

The Project is located in the eastern part of the Republic of Serbia, approximately 270 km southeast of its capital, Belgrade, as shown in Figure 4.1.1. Its northern boundary is positioned about 17 km south from the Danube River and the project area extends 85 km southwards to approximately 40 km southeast and southwest of Bor at its southern boundary. The Project is located approximately 20 km west of the town of Bor, Serbia. Bor is a historical centre for copper mining and smelting in Serbia.

The Project comprises eight exploration licences (Potoj Čuka Tisnica, Breza, Malinik, Lenovac, Blizna, Tilva Toma, Goli Vrh and Bigar Istok licences) covering an aggregate area of 570.4 km<sup>2</sup>. The locations of the exploration licences are shown in Figure 4.2.1. The Bigar Hill, Korkan and Krakus Pester deposits are located within the boundary of the Potoj Čuka Tisnica exploration licence.

Exploration licences are currently granted by decisions of the Serbian Ministry of Natural Resources, Mining and Spatial Planning (MoNR&SP), and are generally issued on an initial 3 year basis and are twice-renewable for a further period of 2 years duration. An integral part of the exploration licence application and renewal process is submission of a detailed exploration work program. Supporting documentation is also required from the Institute for the Preservation of Cultural Heritage and the Institute for Nature Conservation of Serbia, to the effect that the proposed exploration activity is in accordance with Republic of Serbia's environmental and cultural legislation. The obligations of the licence holder are to complete the submitted and approved work program, provide annual exploration activity reports to the Serbia Ministry of Natural Resources, Mining and Spatial Planning, and to advance the geological knowledge of the property.

Exploration licences can be renewed, providing that the exploration licence holder fulfils its obligations, including the completion of at least 75% of the planned work program. The legislation provides for a clear development process, from discovery through to mine development and operation.

The exploration licences for the Project are held by Avala Resources d.o.o., a Serbian registered company. Avala Resources Ltd, a Canadian based gold and copper exploration listed on the Toronto Stock Exchange, indirectly holds a 100% interest in Avala Resources d.o.o. through three levels of ownership in subsidiary companies.

Avala acquired Avala Resources (formerly named Dundee Plemeniti Metali d.o.o. (DPM)) from Dundee Precious Metals Inc. (Dundee), a Canadian-based mining corporation, in July 2010.

The Project is located in a hilly region of Serbia subject to a moderate-continental type climate with a well-developed stream network draining ultimately to the Danube Basin. The

area is typical of the region with a strongly rural character and a relatively sparse population. There appear to be no outstanding values in regard to biodiversity or cultural heritage. The Project is located in the Branicevo District and there are 12 small village communities within the area that may be considered as project neighbours, although none of these would be physically displaced.

Based on the preliminary impacts review, Avala has identified a range of mitigation measures that are assumed to apply in this PEA. The key mitigation measures are related to management of Project emissions and wastes and AMEC has set out a “best international practice” approach for these aspects as well as site monitoring and water management. Management of water quality represents the key technical challenge for the Project, but it is important to note that the favourable nature of the geology means that potential for acid rock drainage (ARD) is low and tailings are not acid generating as the majority of liberated sulphides are recovered by flotation, leaving only encapsulated sulphides which are unlikely to be exposed to oxidation or chemical attack.

Avala has conducted a detailed survey of land to be acquired, the land plots and ownership/title as well as the potential costs involved as part of the initial study of potential land acquisition costs. Mining Law 88/2011 introduces a clause that allows for private sector mining to be declared a “General Interest” cause that would allow the competent authority (either Ministry or Local Municipality) to enact expropriation. This is dependent upon the mining activity being listed as of Strategic Mineral Importance. The Bill that will establish this is, at time of writing, still in the process of being passed. If passed, AMEC understands that Avala could expropriate land under this mechanism, however, all studies to date have focused on optioning and acquisition of land on prevailing commercial terms. There is basic provision for closure planning under Serbian Mining Law and it is anticipated that detailed requirements will be published soon. Therefore, AMEC has anticipated that best international practice for closure will be adopted and has identified a preliminary closure strategy that will permit Avala to leave the site in a condition that requires limited further maintenance and monitoring and achieves agreed end use objectives (likely to be establishment of a mix of forestry and nature conservation).

It is a requirement under international guidance for social and environmental impact assessment that alternatives to the preferred development option are addressed. As is usually the case with mining projects, a combination of unique geological and physical factors, together with economic considerations, combine to dictate the location and extent of the Project mining operations. Comparison of alternative sites for development considering geological and economic factors is outside the scope of this analysis.

In this case, opportunity lies in the development of an open pit mine to access gold ore that occurs at outcrop and relatively shallow depths. The alternatives for the mining scenario are therefore limited to the proposed open pit operation and the “nil option”, i.e. the Project does not proceed.

With respect to the other elements of the Project, the following are considered in respect of options for location and best practice design:

Ore process technology and plant location.

Project water supply.

Power supply options.

Waste rock disposal options.

Process wastes disposal approach.

The following conclusions are drawn from this preliminary environmental and social impacts review:

Significant negative potential impacts that present the greatest technical challenge in terms of control and mitigation are related primarily to surface water and groundwater.

Issues that are important for a future ESIA study and the design of the Project include impacts on local communities (positive and negative), land take for construction of the Project and potential for fugitive emissions (especially noise and dust).

No “fatal flaw” environmental or social issues have been detected at this stage.

Source; AvalaResources