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**ADRIATIC METALS PLC**

**VARES POLYMETALLIC MINING PROJECT**

**CONCEPTUAL MINE REHABILITATION AND CLOSURE PLAN**

**October 2021**

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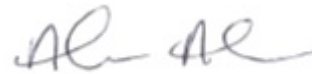
**October 2021**

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## **1 INTRODUCTION**

### **1.1 Overview**

This conceptual Mine Rehabilitation and Closure Plan (MRCP) has been developed during the Definitive Feasibility Study (DFS) stage for the Vares Project, owned and to be operated by Adriatic Metals. The CMRCP considers the baseline environmental and social context of the project area; current project design (as per the Definitive Feasibility Study (DFS), dated September 2021); legislative and regulatory framework for mine closure; closure vision; stakeholder engagement; risk and opportunity assessment; closure activities, planning and parameters; after care considerations; and estimated costs associated with closure.

It is recognised that the actual operation of the mine may not be totally in line with the original plan and DFS design, this plan will therefore need to be updated on a regular basis as detailed design is undertaken and mining progresses. A final Mine Rehabilitation and Closure Plan (MRCP) will be developed towards the end of mine life. This conceptual plan is to provide guidance for the level of funding anticipated to cover the necessary closure works and aftercare.

The final MRCP will be prepared once details are available related to the future use of the site, its operations, stakeholder expectations, results of any progressive rehabilitation, success of revegetation trials for closure and a firm schedule for the mine's closure. An important point is the agreement on what the after use of the site may be as this will determine the extent of the remediation and rehabilitation that will be undertaken. Early engagement with all stakeholders into the operation and closure of the mine will be undertaken.

The MRCP will also identify what monitoring should be undertaken during and after the closure periods and what success criteria will be adopted. Pre operation, specific success criteria cannot be defined but again early engagement with all stakeholders will enable this aspect to be fully covered before closure takes place.

At this stage, the closure planning has had to assume many issues which may change throughout the life of the mine, but it has been assumed that the DFS project description as stated in the ESIA reflects the overall site set up and a methodology for closure has been determined which reflects that and its cost estimated accordingly.

As well as laying out the plan and design for closure, the plan also includes an amount for aftercare which is the period after completion of the closure works to monitor a) the guaranteed quality of the works undertaken and b) the longer-term monitoring ( current estimate 5yrs) of the site for environmental compliance. It should be noted that where closure works are undertaken by contractor point a) will be covered by that contractor.

An estimate for closure costing has been provided. These costings account for redundancy and compensation payments which may be incurred, as well as the physical costs of closure activities.

## **1.2 Responsibility**

Adriatic Metals are responsible for the implementation of the activities laid out within this plan. Overall, the review, update and implementation of the plan is the responsibility of the Environmental and Social Manager on site, who reports directly to the General Manager for the Project. The E&S Manager will be supported by a team of social coordinators and environmental technicians who will assist in the activities defined here within. Physical closure will be designed by the appropriate technical personnel in support of the outcomes required by the E&S Manager.

## **2 ENVIRONMENTAL CONTEXT**

### **2.1 Location and Setting**

The Vareš Project is located in the Vareš municipality of the Zenica-Doboj Canton, Bosnia and Herzegovina. Rupice and Vares Processing Plant (VPP) are located approximately 8.7km west-north-west and 3.5km east respectively from the town of Vareš. Vareš is situated approximately 50km, via paved roads, north of the capital Sarajevo.

The Rupice mine is located within an afforested environment on the eastern side of the Vruci Potok River valley, at an altitude of approximately 900 – 1,280 m above sea level. VPP is located at an altitude of approximately 1,060m above sea level on the southern slopes of Zvijezda Mountain.

The Project affected area in this region is dominated by coniferous forest habitat (spruce and fir) growing on siliceous soils derived from the parent and rocks. Some areas of rocky slopes and grassland are also present, with several watercourses. The area of the Processing Plant itself is a brownfield previous industrial site where the historic process plant was located for the Veovaca mine.

The surrounding area is dominated by rural residential communities and small parcels of land utilised for subsistence farming. The forested valley to the south of VPP will accommodate the Tailings Storage Facility (TSF), this is a managed forestry area.

The haul route between the two sites includes an existing road which will be upgraded as well as 15.5km of newly constructed road. The road will be constructed, developed, and maintained by the municipality and predominantly utilises existing forestry tracks that will be upgraded as well as sections of newly constructed road. The road will be retained post-mining and will continue to be managed by the municipality.

### **2.2 Climate**

Located in a highland region, Vareš has a humid continental climate, with an average temperature range between 17.5°C in July to -3°C in January, with the highest recorded temperatures of +30°C in the summer (July to August), and the lowest temperatures of -20°C in January. Air temperature drops with increasing altitude by approximately 0.6°C per 100 m. Precipitation is approximately 1,088 mm per year, ranging from 127 mm in June to 61 mm in February, with an average of 48 snow days per year.

### **2.3 Geology**

The Vares Project is located in the geological Alpine orogenic belt within the Balkans region; specifically, in the central eastern boundary of the internal Dinarides and the Adria derived thrust sheets. Rupice at the western end of the Vareš mineralised trend is hosted within a west northwest-striking antiformal thrust-bound belt of Triassic rocks surrounded by Jurassic carbonates. The host sequence at Rupice comprises Middle Triassic limestone, dolostone, calcareous and dolomitic marl,

and a range of mostly fine-grained siliciclastic rocks including cherty mudstone, mudstone, siltstone, and fine-grained sandstone.

The overall mineralisation at Rupice is described as a polymetallic sulphide deposit where polymetallic sulphide mineralisation has replaced favourable host rocks with a mixed siliciclastic and carbonate sedimentary succession. The mineralogy at Rupice consists of abundant barite with sulphides including sphalerite, galena, chalcopyrite, pyrite and minor tetrahedrite, stibnite and cinnabar. The mineralisation also contains silver and gold in significant quantities.

## 2.4 Geochemistry

A study has been undertaken to help define the potential for acid generation and/or metal leaching from the rocks excavated and exposed during the project as part of the ESIA.

Results of various testing have shown the ore material and the mineralised envelope around the ore are potentially acid generating and that the observed lower pH is likely to increase leaching of metals. Conversely, the remaining host rock units are predominantly carbonate-rich with high neutralising capacity and alkaline effluent. These materials naturally buffer potential localised acid production but even in alkaline conditions, can still show some, though reduced metal leaching. Given this, it is unlikely that ARD will be a significant risk for the Project and can be managed.

## 2.5 Water Resources

The Mala river which flows southwards in the valley adjacent to VPP is a Class II registered water body that comprises an upland stream that is a tributary of the Stavnja River. The Stavnja basin is a sub-basin of the River Bosna, the third longest river in Bosnia which flows north through the centre of Bosnia for some 282km before discharging to the Sava River, a transboundary river. In the area of the VPP and for a distance of 3km downstream from the southern edge of the historic Veovaca open pit the catchment is heavily modified by former mining activities. This includes two sub-surface culverts that divert the river beneath an historic TSF and an iron mine rock dump.

There are two water courses within the area of influence of the Rupice development comprising the Borovički stream, a mountain stream located close to the eastern margin of the Rupice concession and the Vrući Potok ('Hot stream'). The Borovički stream flows for approximately 8km in a south-westerly direction to its confluence with the Bukovica river, a tributary of the Bosna River. Downstream of Rupice, the Borovički stream flows through the village of Borovica Donja, where it is used by households for sewage dilution i.e. as a receiving water for outflows. The Vrući stream is a small mountain stream to the north of the Rupice concession which flows north for 2.5 km from its source to its confluence with Trstionica, a tributary of the Bosna River and which appears to have no formal designation or use as it has been heavily impacted by frequent muddy run-off from forestry activities during the monitoring period.

