

ESPOO Notification

Jadar Project - Underground Mining of Lithium and Boron Deposit

1. INFORMATION ON THE PROPOSED ACTIVITY
(i) Information on the nature of the proposed activity
<p>Type of activity proposed:</p> <p>Underground mining of lithium and boron deposit Jadar.</p>
<p>Is the proposed activity listed in appendix I to the Convention?</p> <p>YES</p>
<p>Scope of proposed activity (e.g., main activity and any/all peripheral activities requiring assessment)</p> <p>Scope of activities envisaged by the relevant project includes:</p> <ul style="list-style-type: none"> • Underground mining of mineral resources • Ore mineral processing for chemical treatment • Mine waste disposal
<p>Scale of proposed activity:</p> <p>The exploitation reserves of Category B and C1, in the part of the Jadar deposit relevant for underground exploitation, have been estimated to amount to 147 Mt. The planned annual exploitation capacity is approximately 1.6 Mt/year.</p>
<p>Description of proposed activity (e.g. technology used):</p> <ul style="list-style-type: none"> • Mine opening with two shafts; • Mine development by horizontal, inclined and vertical mine roadways; • Ore mining by with various underground mining methods including backfilling of the excavated area; • Hoisting of ore to the surface; • Ventilation of underground roadways with the main fan exhaust ventilation system and auxiliary ventilation fans (underground); • Dewatering of underground workings; • Mineral processing for chemical treatment –beneficiation; • Mine waste disposal.
<p>Description of purpose of proposed activity:</p> <p>These activities should ensure opening, development and underground mining of the lithium and boron deposit and beneficiation for further chemical treatment.</p>
<p>Rationale for proposed activity (e.g. socio-economic basis, physical geographic basis):</p> <p>The available industry resources suggest a complete switch to Li-ion batteries. Governments in many countries are already encouraging market development by providing subsidies for the purchase of EVs/PHEVs/Evs vehicles and setting strict CO₂ emission limits for car manufacturers. It is predicted that the demand for Li-ion batteries (in the period from 2017-2030) will be growing at an annual rate of approximately 16%. Almost all electrical devices use lithium-ion batteries, and about thirty percent of the production of this metal is used for manufacturing battery cathodes.</p>

The global demand for boric acid (in 2016) is estimated at about 1.3 million tons of boric acid (H_3BO_3). It is estimated that the borate demand in the primary areas of application, such as insulation, glass and ceramics, will hold the largest part of the global borate demand in the foreseeable future. A strong growth in the demand for application in TFT - LCD technologies is also expected.

Additional information/comments:

(ii) Information on the spatial and temporal boundaries of the proposed activity

Location:

The Jadar deposit site, i.e the exploration area where the deposit has been discovered, is situated 15 km east of Loznica (150 km from Belgrade), on both sides of the Jadar River, between the slopes of the mountains of Iverak and Cer in the northeast, and Kostajnica and Bobija in the southwest. In terms of administration, the exploration area belongs to the territory of the Town of Loznica. It includes the areas of the villages of Gornje Nedeljice, Brezjak, Slatina and Draginac. The town of Loznica is situated in the immediate vicinity of the state border with Bosnia and Herzegovina, at the foot of the mountain Gučevo, at 142 meters of altitude.

Description of the location:

In terms of microlocation, the immediate area of the complex of the planned Project and its surroundings can be geographically described as follows:

- in the north: the Korenita River, a local asphalt road which simultaneously represents the border of the Cadastral Municipalities of Gornje Nedeljice and Donje Nedeljice, and also the arable agricultural land,
- in the east: Korenita River, a local asphalt road, a forest area and arable agricultural land. The village of Draginac is situated about 4 km east, southeast.
- in the south: several smaller residential areas belonging to the cadastral municipality of Slatina are located next to southern border of the future complex, arable agricultural land, forest land, the Korenita River. The Loznica-Valjevo regional road also goes through the south side of the future complex.
- in the west: a populated zone (the villages of Gornje Nedeljice and Brezjak) stretches along the entire western border of the future complex. The distance of the nearest households ranges between 10 - 20 m from the complex borders in the in the southwestern part, and 100 - 150 m in the western and northwestern part.

Rationale for location of proposed activity:

The location of the future project of underground mining of lithium and boron deposit Jadar is contingent on the deposit location.

