ADRIATIC METALS PLC – EASTERN MINING

VARES PROJECT

OCTOBER 2021

ENVIRONMENTAL AND SOCIAL MANAGEMENT SYSTEM

This document has been developed/revised as indicated below and described in the revision record on the following page. Please destroy all previous revisions.

Version	Date	Authors	Reviewed	Pages
1.0	10/08/21	Aida Ahmedović	Vildana Mahmutović	79
2.0	21/10/21	Aida Ahmedović	Vildana Mahmutović	81

List of Acronyms

EBRD European Bank for Reconstruction and Development

ESIA Environment and Social Impact Assessment

EM Eastern Mining

E&S Environment and Social

ESF Environment and Social Function

ESMP Environment and Social Management Plan

ESMS Environment and Social Management System

FBiH Federation of Bosnia and Herzegovina

H&S Health and Safety

IFC International Finance Cooperation

SEP Stakeholder Engagement Plan

WHO World Health Organization

Adriatic Metals
Eastern Mining

Contents

1 INTRODUCTION

1.1 Introduction

Adriatic Metals is committed to the responsible stewardship of natural resources and aims to operate in a sustainable manner that eliminates, minimises, mitigates or compensates for adverse impacts and maximises positive environmental and socio-economic impacts. Also, Adriatic Metals is committed to active and inclusive consultation and engagement with the communities associated with our operations, and to supporting sustainable local socioeconomic development. We conduct our business responsibly, value strong relationships with local authorities and communities and strive for our activities to respect the dignity and uplift the life chances of local people and to create a positive legacy.

This document provides a framework of an Environmental and Social Management System (ESMS) for the Vares Project (the "Project") for Eastern Mining ("the Company"). It also provides an outline of the various environmental and social management plans, policies and procedures comprising the ESMS and describes their implementation schedule and responsibilities.

The four steps in the cycle are as follows:

Plan: Establish the objective and processes needed to achieve the organization's policies and strategies.

Do: Implement the procedures and processes which are defined by the ESMS system.

Check: Monitor and measure the implemented process.

Act: Act on the reported results to ensure that the implemented process has met the E&S requirements, which maintains and continually improves the ESMS.

The implementation of the ESMS means to manage and minimise risks, comply with local law legislation and legislation toward EBRD (Europe Bank for Reconstruction and Development) and International Finance Corporations (IFC) Performance Standards and, provides the framework for continuous improvement and performance.

1.2 Project description

Eastern Mining d.o.o. is owned and operated by Adriatic Metals PLC and located in Bosnia and Herzegovina (BiH). Eastern Mining d.o.o. is the holder of a concession for exploration and exploitation in Vareš (BiH). Since 2017, ADT has been conducting research at several sites in the municipality of Vareš, for the first time since the 1980s. The company's focus is on exploring minerals that have the potential to grow the company. The ultimate goal is to revive the mining industry in the municipality of Vareš, by exploiting new and existing ore deposits. New

potentials have been identified in Rupice, where research and exploitation of lead, zinc and barite have been carried out before. The deposits were further expanded and subjected to extensive research and contained significant amounts of lead, zinc, silver, gold, copper and barite. The project, named Vares Project is polymetallic mine, and has attracted reputable foreign investors in BiH. In many ways, this research project is unique in post-war BiH, both in terms of investment size and development potential.