Groundwater at Rupice is primarily associated with a Triassic age dolomitic limestone unit which itself has low primary porosity and permeability but due to significant faulting and fault breccias enables a



degree of fracture flow to occur between limestone compartments and fault margins. No groundwater was encountered from wells drilled within the VPP site.

## **2.6 Biodiversity**

### **2.6.1 Habitats**

Several habitats have been identified within the Project affected area, namely Acidophilic spruce forests of hilly to mountainous belt (Vaccinio-Piceetea), Alpine rivers and their ligneous vegetation with *Salix elaeagnos*, Water courses from plateaus to the mountainous belt with Ranunculion fluitantis and Callitriche-Batrachion vegetation, Mountain hay meadows, and Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels. These habitats are deemed Priority Biodiversity Features, as per EBRD's PR6 on Biodiversity. According to PR6, the Project must achieve no net loss, if not a net gain, of these habitats, thus meaning biodiversity offsets are required.

Adriatic Metals are in discussion with the Vares forestry commission and the governing board for the new proposed protected area to establish suitable areas and programmes for ensuring the biodiversity offset is met for the Project.

### **2.6.2 Flora and Fauna**

Field studies were undertaken for flora and fauna in Autumn 2020 and Spring/early summer 2021 by the Zenica Institute. The surveys worked within Ecological Areas of Appropriate Analysis (EAAA) to determine the presence of species of conservation concern according to the IUCN Red List of threatened species, EU protected species and BiH protected, endemic or threatened species.

Several species were identified in the Project area triggering the presence of Critical Habitat, as per EBRD PR6. The EU Annex IV yellow bellied toad, Greek frog, green toad and agile frog were found in several water courses in the region. The Zagarski stream, along the route of the planned haul road, contains some of these species and will be directly impacted by road construction. The presence of these species triggers the designation of critical habitat thus requiring the Project to implement mitigation. Adriatic Metals have committed to translocating the amphibian species to newly installed ponds, as well as to remediate and manage an appropriate stretch of degraded river as an offset.

The Mala River, southeast of VPP and the TSF, has a population of White Clawed Crayfish, a IUCN EN, FBiH EN, Annex II species. This species is particularly sensitive to changes in water quality. Whilst not directly impacted by the Project, run off from construction and operation of the TSF and VPP could lead to water courses being degraded. Sedimentation, especially during construction, will be collected by a sediment pond in the TSF valley.

Large mammals, namely Brown bear, Grey wolf, Eurasian Lynx and European wildcat, are found in the region, though outside of the Project Area. No suitable denning habitat for these species was found to be present in the project affected area. Bat and ornithofauna surveys were also carried out, with no significant finds in the project affected area.

A Biodiversity Action Plan has been developed for the Vares Project, laying out the methodology for avoiding, minimising and mitigating impacts to identified species of flora and fauna and habitats.

## **2.7 Soils**

### **2.7.1 *Natural Soils***

The soils within the Project area are humus accumulative, on top of non-carbonate rocks and are predominantly covered by forest, and agricultural land primarily used for livestock. Along the flanks of the Rupice deposit, exposures in cuttings showed residual soils from the weathering of Triassic chert bedrock. In the upper slopes, the soil profile was approximately 0.5m thick, comprised of thin humic, rocky materials with minimal structure. In the lower slopes, there were thicker accumulations with indications of leaching and clay development closer to the surface.

Soils are predominantly a mixture of sandy loams and sandy clays, with relatively high SOM. Some soils displayed relatively acidic pH as low as 3.73, whilst there were low levels of phosphorus (P) and high levels of potassium (K) when compared to Defra (UK Department for Environment Food and Rural Affairs) guidelines.

### **2.7.2 *Contaminated Soils***

According to the soils baseline in the ESIA there are elevated levels of certain contaminants above BiH and Canadian Council of Ministers of the Environment (CCME) guidance in some areas. These are focused in the VPP. In many cases within VPP, BiH agricultural limits were exceeded in relation to As, B, Cd, Co, Cr, Cu, Hg, Ni, Pb, Zn as well as PAHs and Sulphides. Industrial CCME values were exceeded for As, Cd, Cr, Cu, Ni, Pb and Zn. Due to the fact that some samples did not exceed BiH levels, and very high concentrations of some contaminants such as Pb are present, most exceedances of CCME guidelines are likely related to historic mining operations.

Soils along the haul route consisted of those relating to industrial land uses, more natural land uses, and soils that are completely undisturbed. There were exceedances of the BiH limits and some CCME limits seen along the route. This suggests that there are both naturally elevated background levels of elements, including Ba, Cd, Cu, Ni, Pb and Zn as well as areas which greatly exceed both BiH and CCME limits, and where contamination levels are linked to previous mining activities, including As, Cr, Co, Hg, Ni, and Zn.

## **2.8 Air Quality and Noise**

Ambient air quality in the region is compromised with multiple exceedances of national and World Health Organisation (WHO) standards for dust and SO<sub>2</sub>. Exceedances are largely due to prevalence of wood burning for domestic heating and cooking as well as the operation of industrial sawmills in the region. Metal concentrations in dust are high and exceed the national standards.

Background noise levels are generally considered very low with minimal exceedances of local or international requirements.

### 3 SOCIOECONOMIC CONTEXT

#### 3.1 Key Communities

Located in a rural setting, there several key communities identified scattered across the project area, stretching from Bastašići and Lipnica in neighbouring Kakanj Municipality, west of Rupice, along the haul route to Daštansko, east of VPP. The closest communities, as shown on Figure 3.1, have small populations ranging from 3 people in Osredak to 2,917 in Vares town.

