the validity of the methodology being employed, and consequently the reliability of the results obtained from the aforementioned models.

### **3. The Request does not contain a full and accurate description of measures planned to prevent, reduce, and mitigate significant adverse impacts**

Article 12, Paragraph 1 (6) of the Law on Environmental Impact Assessment prescribes that *the Request to establish the scope and contents shall be submitted in the prescribed form and must contain a description of the measures plant to prevent, reduce, and mitigate significant adverse impacts*. Appendix 2 (6) of the Rulebook prescribes that a description is required of *the measures planned to prevent, reduce, and mitigate any significant adverse impacts on the environment*.

The Submitter points out that the Project Developer **has not provided adequate measures** to prevent, reduce, and mitigate significant adverse effects on the environment related to the soil, water (both groundwater and surface water), air, climate factors, as well as infrastructure, within the chapter in question, all of which are generally recognized within the Request. One especially important shortcoming of the Request is the fact that it does not include a description of waste management measures aimed at preventing, reducing, and mitigating significant adverse environmental impacts. Additionally, it does not foresee air protection measures from suspended particles generated during the construction of landfills and facilities to store and reuse waste from mining and ore preparation processes. Bearing in mind the fact that necessary project information is missing, as well as the possible impact of the project on the environment, it is no wonder that the Project Developer has neglected to suggest adequate measures to prevent, reduce, and mitigate significant adverse impacts on the environment.

#### **4. The Request does not contain a complete non-technical summary**

Article 12, Paragraph 1 (12) of the Law on Environmental Impact Assessment prescribes that *the Request to establish the scope and contents of the Environmental Impact Assessment study shall be submitted in the prescribed form and contain a non-technical summary of the information listed under 2) to 6)*. With that in mind, the Submitter highlights that these points include, among other things, an overview of the main alternatives that were considered. However, the Submitter points out that the Project Developer has neglected to submit information related to the main alternatives considered within the submitted Request, even though this is a mandatory section of the non-technical summary chapter containing the information previously discussed within the Request.

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The Submitter points out that the Request as submitted does not contain all of the elements prescribed by the Law on Environmental Impact Assessment, which renders it incomplete pursuant to Article 59 of the Law on General Administrative Procedure (Official Gazette of the Republic of Serbia no. 18/16 and 95/18), explicitly referenced by Article 34a of the Law on Environmental Impact Assessment, and that the addressed public authority was obliged to act in accordance with Article 9 of the Law on Environmental Impact Assessment.

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The Submitter hereby points out to the addressed public authority that, by submitting a brief and providing proof of identity as part of the procedure at hand, the Submitter gains standing as a party to the procedure pursuant to the Law on Environmental Impact Assessment. *As a precaution*, if the addressed public authority believes for any reason that associations or public interest advocates do not have standing in this administrative procedure, despite the detailed explanation of the applicable legal basis, we are submitting a Request for recognition of standing pursuant to Article 93 of the Law on General Administrative Procedure. Article 44, Paragraph 3 of the Law on General Administrative Procedure stipulates that advocate for collective interests and advocates for wider public interests, organized in line with the regulations, may have standing in administrative procedures if the result of the administrative procedure can influence the interests they represent. The Submitter is an association founded to pursue goals in promoting and improving the right to a healthy and preserved environment and the sustainable management of natural resources.

**Appendix:** *Statute of the Renewables and Environmental Regulatory Institute from May 15, 2024.*

With that in mind, the Submitter emphasizes the process rights of parties to administrative procedures, such as the forwarding of an administrative act ending the procedure.

In Belgrade, October 1, 2024.

Mirko Popović  
Legal Representative