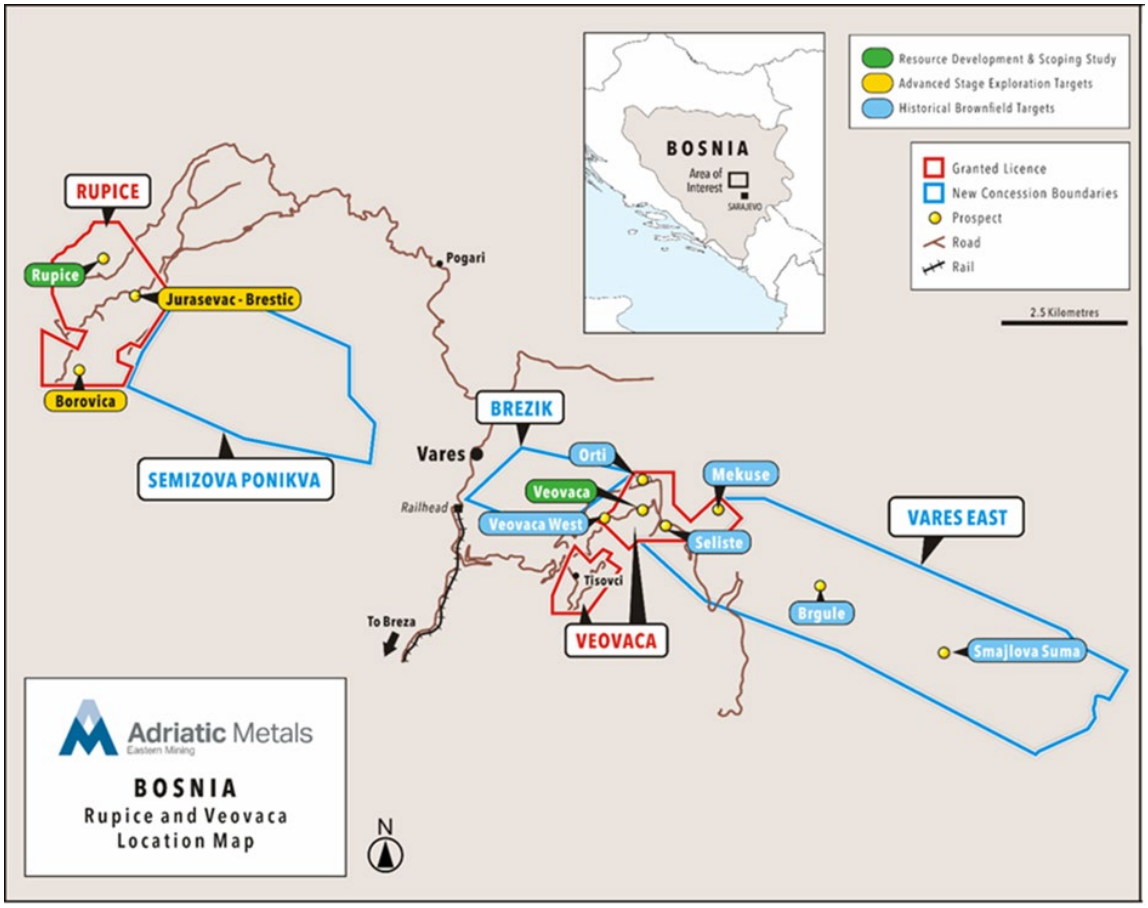

Figure 1.1. Map showing the location of the Vares Project

1.3 Project overview

Implementation of the commitments and mitigation strategies identified in the Environmental and Social Impact Assessment (ESIA) report are described in this document, including system and associated plans that Eastern Mining put in place for the life of the Project.

ESMS focuses on the processes and plans necessary to ensure social and environmental commitments and mitigation measures identified in the Environmental and Social Impact Assessment (ESIA) report are implemented and re-evaluated throughout the life of the Project, from Construction through to Closure and Post-Closure.

The following key environmental management plans have been developed:

- Air Quality and GHG Management Plan;

- Biodiversity Action Plan;
- Emergency Preparedness and Response Plan;
- Hazardous Materials Management Plan;
- Health and Safety Management Plan;
- Human Resources Policy and Eastern Mining Strategic Blueprint
- Land Acquisition, Compensation and Livelihood Restoration Plan;
- Mine Closure and Rehabilitation Plan;
- Noise and Vibration Management Plan;
- Soils, contaminated land and erosion control Management Plan;
- Surface Mineral Waste Disposal Plan;
- Waste and Hazardous Waste Management Plan and
- Water and Wastewater Management Plan.

During the life cycle of the project there are likely to be a range of social impacts that can affect the community order. To manage these impacts Eastern Mining developed a number of social management plans, frameworks and/or procedures to avoid these social impacts where possible and mitigate them through open and transparent community engagement; supporting the local economy; through generating employment, supporting local businesses and fair compensation of economic losses.