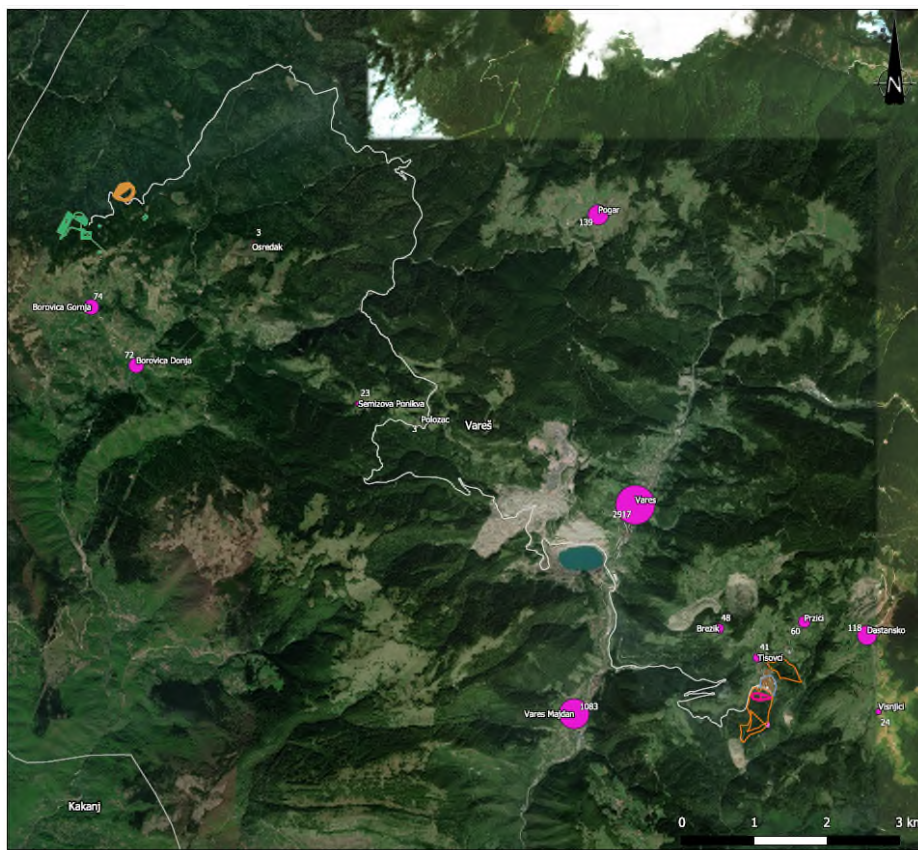


Figure 3.1: Key Communities and Population

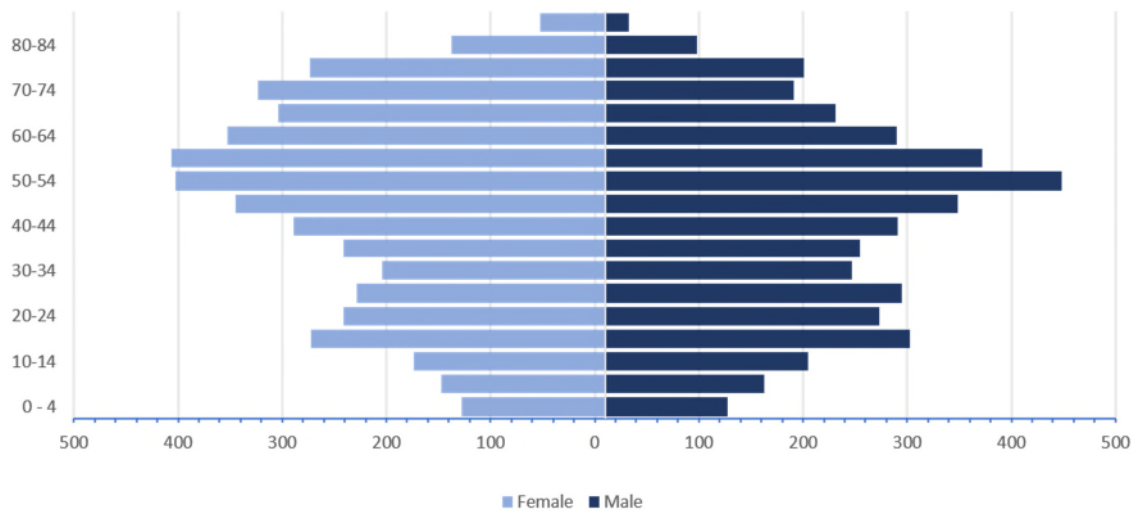
The town of Vareš is the only urban centre in the municipality, with all other villages classed as rural communities. Vareš town hosts all key services such as the police station, municipality buildings, health centre and schools. Adriatic Metals have established an Information Centre in Vareš, providing a central place for project affected people and stakeholders to gain information or raise concerns or queries with the company.

#### 3.2 Demographics

The population of Vareš Municipality has significantly depleted since the Bosnian War (1992-1995), reducing from 22,200 in 1991 to 8,900 in 2013. Many properties remain vacant today with only a small number of residents returning since the end of the war. Industrial activity in Vareš municipality has

also significantly depleted and outmigration is a continuing trend as people leave in search of economic opportunities, leaving an ageing population behind.

The previous iron foundry sits vacant and largely derelict in the southern part of Vareš and historic mine sites are dotted across the area, inactive and predominantly abandoned. The population density of Vareš is significantly lower than the national average at 22.8 inhabitants per km<sup>2</sup>, likely due to the largely rural population with only one urban centre, Vareš town.



**Figure 3.2: Population Pyramid for Vareš Municipality (2013)**

The Vares Project is anticipated to lead to population influx as people move to the area in search of direct and indirect employment and opportunities. There is ample housing in Vareš, and opportunity to grow services and industries required by both the mine and the population in the region.

### 3.3 Cultural Setting

The people of Vareš municipality and the surrounding area have strong ties to the land and area within which they live, with many residents having been born in the region. The proximity and experiences of the Bosnian war, have further enhanced peoples ties to the region, and has played a large role in the current status of the area. Vareš Municipality has a strong connection and history with the Bosnian War due to the close proximity of three parties, the Army of Republika (VRS), the Army of Republic of Bosnia and Herzegovina (ARBiH) and the Croatian Defence Council (HVO). Effects of the war are still evident across the municipality with many abandoned houses, and war memorials throughout the area.

Mining remains an integral part of the culture and history across much of the wider Vareš region, including Breza, Kakanj and Tuzla Vareš. Municipality Day, August 16th, which commemorates the opening of the first blast furnace in Vareš in 1891, is still celebrated today.

The Project will not directly impact on any identified archaeological or cultural heritage sites in the region. A chance finds procedure, in accordance with EBRD PR 8, has been developed for the Project.

## **4 MINE DESIGN**

### **4.1 Overview**

The Vares Project comprises the polymetallic underground Rupice Mine, the Vares Processing Plant with associated infrastructure and a 24.5km haul route connecting the two. The Project is shown in Figure 4.1.

The pertinent features of the Vares Project which will require consideration for closure are as follows:

- Rupice mine site and surface infrastructure;
- Vares Processing Plant Site;
- Waste Management Facilities (Tailings Storage Facility);
- Mining Fleet and Equipment;

Note that the planned haul route that will connect the Rupice and Vares Processing Plant site will be constructed and maintained by Vares Municipality. The road will remain post-mining for continued use by the community and forestry industry.