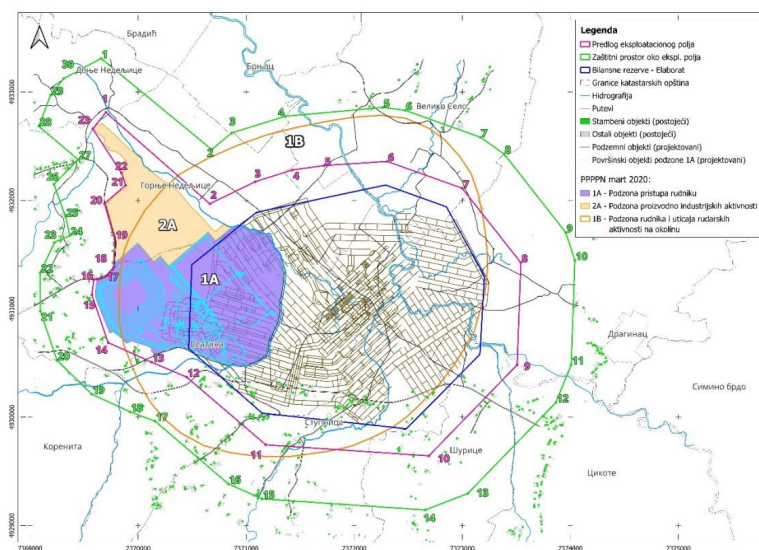
Time frame for proposed activity:

3 years is the period planed for the mine opening. After that period, the next 36 months production will be gradually increased to full capacity, with the expected life of operation around 70 years.

Maps and other pictorial documents connected with the information on the proposed

activity:

The exploitation field is limited by relevant polygonal lines on the surface of the terrain, stretching to the designed exploitation depth, as shown in the Figure below.



Additional information/comments:

(iii) Information on expected environmental impacts and proposed mitigation measures

Scope of assessment (e.g. consideration of: cumulative impacts, evaluation of alternatives, sustainable development issues, impact of peripheral activities):

The scope of environmental impact assessment includes consideration of the impact of underground mining of mineral resources, their beneficiation for chemical treatment and disposal of mine waste on all aspects of the environment (air, water, soil, community, etc.).

Expected environmental impacts of proposed activity (e.g. types, locations, magnitudes):

The underground mine in combination with the belonging surface infrastructure should provide the input raw material for the process plant. Even though it is an underground facility, with a considerably smaller aboveground infrastructure than the process plant, certain effects, or impacts on the environment are unavoidable. These impacts can be classified as follows:

- Impacts on the physical surroundings – soil (physiography, geology and soil), water (surface and underground resources) and air (climate, air quality and noise);
- Impacts on the natural surroundings – biodiversity (aquatic and terrestrial habitats), flora and fauna;
- Impacts on the social and economic surroundings – the current and planned use of land and resources and related economic activities;
- Impacts on the cultural surroundings – archaeological, cultural and heritage features that include any site or property of historical significance that could be impacted by the physical aspect of the project.

The most of the possible impacts on the quality of the environment during the Project

implementation will be considered in detail by the Environmental Impact Assessment Study.

Inputs (e.g. raw material, power sources):

In order to implement the Jadar Project, it is planned to construct and equip power facilities necessary for the operation of jadarite mineral exploitation and processing plants and develop sites for new transformation facilities and routes of future grids, which will contribute to more secure and more cost-effective power supply.

The electricity demand of the special purpose complex (the exploitation and processing plants) is about 45 MW (with a power factor of 0.95), with the maximum expected peak load of about 65 MVA.

The construction of the gas pipeline network is one of the main planning solutions for the implementation of the Jadar project. The gas pipeline construction will provide safe and reliable gas supply for the ore exploitation and processing plants. The planning solution was developed considering the needs for the project implementation, taking into account the existing and planned facilities and the protection of the planned gas pipeline corridor.

It is planned to construct a side interconnecting steel gas pipeline with a pressure of up to 50 bar. The pipeline route is planned as an underground route along the entire route. The total length of the planned interconnecting steel gas pipeline is about 8.6 km. The diameter of the gas pipeline is Ø168.3 mm.

Technical water supply will be sourced from the Drina alluvium. From here, water will be pumped using system of wells and transported via pipeline to the Project location.

Outputs (e.g. amounts and types of: emissions into the atmosphere, discharges into the water system, solid waste):

Jadarite mining under the Jadar Project deploys an underground exploitation technology assisted by mining machinery. A large number of sources of potential emissions of pollutants are located in the underground production system and as such, at least when it comes to air and soil pollution, noise and vibration, light, heat and radiation, etc., do not exert a significant impact on the environment. A possible impact can be expected in terms of dust emissions emitted from ancillary facilities, such as a beneficiation plant and a tailings dump.

Furthermore, the possible impact can be expected from the point of view of water, which is pumped from the underground production system to the surface as part of the regular mine drainage process for further treatment. The planned project envisages all measures necessary to prevent and limit possible negative impacts on environmental factors.

