

Since the discovery of the new mineral, Rio Tinto has been working on the development of a Jadarite processing technology project, as well as the application of state-of-the-art mining technology solutions with a large team of domestic and international experts. Since its discovery in 2004, the new mineral jadarite, also known as Serbian “kryptonite”, has attracted public attention. Due to the high concentration of lithium and boron per ton of excavated ore, Jadar is ranked as one of the most important lithium deposits in the world. The “Jadar” project represents a strategic development opportunity for Serbia. It is still early to talk about all the numbers, but at this moment we can say that during the construction phase, the project could employ over 2,000 workers, while when operational activities begin, “Jadar” would open over 650 permanent highly qualified jobs, and about 1,500 more indirect jobs. Rio Tinto has so far determined and invested over 450 million US dollars in the development of the “Jadar” project, and economic estimates for this phase of the project indicate that the development of “Jadar” will bring an investment of 1.5 billion dollars.

“A big job is still ahead of us so that the greenfield mining and metallurgical project of this size can reach its operational phase in a safe and sustainable way, in ecological and economic terms. After making the final investment decision we expect at the end of 2021, construction work could begin during 2022 and take about four years. “Jadar” is designed to be a modern underground mine with a modern ore processing plant and a solution for sustainable waste management. It is planned that the underground exploitation is carried out with the most modern methods and the best available techniques in order to ensure the safety and sustainability of exploitation and processing, and to reduce the potential impact on the environment. The mine is planned to use an almost completely electric fleet of vehicles that reduce carbon dioxide emissions and energy consumption. “Jadar will be a modern mine of the 21st century.” says Marnie Finlayson, CEO of Borate and Lithium at Rio Tinto and CEO of the Jadar Project, and adds:

The preparation of the environmental impact assessment study is still in progress in accordance with the laws of the Republic of Serbia, but at this moment we can state with certainty a few solid facts: the mine technology does not involve flotation, and wastewater will be treated.

The mine and treatment plant will generate 2 types of waste. One type of waste is rock material, ie rock from which jadarite will not be extracted, but goes to landfill. And the other is the one that will be created in the process of processing and it will be the so-called industrial waste which is a mixture of minerals from the ore body and minerals generated during the processing process. It is important to mention that the content of heavy metals in

the waste will be approximately the same as the content present in the soil itself. Both types of waste will be mixed into a single mass that will be filtered and eventually be similar in structure to the rock material. A certain part of the total waste, approximately 20%, will be used to fill gaps in underground facilities. Oils, liquid waste, as well as organic or aromatic substances will not be deposited at the landfill. It will not decompose in the air, nor will it encourage the development of bacteria. Industrial waste obtained from ore processing will have the smell of earth and the landfill will be stacked and compacted using smooth rollers. Landfill areas will be lined with impermeable material that will protect groundwater and soil, and the landfill surface will be gradually recultivated by planting grass and shrubs. The most important thing here is to point out that untreated water cannot and will not be released into the environment, especially considering that in accordance with Serbian regulations, the water that is discharged must be of better quality than the water that is discharged. All wastewater will be treated, both in the process plant and at the landfill. In order to reduce the amount of water needed, the same water will be used several times in the processing process, with purification after each use. On the other hand, landfills will also include a state-of-the-art surface water management system to divert atmospheric water away from landfills. Contact water, or water that has had contact with waste at the landfill, will be temporarily safely stored, and will then either be pumped into the factory for reuse for treatment, or treated in a water treatment plant.

In order to build a mine and a processing plant, as well as a landfill, we need land, and the purchase process itself is underway. We are aware that this is a sensitive and important issue for families involved in redemption, and that is why we approach this topic in a transparent, careful and fair way. We are in regular communication with the landowners and I can say with satisfaction that this is a relationship of mutual respect and trust. The redemption program itself is performed in accordance with the laws of the Republic of Serbia and the best world practice, the principles of which have been determined by the International Finance Corporation (a member of the World Bank Group). Literally every detail is taken into account, not only the land and facilities on it are valued, but also the crops, all taxes and relocation costs are included, every aspect is taken into account. Our goal is for both parties to be satisfied at the end of the redemption process. In accordance with international standards, we are committed to supporting the renewal or improvement of livelihoods of people whose lives are affected by the Project. Plans for the renewal of livelihoods will be prepared in cooperation with households, through active engagement and feedback from households, on a voluntary basis.

Source: b92.net

What will Serbia gain from the exploitation of jadarite?