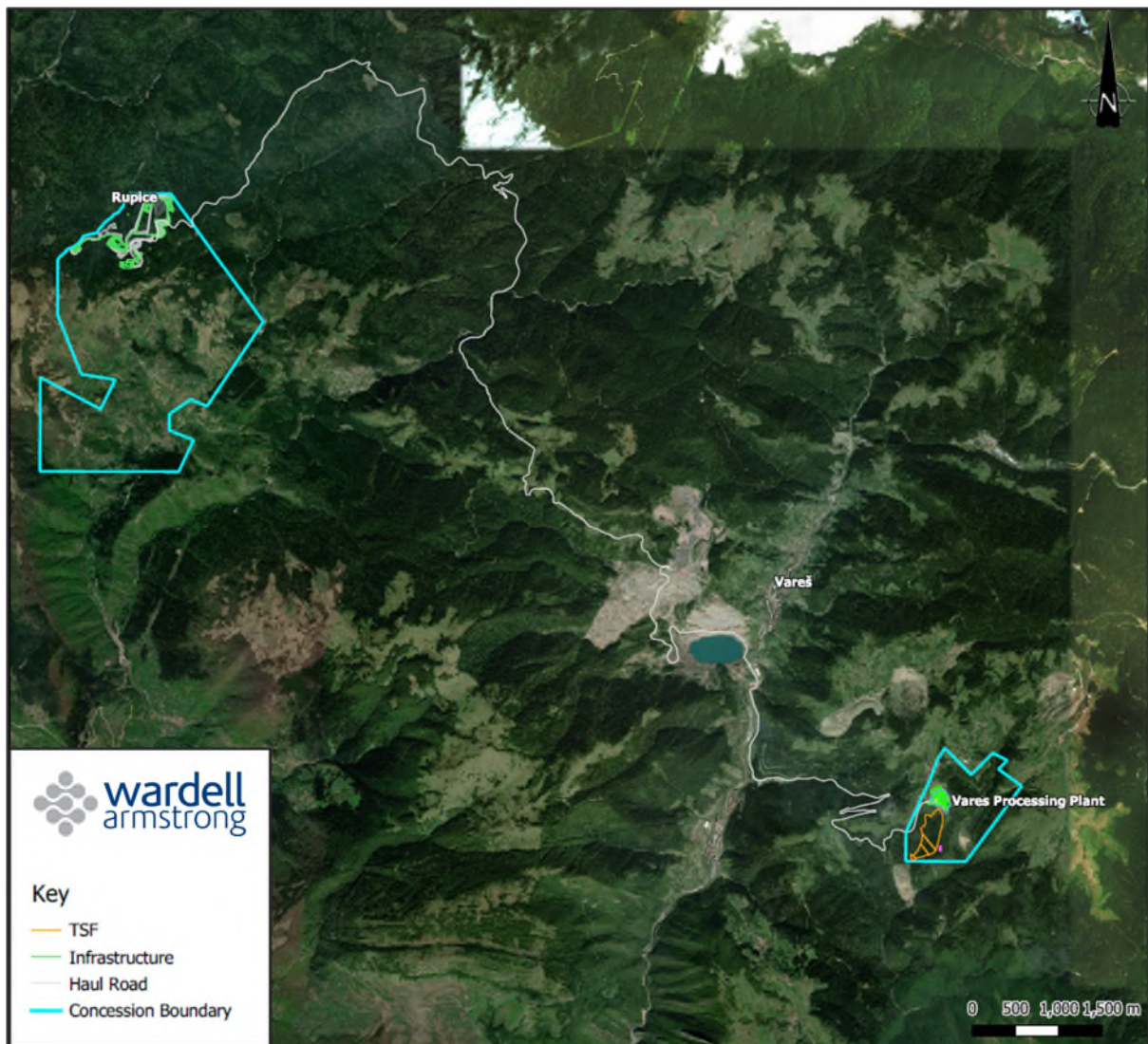


Figure 4.1: Vares Project Layout

## 4.2 Rupice

The Rupice Mine site and Infrastructure, comprises:

- Underground workings, including ventilation drives and declines;
- Backfill and shotcrete plant;
- Waste Rock and Ore Stockpiles;
- Three stage crushing plant;
- Three Run-of-mine (ROM) stock piles of varying grade;
- Haul truck maintenance workshop;
- Refuelling station;
- Water storage reservoir; and
- Water treatment plant for acidified runoff from the stockpiles.



Ancillary facilities at Rupice include the mining office and change house building, workshop, warehouse and washbay building, explosives storage, fuel and lube storage building, mine storage building and compressor building. A fire water tank and pump will be located adjacent to the portal entrance.

The mining office and change house building will be a single-storey, steel frame building with sandwich panels and have been assumed to be constructed in the mine facility area. It will be approximately 15m (wide) by 25m (long). The workshop, warehouse and washbay building at the site will be a 16m x 75m pre-fabricated building located southwest of the fuel station.

The fuel and lube storage building will be located northwest of the workshop building. The building will be a 15m x 22m prefabricated building that will be used as a warehouse for lubrication oils, greases and fuel as well as general storage.

A fuel station 20m x 30m will be open aired, reinforced, and have a concrete containment area located adjacent to the truck shop. The storage area will be bunded to prevent spillage of fuel contaminating the site area or watercourses.

It is planned to develop a raw water supply for Rupice by rehabilitation of a municipality owned unused water source that draws from the headwater springs of the Bukovica stream. The water supply will require rehabilitation of the source and the deployment of pumping equipment and pipeline to the site. Additional capacity may be added which would provide a means of reticulated potable water supply to the residents of Borovica as a community improvement project and would remain in place on closure of the mine.

Sanitary effluent from Rupice will require treatment and a modular biological system such as MMBR is envisaged for operations which will be removed on closure.

The Rupice site consists of several terraces accommodating the portal access to the two Production declines and one ventilation Return Airway decline, the stockpiles required for management of ore and waste rock, and the three stage crushing and screening plant. The paste backfill plant and the associated stockpiles and ancillary facilities are located on their own terraces near the upper underground portal at the site. The surface infrastructure, mine portal, waste dumps and ROM stockpile will eventually drain through an engineered channel and settlement pond system to the Vrući Potok.

Blasted ore will be hauled to surface via an internal ramp and tipped onto one of three run-of-mine (ROM) pads. The stockpiles are placed on an impermeable pad raised and bunded above natural ground elevation with an external MSE wall, engineered granular sub-base material and HDPE liner beneath graded locally site-won calcareous gravel dressing 150mm thick.

### 4.3 Vares Processing Plant site

The Vares Processing Plant Site comprises the following:

- Crushed ore handling;
- Grinding facility;
- Flotation circuits (silver-lead and zinc);
- Concentrate thickeners and filters;
- Tailings thickener and filter;
- Tailings Storage;
- Concentrate storage and loading;
- Reagents handling; and
- Tailings Storage Facility.

Ancillary facilities at the Vares Processing Plant includes a laboratory, reagents storage, administration building, concentrate storage areas, security, workshop/warehouse and laydown areas. A rail loadout facility, Droskovac in Vareš, is being restored for operation.

The laboratory will be an assortment of prefabricated, single-storey, modular buildings on precast concrete blocks, totalling 15m x20m, and housing the equipment for typical site assays. The administrative building, existing from the previous period of mining, is located at the northern side of the site.

The workshop/warehouse building at the site will be a 15m x 48 m fabric building located west of the process plant. The maintenance bays will be served by a 25t bridge crane, supported on steel framing independent of fabric building framing. The building will be supported on a reinforced concrete raft foundation.

The reagent storage building will be a 24m x 36m fabric building located northwest of the process plant. The building will be supported on a reinforced concrete raft foundation.

The tailings storage building will be a 23m x 35m fabric building located southwest of the process plant that will house the tailings filter press and storage space for tailings. The building will be supported on a reinforced concrete raft foundation.

The concentrate storage building will be a 21 m (wide) x 40 m (long) fabric building located west of the process plant that will house the concentrate filters, air services and storage space for concentrate produced and space for loading containers using conveyors. The building will be supported on a reinforced concrete raft foundation.

Water demand for VPP will be met by the existing municipality reticulated supply. The VPP site has its own dedicated receiving tank and pipeline supply which has been operating and providing water for the exploration team on-site since 2018 until the present.

## **4.4 Waste Management**

### **4.4.1 Waste Rock Stock Pile**

A permanent waste rock dump will not be required for the Project as waste rock will be utilised in backfilling activities. It is expected that the waste rock stockpile will be depleted in year 8 of the mine life and no waste rock will be present at closure. The Waste Rock Stockpile will be lined and an ARD treatment plant will treat seepage which is collected from the ore stockpiles and other contact water.

### **4.4.2 Tailings Storage Facility**

A dry stack tailings storage facility (TSF) will be developed in a steep sided wooded valley south of VPP. The TSF has been designed to sufficiently store tailings produced by the Project across the mine life that will not be utilised in backfill.

An existing track runs along the eastern ridge of the site with a forestry track forming the western extent with meadows beyond and the proposed mine haul route. Tailings will be transported from the processing facility to the TSF by trucks via a purpose-built access route. The road would be maintained post-closure for ongoing monitoring of the TSF, therefore cost and activities for closure of this road has not been considered within this plan.

The TSF will be produced in three stages, consisting of an initial area followed by two subsequent expansions. It will have an initial capacity of 0.97Mt followed by 1.73Mt and 2.56Mt creating a total storage capacity of 5.3Mt. Locally sourced rock will make up the zoned starter embankment at the toe of the facility, with upstream construction of compacted filtered tailings being used to develop the facility. The facility will be progressively closed and capped with a low permeability layer covered with waste rock to prevent erosion before cover with topsoil to encourage natural revegetation. At the time of closure only the third lift of the TSF will remain.

### **4.4.3 Non-mining Waste**

Non-mining waste will be collected and disposed of by the appropriate legal entities. It will be taken offsite to final disposal locations. No land fill will be developed as part of the Vares Project.

## **4.5 Mining Equipment**

The underground mining fleet is shown in Table 4.1. Haulage of ore and tailings between the two sites will be undertaken by a contractor, thus the associated vehicles are not considered in this mine closure plan.