Transboundary impacts (e.g. types, locations, magnitudes):

According to the available information no transboundary impacts are expected. Detailed impact analysis will be addressed in detail through further development of the project, including the relevant Environmental Impact Assessment Study.

Proposed mitigation measures (e.g. if known, mitigation measures to prevent, eliminate, minimize, compensate for environmental effects):

The mining plan are incorporating mitigation measures for the protection and rehabilitation of the environment, which imply strict implementation of the adopted principles: BAT – application of the best available techniques in the design and development stage of the project, i.e. BMP – best management practices, principles to be applied in the stage of project

construction and exploitation. Further detailed consideration of measures will be performed during the preparation of the Environmental Impact Assessment Study.

Additional information/comments:

(iv) Proponent/developer

Name, address, telephone and fax numbers

Legal entity: Rio Sava Exploration d.o.o.,
GEOLOGICAL EXPLORATION COMPANY RIO SAVA EXPLORATION DOO BEOGRAD (NOVI BEOGRAD)

Address: 1i Milutina Milankovića Blvd., 11070 Novi Beograd, Serbia

Telephone: +381 (0) 11 4041 430

E-mail: serbia@riotinto.com

Web site: <http://www.riotinto.com/Jadar>

(v) EIA documentation

Is the EIA documentation (e.g. EIA report or EIS) included in the notification?

NO

If the answer to the above is no or partially, description of additional documentation to be forwarded and (approximate) date(s) when documentation will be available:

Development of Request for Establishing the Scope and Contents of the Impact Assessment Study is ongoing.

Additional information/comments:

2. POINTS OF CONTACT

(i) Points of contact for the possible affected Party or Parties

Authority responsible for coordinating activities relating to the EIA (refer to decision I/3, appendix) - Name, address, telephone, and fax numbers:

Ministry of Environment and Tourism
Address: Hamdije Čemerlića 2,
71000 Sarajevo
Tel: +387 33 726 700
Fax: +387 33 726 747
E-mail: fmoit@fmoit.gov.ba

Ministry of Physical Planning, Construction and Ecology of the Republic of Srpska
Address: Trg Republike Srpske 1, 78000 Banja Luka
Tel: 051/ 339 520, 051/ 339 592
Fax: 051/ 339 653
E-mail: kabinetministra@mgr.vladars.net

List of affected Parties to which notification is being sent

Bosnia and Herzegovina

(ii) Points of contact for the Party of origin

Authority responsible for coordinating activities relating to the EIA (refer to decision I/3,

appendix) - Name, address, telephone and fax numbers

Ministry of Environmental Protection of the Republic of Serbia
Bulevar Mihajla Pupina 2
11070 Belgrade, Serbia
Telephone: 011/3110-271; 011/3110-245
Fax: 011/3110-298
email: kabinet@ekologija.gov.rs

Decision-making authority if different than authority responsible for coordinating activities relating to the EIA

Name, address, telephone and fax numbers

Ministry of Environmental Protection of the Republic of Serbia
Bulevar Mihajla Pupina 2
11070 Belgrade, Serbia
Telephone: 011/3110-271; 011/3110-245
Fax: 011/3110-298
email: kabinet@ekologija.gov.rs

3. INFORMATION ON THE EIA PROCESS IN THE COUNTRY WHERE THE PROPOSED ACTIVITY IS LOCATED

(i) Information on the EIA process that will be applied to the proposed activity

Time schedule:

Opportunities for the affected Party or Parties to be involved in the EIA process:

Affected Party and Parties are involved in EIA process in accordance with Law on Environmental Impact Assessment

Opportunities for the affected Party or Parties to review and comment on the notification and the EIA documentation:

According to the Law on Environmental Impact Assessment, interested bodies and organization and interested public may submit their opinions within:

- 15 days on the Request for Establishing the Scope and Contents and
- 20 days on the Environmental Impact Assessment Study

starting on the date of receiving and publishing on the website of Ministry.

Nature and timing of the possible decision:

Process for approval of the proposed activity:

Additional information/comments:

4. INFORMATION ON THE PUBLIC PARTICIPATION PROCESS IN THE COUNTRY

OF ORIGIN

Public participation procedures:

Under the Environmental Impact Assessment Law (Official Gazette RS, No. 135/04, 36/09), all stakeholders (authorities, organizations and the public) may review and provide their opinion during the entire environmental impact assessment procedure, from the time of application for determining the scope and contents of the EIA Study until its approval by the ministry in charge for environmental protection.

Expected start and duration of public consultation

Expected start of public consultation is September 2024.

Additional information/comments:

5. DEADLINE FOR RESPONSE

Date:

15 days after receiving the notification by the affected party