Mining Equipment will be sold off at scrap value or if still having a useful life will be sold as operational. No allowance has been made in the closure costs for the sales of scrap or equipment as the worst-case scenario has been assumed, i.e., no sales to ensure that all costs are covered.

<b>Table 4.1: Mining Fleet</b>		
<b>Equipment type</b>	<b>Average Requirement</b>	<b>Peak Requirement</b>
Drill Rig - Short hole	3	3
Drill Rig - Long hole	2	2
Drill Rig – Bolter/Support	1	1
Häggloader (optional)	(1)	(1)
LHD	2	3
Truck	3	4
Shotcrete Unit	1	2
Charging Vehicles	1	2
General Service Truck	1	1
Scissors Truck	2	2
Water Cart	1	1
Motor Grader	1	1
Personnel Transport Vehicle	1	2
Light Vehicles	6	6
<b>TOTAL</b>	<b>25 (26)</b>	<b>30 (31)</b>

## 5 LEGISLATIVE FRAMEWORK

### 5.1 Local Legislation

Mine closure and mine closure funding are covered by the mining legislation of Bosnia and Herzegovina as shown in the 'Law on the Mining Industry of the Federation of Bosnia and Herzegovina', Articles 58 and 59, extracts below. It should be noted that the sections in blue are the responsibilities of the mining company in relation to closure planning and costs.

#### **Article 58**

##### *'Complete and Permanent Suspension of Mining Operations'*

*In the event the company decides for any reason to completely and permanently suspend mining operations on the exploitation of mineral raw materials in all facilities or only one facility in which mining operations are executed, it must do so by observing provisions of this Law.*

*A complete and permanent suspension of mining operations on the exploitation of mineral raw materials must be reported by the company to the Federal Ministry or the Cantonal Ministry responsible for the mining industry and to the competent mining inspection authority within 15 days before commencement of such suspension.*

*The Federal Ministry or the Cantonal Ministry responsible for the mining industry may appoint a commission to examine on the spot the reasons for suspension of operations. The company must present to the commission the documentation that served as a basis for operations of exploitation of mineral raw materials and for its decision on complete and permanent suspension of operations, as well as the mining design for the closure of the mining facilities in which the exploitation is to be discontinued.*

*In addition to representatives of the Federal Ministry or the Cantonal Ministry responsible for the mining industry, members of the commission referred to under Paragraph 3 of this Article shall also include representatives of the Federal Ministry of Spatial Planning and the Federal Ministry of Environment and Tourism, or of Cantonal Ministries responsible for spatial planning and the environment.*

*Following its inspection, the commission shall produce a report including proposals for further measures and shall deliver it to the Federal Ministry or the Cantonal Ministry responsible for the mining industry. This report shall serve as a technical basis for issuing a permit for suspension of exploitation referred to under Article 42 of this Law.*

## Article 59

*'Remediation and Reclamation of the Effects of Mining Operations on the Environment'*  
*Having obtained the permit for suspension of exploitation of mineral raw materials referred to under Article 37, Item 2 of this Law, the company must carry out the final remediation of the land and reclamation of the environment and must remedy any effects of mining operations, based on a remediation and reclamation design.*

*In accordance with the design of mining operations, the company shall continuously perform remediation of land and technical reclamation of areas ruined due to mining operations.*

*Before final remediation, the company shall take security measures to permanently exclude any danger to health and safety of people and to property, as well as any potential causes of environmental pollution or damage to buildings or the environment.*

*The company shall notify all completed activities referred to under Paragraphs 1, 2 and 3 of this Article to the Federal Ministry or the Cantonal Ministry responsible for the mining industry, the competent mining inspection authority and the Federal or Cantonal environmental inspection authority.*

*Based on the notification referred to under Paragraph 4 of this Article, the Federal Ministry or the Cantonal Ministry responsible for the mining industry shall perform technical inspection to establish whether the remediation and reclamation of the environment were completed in compliance with the mining design and whether measures taken as referred to under Paragraph 3 of this Article are sufficient, on which a certificate shall be issued to the company. In the event the measures taken are not sufficient, the company shall be ordered to remedy any identified defects within a certain period of time.*

*In the event the company fails to comply with the order referred to under Paragraph 5 of this Article, the Federal Ministry or the Cantonal Ministry responsible for the mining industry shall take necessary security measures at the expense of the company.*

*The technical inspection referred to under Paragraph 5 of this Article shall be performed with the participation of representatives of the Federal Ministry or the Cantonal Ministries responsible for the mining industry, and competent Ministries responsible for spatial planning, environment and tourism, and agriculture, water management and forestry. The costs of the technical inspection shall be borne by the company.*

The Mining Law therefore indicates that there should be a 'design for the closure of the mining facilities in which the exploitation is to be discontinued'. It is not apparent that Bosnia and Herzegovina have legislation which deals with covering the costs of closure although it is noted that the mining company has the responsibility for carrying out such work and therefore by default should fund such works.

## 5.2 International Requirements and Guidance

Mine closure planning has been the subject of several best practice documents produced by funding agencies and mining organisations to try to ensure that not only is the closure carried out to current best environmental and social standards but also to ensure that the mines are not abandoned as a liability to the locality, local communities and governments.

The following documents have been used to develop this closure plan to best practice:

- The IFC has published its Environmental, Health and Safety Guidelines with examples of Good International Industry Practice ( GIIP) 2007;
- The Treatment Disused Mine shafts and Adits – 1982;
- Abandoned Mine Site Characterisation and Clean Up US EPA - 2000;
- ICMM Integrated Mine Closure – Good Practice Guide 2nd edition 2019;
- EU Extractive Waste Directive 2006/21/EC;
- Best Available Techniques Reference Document for the Management of Waste from Extractive Industries<sup>1</sup>; and
- Guidelines for Mine Closure activities and calculation an periodic adjustment of financial guarantees<sup>2</sup>.

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<sup>1</sup> <https://ec.europa.eu/environment/pdf/waste/mining/MWEI%20BREF.pdf>

<sup>2</sup> <https://op.europa.eu/en/publication-detail/-/publication/cdb0af5d-8b8d-11eb-b85c-01aa75ed71a1>

## **6 CLOSURE VISION**

The objective of the closure planning is to completely remove any physical trace of the mining operation at Rupice except for the road network and part of the water supply which will be used by the local community. The works at the site will enable it to revert to its former state i.e., forest.

The VPP site offers some prospect of being used for other purposes, as yet unknown, therefore the site will be cleared of all processing equipment with any contaminated materials removed, leaving only buildings and concrete slabs that may be useful for future use. Services such as water and electricity supply and sewage disposal will remain in place for future use. It should be noted that at this stage future use assumed but should this not be the case then Adriatic will plan to remove any or all of the remaining services in line with stakeholder requirements. Studies and stakeholder consultation related to all aspects of closure will be undertaken nearer to the closure date to determine the exact state of the sites with a view to refining the closure requirements.



## 7 STAKEHOLDER ENGAGEMENT

A Stakeholder Engagement Plan (SEP) has been disclosed and implemented for the Vares Project. The SEP outlines ongoing and future engagement activities across the mine life. Adriatic Metals environmental and social team undertake regular engagement with local stakeholders through various means. A Public Liaison Committee (PLC) has been established, with the key aim of promoting understanding by the local communities of key issues across the life of the mine, and thereby preventing or resolving any potential issues as they arise. The PLC committee comprises representative community members and has an independent chair.

The established stakeholder engagement activities, as laid out in the SEP, will be critical to detailed mine closure planning. Whilst specific engagement related to mine closure has not yet been carried out, the following is recommended:

- Focus groups looking at mine closure after use of the sites. There should be dedicated groups for business owners, municipality administrations, and NGOs / individuals representing vulnerable groups;
- Public Liaison Committee Meeting to discuss the potential after use options and provide an opportunity for stakeholder feedback;
- Engagement via door to door and telephone meetings with individuals, particularly those living in key communities close to Vares Processing Plant and Rupice;
- Interviews on Radio Bobovac focusing on mine closure.

## 8 RISK AND OPPORTUNITY ASSESSMENT

A comprehensive risk and opportunity assessment for mine closure will be carried out as the mine development progresses and finalised when the final MCRP plan is drafted. The risk and opportunity assessment will consider:

- Community Health & Safety;
- Legal and Regulatory Risks;
- Environmental and Social;
- Financial; and
- Reputation Risk.

An initial risk assessment is shown below which uses the DFS plan as a guide to the potential risks at closure. This will require continuous updating as the mine development and operation progresses to ensure all potential risks to the site area identified. A final risk assessment will be undertaken as part of the development of the MCRP.

The conceptual MCRP has been risk assessed to identify the level of risk posed by the closure and programme and to determine whether the planned provision have controlled those risks. The risk assessment has used Tool 8 of the ICCM document on Mine Closure. The tables below identify the Consequences for each type of risk and the likelihood of that happening.

**Consequence rating of the risk occurring**

Consequence rating					
Consequence type	Insignificant (1)	Minor (2)	Moderate (3)	High (4)	Major (5)
<b>Schedule</b>	Less than 1% impact on overall project timeline	May result in overall project timeline overrun of equal to or more than 1% and less than 3%	May result in overall project timeline overrun of equal to or more than 3% and less than 10%	May result in overall project timeline overrun of equal to or more than 10% and less than 30%	May result in overall project timeline overrun of 30% or more
<b>Financial</b>	Less than 1% impact on the overall budget of the project	May result in overall project budget overrun of equal to or more than 1% and less than 3%	May result in overall project budget overrun of equal to or more than 3% and less than 10%	May result in overall project budget overrun of equal to or more than 10% and less than 30%	May result in overall project budget overrun of 30% or more
<b>Safety</b>	First-aid case	Medical-treatment case	Lost-time injury	Permanent disability or single fatality	Numerous permanent disabilities or multiple fatalities
<b>Environment</b>	Lasting days or less; affecting small area (metres); receiving environment altered with no sensitive habitats and no biodiversity value (eg urban/ industrial areas)	Lasting weeks; affecting limited area (hundreds of metres); receiving environment altered with little natural habitat and low biodiversity value	Lasting months; affecting extended area (kilometres); receiving environment comprising largely natural habitat and moderate biodiversity value	Lasting years; affecting area on sub-basin scale; receiving environment classified as having sensitive natural habitat with high biodiversity value	Permanent impact; affecting area on a whole basin or regional scale; receiving environment classified as highly sensitive natural habitat with very high biodiversity value

Consequence rating					
Consequence type	Insignificant (1)	Minor (2)	Moderate (3)	High (4)	Major (5)
<b>Legal and regulatory</b>	Technical non-compliance. No warning received; no regulatory reporting required	Breach of regulatory requirements; report/ involvement of authority. Attracts administrative fine	Minor breach of the law; report/ investigation by authority. Attracts compensation/ penalties/ enforcement action	Breach of the law. May attract criminal prosecution, penalties/ enforcement action; individual licence temporarily revoked	Significant breach of the law. Individual or company lawsuits; permit to operate substantially modified or withdrawn
<b>Social/ communities</b>	Minor disturbance of culture/social structures	Some impacts on local population, mostly repairable. Single stakeholder complaint in reporting period	Ongoing social issues. Isolated complaints from community members/ stakeholders	Significant social impacts. Organised community protests threatening continuity of operations	Major widespread social impacts. Community reaction affecting business continuity. Licence to operate in jeopardy
<b>Reputation</b>	Minor impact; awareness/ concern from specific individuals	Limited impact; concern/ complaints from certain groups/ organisations (eg NGOs)	Local impact; public concern/ adverse publicity localised within neighbouring communities	Suspected reputational damage; local/ regional public concern and reactions	Noticeable reputational damage; national/ international public attention and repercussions

**Figure 8.1: Consequence Rating of Risk Occurring**

**Likelihood rating of the risk occurring**

Likelihood	
<b>Almost certain (5)</b> >90%	Greater than 90% likelihood of occurring Has happened, will probably happen during the mine life and there is no reason to suspect it won't happen
<b>Likely (4)</b> 30%–90%	Likelihood of occurring is equal to or more than 30% and less than 90% This consequence is not uncommon in the mining and metals industry/area
<b>Possible (3)</b> 10%–30%	Likelihood of occurring is equal to or more than 10% and less than 30% There is a possibility of this risk occurring as it has occurred before (albeit infrequently) in the mining and metals industry/area
<b>Unlikely (2)</b> 3%–10%	Likelihood of occurring is more than or equal to 3% and less than 10% There are no specific circumstances to suggest this could happen
<b>Improbable (1)</b> <3%	Likelihood of occurring is less than 3% It would require a substantial change in circumstances to create an environment for this to occur, and even then, this is a rare occurrence

**Figure 8.2: Likelihood Rating of Risk Occurring**

An estimate is made and applied to the Risk Matrix below

Event Risk Rating / Priority (1)					
Consequence Likelihood	1 Minor	2 Low	3 Medium	4 High	5 Major
5 Almost Certain	Medium (11)	Significant (16)	Significant (20)	High (23)	High (25)
4 Likely	Medium (7)	Medium (12)	Significant (17)	High (21)	High (24)
3 Possible	Low (4)	Medium (8)	Significant (13)	Significant (18)	High (22)
2 Unlikely	Low (2)	Low (5)	Medium (9)	Significant (14)	Significant (19)
1 Rare	Low (1)	Low (3)	Medium (6)	Medium (10)	Significant (15)

(1) Risk rating does not indicate risk acceptability; all risks should be reduced to ALARP (as low as reasonably practicable).

**Figure 8.3: Risk Matrix**

A 'risk rating' is calculated after which the control measures as described in the conceptual MRCP are applied and a 'residual risk' rating is calculated. The aim is to reduce the risk to be as low as practically possible (ALARP). The table below shows the initial risk assessment which will need to be updated as the project progresses to ensure the overall residual risk after closure is as low as possible.

**Table 8.1: Preliminary Risk Assessment for Mine Closure**

Risk	Consequence	Likelihood	Risk Rating	Control Measures	Residual Risk Rating
<b>Community</b>					
Total removal of all site activities and infrastructure resulting in the community not being able to achieve the desired after use at Rupice and Vares.	3	2	6	Stakeholder engagement at early stage to determine after use	1
Premature end to mining activities leaving all infrastructure in place resulting in derelict and dangerous structures and excavations at Rupice and Vares.	5	5	25	Financial closure provisions to cover cost identified in DFS over LOM to ensure basic closure costs are covered.	5
Premature end to mining leaves no compensation funding and no support to cover the community during a period of unemployment.	5	5	25	Financial closure provisions to cover cost identified in DFS over LOM to ensure basic compensation costs are covered	10
<b>Health and safety</b>					
Unrestricted public access to open mine workings resulting in death or injury in irrespirable or hazardous workings at Rupice	5	3	15	Closure activities include effective sealing of mine entrances	5
Collapse of underground workings resulting in crownhole occurrence after closure and a hazard to landowners and users at Rupice.	4	2	8	All underground areas with 10x working height to surface are backfilled	4
Unexpected water discharges and flooding of the surface due to	5	3	15	Hydrogeological study including flood risk assessment to be undertaken and water management controls to be constructed where required	1

**Table 8.1: Preliminary Risk Assessment for Mine Closure**

Risk	Consequence	Likelihood	Risk Rating	Control Measures	Residual Risk Rating
mine recharge after closure at Rupice.					
Unrestricted public access to contaminated land and infrastructure post-mining resulting in injury or adverse health issues at Rupice and Vares.	5	5	25	Remove all contaminated material to a depth of 1m and replace with clean top or subsoil. Clean and remove all plant and equipment. Progressive rehabilitation of Rupice (through backfill) and the TSF. Active rehabilitation of VPP through removal of contaminated soils.	5
Unrestricted public access to disused mine buildings resulting in accidents or vandalism at Rupice and Vares	3	5	15	Demolish and remove all buildings not required for reuse. Fence remaining buildings with warning notices	3
Risk of electrocution resulting from unguarded 'live' electrical supply at Rupice and Vares	5	5	25	Isolate supply	5
Risk of drowning from public access to water tanks and unfenced water bodies at Rupice and Vares	5	3	15	Empty or fence all water containing bodies	5
Unrestricted public access to reagent and other hazardous material storage at Vares	5	5	25	Remove all reagents, demolish storage silos, remove from site	5
<b>Legal and Regulatory</b>					
Changes to regulations to cover all environmental liabilities including historic liabilities on the mine site	5	3	15	Ensure as far as possible all agreements exclude historic liabilities	5

**Table 8.1: Preliminary Risk Assessment for Mine Closure**

Risk	Consequence	Likelihood	Risk Rating	Control Measures	Residual Risk Rating
Royalty or ownership issues cause closure	3	3	9		9
<b>Environmental and Social</b>					
Topsoil degradation making it unusable for rehabilitation purposes (of TSF and Rupice surface infrastructure).	2	3	6	Ensure soil storage and handling are carried out to standards as detailed in the Soils, Contaminated Land and Erosion Management Plan.	4
TSF leakage leading to pollution at downstream receptors (Mala River)	5	3	15	TSF to be constructed and managed to international best practice standards, in line with the ICMM Global Tailings Standard, throughout all stages of Project life.	9
Dust and other emissions from closure activities, mostly at VPP, where residential receptors are in close proximity to the site.	2	5	10	Ensure air quality management measures are implemented during all closure activities, most notably dust suppression during earth works.	5
Remaining contaminated land and facilities	4	2	8	Ensure environmental management plans to international best practice standards are reviewed for closure activities and implemented across all of closure activities. Storage, handling and disposal of any contaminated or hazardous materials to be done by licensed contractors.	4
Contamination of local water courses, abstraction points and water bodies from site leakage .	3	3	9	Water and Waste Water Management Plan, as well as management plans for the other environmental disciplines, should be reviewed for closure and implemented throughout closure activities.	5
<b>Schedule</b>					
Premature end to mining -no schedule in place	5	5	25	Schedule of closure to be developed at start of development and update annually . Funding to be put in place to cover schedule	5



**Table 8.1: Preliminary Risk Assessment for Mine Closure**

Risk	Consequence	Likelihood	Risk Rating	Control Measures	Residual Risk Rating
Schedule underestimated and closure takes longer than expected	2	4	8	Costs to include a contingency to cover overruns	2
Schedule of works is not comprehensive, predicted costs insufficient to cover closure	5	2	10	Closure plan and costs to be updated annually	5
<b>Financial</b>					
No provision in place to cover closure costs	5	5	25	Funding mechanism to be set up at outset to cover initial closure cost estimate over LOM	5
Closure cost estimate is not updated during LOM, insufficient funds	5	3	15	Update MCRP annually to reflect working plans	3
<b>Reputation Risk</b>					
Premature end to mining -no schedule in place, insufficient funds	5	5	25	Fund to be set up at outset to cover initial closure cost estimate over LOM	5

## **9 CLOSURE ACTIVITIES**

### **9.1 Rupice**

#### **9.1.1 Overview**

Several assumptions have had to be made at this stage of development. Firstly, the after use of both Rupice and Vares sites have not been decided therefore it has been assumed that the Rupice site will not be required and the whole site will be remediated to forestry in keeping with its current status.

As stated, the current mining plan uses all waste rock in backfill before the end of mine life and subsequently, there no waste rock will remain at closure. All ore stockpiles will have been removed for processing by the end of mine life. It is planned that these areas will involve progressive rehabilitation and planting as material is cleared. This will follow thorough assessment of the pads for any remnant acid rock drainage or metal leaching ore material that may remain which will be removed from site or neutralising material added if necessary.

#### **9.1.2 Specific Activities**

For Rupice, the criteria and assumptions have to take into account the specific criteria associated with underground mines as follows:

1. All surface entries, declines will be identified, filled to a vertical depth 50m or 10 times the excavated height, and sealed with a 10m concrete plug. Any open cut will be filled and landscaped.
2. All land will be restored to its pre-mining capability, predominantly forestry, where possible.
3. Engineering works (re-shaping, earthworks, drainage etc.) will be undertaken and remediation and rehabilitation of all disturbed land surfaces, i.e. landscape, rip, and topsoil if sufficient topsoil is available ( or an acceptable material made up from subsoil and organic material if not) and re-vegetate, will be undertaken.
4. Any facilities or infrastructure that are designated to remain will be made safe for both humans and animals and will be made stable and sustainable.
5. Water recharge will be calculated, as part of a final hydrogeological study, and points where water may surface will be identified and quantified. Provision to be made for final containment or treatment if required.
6. Water discharges will be monitored and any provisions for the settlement or treatment of water emanating from underground will be designed and implemented.
7. All assets on site and the ground on which it sits will be assessed for contamination, the asset will be decontaminated before being removed and sold. Any contaminated ground will be removed to a depth of 1m below ground level and then disposed at a licensed facility or placed in a lined, specially constructed hazardous waste pit as may be agreed with the authorities.

8. All assets on site will be removed from site and sold at scrap value. No allowance has been made of the scrap value or the resale value of assets which may have a operational value.
9. Prefabricated buildings to be dismantled and removed from site and sold.
10. Any inert ceramics, such as bricks, concrete, gravel etc., that cannot be sold will be removed off site . Other inert waste, such as buried services which are more than 500 mm underground, will be deenergised and left in place.
11. All electricity supply lines from the main incoming substation will be dismantled and removed.
12. Air and water quality and subsidence will be monitored for at least 5 years after closure.
13. Environmental monitoring and maintenance including reseeding and planting where necessary will be continued for at least 5 years after closure.

### **9.1.3 Water Management**

The closure plan for the Rupice mine will allow the underground development to recharge to prevent oxidation of sulphidic material below the water line. During operations, there will be on-going monitoring of mine water and modelling for prediction of final mine water quality. Geochemical impacts, if any, from the backfilled stopes should be well understood prior to closure. This will allow progressive refining of water quality and quantity predictions as part of the hydrogeological studies carried out. The study will also investigate water inflow sources/pathways to determine the likely post-closure hydraulic connectivity with groundwater.

## **9.2 Vares Processing Plant**

The Vares site may be used for light engineering and some buildings may be reused. However, WAI have assumed that any buildings or plant associated with the processing, or stockpiling will be removed leaving only those buildings which may be suitable for future use. Foundations, unless contaminated will be left as a platform for future development.

For the Vares Processing Site:

1. All land, not identified for redevelopment as a light industrial site will be restored to its pre-mining state, forestry, where possible. WAI have assumed that the area will be mostly planted with native species but 25% of all areas will be left to self seed/plant.
2. Engineering works (re-shaping, earthworks, drainage etc.) will be undertaken and remediation and rehabilitation of all disturbed land surfaces, i.e. rip, topsoil if sufficient topsoil is available and re-vegetate, will be undertaken.
3. Facilities or infrastructure that are designated to remain will be made safe for both humans and animals and will be made stable and sustainable.
4. All structures above their concrete plinths and infrastructure other than the tailings facilities will be removed.

5. The Tailings facility will be developed during the mine operations, and progressive rehabilitation started during its operation. There will be a final area remaining to be completed on closure.
6. All assets on site will be removed or demolished, including any remaining infrastructure. All rubble and waste will be placed in a designated waste site or removed off site
7. Any contaminated material will be removed from site to an authorized dump.
8. All vehicles, plant and workshop equipment will be removed for salvage or resale. Any fixed assets that can be profitably removed, will be removed for salvage or resale, and the remaining treated as waste and dumped in a specially constructed dump in the open pit. Cost are included for the removal of the asset but no allowance has been made for the resale or scrap value.
9. Any inert ceramics, such as bricks, concrete, gravel etc., that cannot be sold will sold or removed off site . Other inert waste, such as buried services which is more than 500 mm underground, will be left in place.
10. All electricity supply lines to the main substation on site will be left in place.
11. Air and water quality will be monitored for at least 5 years after closure.
12. Environmental monitoring and maintenance including any replanting will be continued for at least 5 years after closure.

### 9.3 Removal of Infrastructure

At both Rupice and VPP, the removal of infrastructure or parts will be required to some extent, resulting in waste. Whilst some material may be resold, at present the worst case scenario has been assumed, meaning all aspects are treated as waste.

The closure plan adheres to the following which will be contained in a Waste Management Plan developed and agreed at the time of closure:

- Inert crushed construction waste only will be retained at either site and be levelled into the final profiles or road repairs (including local roads);
- Hazardous or contaminated waste will be stored at a specially prepared temporary locations, then moved to a licensed facility off site;
- Waste oils, car batteries and tyres to be disposed of off-site at a licensed facility off site;
- Waste types to be sorted during demolition and crushed to suitable sizes for transport;
- All suitable non-contaminated waste can be used for filling, levelling and road repairs (including local roads); and
- Any reinforcing and metal to be isolated, collected and disposed of by a licenced contractor.

If unidentified and potentially hazardous material is discovered, it must be placed into watertight containers and kept securely under cover and catalogued. Containers should be able to be handled safely; an emergency procedure developed and displayed in accordance with fire, OHS and environmental laws. Materials must be tested and disposed of according to its constituents using a licenced contractor.

## 9.4 Revegetation

The rehabilitation of Rupice will require planting and management of biodiversity aspects to ensure the existing habitat is restored, or preferably improved. As this restoration will take many decades to achieve the desired effect, the Biodiversity Action Plan lays out additional methods of offsetting the biodiversity impact from the Project.

Restoration will utilise a mixture of natural regeneration and replanting which will permit a more dynamic emerging forest than planting alone would achieve. Natural regeneration allows areas of dense and open forest to establish with a prior period of grassland and scrub development which are also of value as 'intermediate' habitats and as migratory corridors for species of more open habitats.

In terms of species targeted for planting, the reforestation scheme should aim to diversify the species mix towards the local Dinaric Mixed Mountain Forests ecotype for that elevation, and also include understorey shrub species. For example, prior to exploitation the forest is likely to have been a more open mixture of beech, Norway spruce, silver fir, sycamore, Bosnian maple *Acer opalus subsp. obtusatum*, hop-hornbeam *Ostrya carpinifolia* with some native birch *Betula spp* and alder *Alnus spp*. Trees should not be planted at high density to allow a forest ground flora to develop.

The planting scheme, as defined above aims to improve the locale of the regions biodiversity. This has limited cost implications to the overall mine closure cost estimate.

## 9.5 Social Transition

### 9.5.1 Overview

During the life of mine, Vareš is expected to undergo significant social changes brought on by the mining activities in the region. In-migration is expected with people looking for both direct and indirect employment and opportunities. Adriatic Metals are committed to enhancing these socioeconomic benefits in the local area as far as possible. A local procurement strategy has been developed to not only prioritise local supply chain providers but also to assist suppliers in start up ventures and operations. It is anticipated that locally there will be high dependency on the mine in the region.

There will be several social impacts associated with mine closure, that will require management and monitoring, long before the closure period begins. To understand and manage these impacts stakeholder engagement and consultation is critical throughout the life of the mine. As discussed in Section 7, engagement activities with a distinct focus on mine closure should be undertaken regularly throughout the mine life. This will ensure an iterative approach, where stakeholders are a part of mine closure planning.

Since 2019, Adriatic Metals/Eastern Mining have worked to establish a programme of social initiatives and community development in the Vareš Municipality. The Adriatic Foundation has been established

to support and promote local sustainable socio-economic development, with a particular focus on the communities associated with Adriatic's operations. The Foundation is a consultation body that channels social investment in an effective and responsible manner in order to leave lasting positive legacies. It supports programmes and projects that have long-term development impact, particularly in the areas of education, environmental protection, and healthcare. The Adriatic Foundation will be critical in ensuring an effective social transition, post-mining.

### **9.5.2 Redundancy**

The mine plans to employ some 187 persons (including 24 G&A personnel) at Rupice and 134 persons (including 24 G&A personnel) at VPP, a total of 321 for both sites. It should be noted that it is likely that the closures will be undertaken by contractors who may employ some of the permanent workforce, estimated at 54 persons. This closure plan assumes that provision for payment of redundancy should be taken into account within the closure provision.

The Labour law of Bosnia and Herzegovina regulates the issue of workers being made redundant. The compensation or severance pay depends on several factors, primarily of how many workers the company employs and for how long the individual workers has been working with the Company. If the company employs more than 30 workers, and more than 5 are to be made redundant within a three-month period there is a specific provision that consultation is required with the employee council and their union.

The compensation or severance pay, the Law stipulates that severance pay should not be less than one third average monthly salary paid to an employee in the last three months before the termination of the contract, and for each completed year of work of that employer, a maximum of six average salaries shall be paid. For the purpose of calculation 50% salary has been used to calculate the average redundancy and the maximum 6 average salaries will be paid to each employee.

### **9.5.3 Training**

Adriatic Metals are committed to providing capacity building and training to all employees. A Talent and Learning Strategy has been developed as part of the strategic blueprint for the Project ensuring that all Eastern Mining employees have access to learning and development opportunities. Several training programmes are currently in development including vocational courses focused on the mining industry.

Where members of the workforce do not have an obvious transferrable skill, the Company will allow \$2,500 per person to undergo specific training for an alternative occupation. The training programme has not yet been developed.

## 10 AFTER CARE

Following the completion of the Closure Activities the site will need to be monitored at the Mine Operators cost for a period of time to demonstrate that the site is not having any impact on the environment. Some authorities require the monitoring to be provided 'in perpetuity' which WAI consider both unworkable and not required. WAI have therefore allowed for a lump sum amount of \$500,000 to cover annual monitoring for 5 years of monitoring. The monitoring plan is likely to change as the mine is operated and therefore the allowance can only be considered at a low measure of accuracy.

It is anticipated that the monitoring on an annual basis will include:

- Monitoring of any water wells in the vicinity;
- Groundwater compliance well monitoring;
- TSF Boreholes and piezometers;
- TSF embankment settlement surveys;
- TMY audit and run off;
- Plant Chemistry;
- Soil Chemistry;
- Tree growth assessment and replacement where required;
- Upstream and downstream monitoring of local river courses;
- Site water discharges and leakage surveys; and
- Surface settlement surveys.

## 11 COSTS OF CLOSURE

A Spreadsheet itemising the closure items required at the Vares site has been developed and is shown in the appendices. The costs used are local quotes for closure activities and used for the demolition and other activities of the original Veovaca processing plant and are therefore considered appropriate.

WAI consider that the Physical Cost of closing the Vares site amounts to some \$5.5M. However, there is a social cost of some \$10M which will be dependent on the legal requirements at the time. A further \$0.5M has been allocated for Aftercare costs.

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