The following management plans have been developed:

- Stakeholder Engagement Plan
- Community Health, Safety and Security Management Plan
- Cultural Heritage Management Plan
- Traffic Management Plan

2 ENVIRONMENT POLICY

INTRODUCTION

Adriatic Metals is committed to the responsible stewardship of natural resources and aims to operate in a sustainable manner that eliminates, minimises, mitigates or compensates for adverse impacts and maximises positive environmental and socio-economic impacts. We recognise that mining is often associated with significant environmental impacts and intensive resource use and that these factors create a significant responsibility that exists from exploration through to closure.

PRINCIPLES

Adriatic Metals is committed to:

- complying with all applicable environmental laws and regulations, and with those obligations that arise from industry rules, codes and standards to which we subscribe;
- establishing and implementing, within three years of the commencement of commercial production, and subsequently maintaining, best-practice, externally certified environmental management systems;
- understanding the nature of our environmental and social impacts through high-quality baseline studies, impact assessments and ongoing monitoring, including how these compare to predicted impacts, and having regard to cumulative impacts where relevant, and putting in place appropriate management plans and systems to address these impacts;
- seeking to work with governments, communities, expert institutions and civil society groups in securing co-operative environmental and related socio-economic outcomes;
- establishing an appropriate level of awareness among our employees around environmental responsibility; and
- engaging with external stakeholders on our environmental performance commitments, and publicly reporting our material environmental performance indicators.

We will:

- manage water efficiently, applying strong water governance measures so as to achieve sustainable water use including through a collaborative approach with other water users;
- address potential adverse impacts on biodiversity by applying the mitigation hierarchy, aiming to achieve 'no net loss' of priority biodiversity features or critical habitat and, where possible, to contribute to a 'net gain' of biodiversity as a result of our activities;
- use energy and resources efficiently and sustainably and manage tailings and waste responsibly in conformance with national legislation and international good practice codes;

- minimise the noise, dust, emissions and vibration impacts of blasting and other operational activities;
- use an integrated approach to land-use planning, including seeking to minimise adverse impacts on the livelihoods of other land users;
- plan for the social and environmental aspects of mine closure in consultation with authorities and other relevant stakeholders and make appropriate financial provision for closure;
- ensure that we have access to appropriate environmental expertise in the management of our operations; and
- require contractors and suppliers to abide by this Policy and associated relevant plans and procedures.

APPLICATION

Responsibility for the application of this Policy rests with, but is not limited to, all Company employees and contractors engaged in relevant activities under the Company's operational control.

The Company's managers are responsible for promoting and ensuring compliance with this Policy and any related business unit or departmental policies.

MONITORING AND REVIEW

The Board will monitor the content, effectiveness and implementation of this Policy on a regular basis. Additional independent reviews may be commissioned from time to time. Any findings, updates or improvements identified will be addressed as soon as possible.

Material breaches of this Environment Policy will be reported to the Company's Board of Directors (Board) and the ESG Committee of the Board.

Stakeholders are invited to comment on this Environment Policy and suggest ways in which it may be improved. Comments, suggestions and queries should be addressed to the Board.

Approved by the Company's Board of Directors on 6th November 2020.

Adopted by the Company on 9th November 2020

3 SOCIAL PERFORMANCE AND COMMUNITY POLICY

INTRODUCTION

Adriatic Metals is committed to active and inclusive consultation and engagement with the communities associated with our operations, and to supporting sustainable local socioeconomic development. We conduct our business responsibly, value strong relationships with local authorities and communities and strive for our activities to respect the dignity and uplift the life chances of local people and to create a positive legacy.

PRINCIPLES

Adriatic Metals is committed to:

- complying with all applicable legal requirements and other rules, codes and standards to which we subscribe (such adherence will be published on our website);
- engaging openly, honestly, regularly and in a timely manner with the communities impacted by our operations as a platform for dialogue and for understanding stakeholder views;
- respecting and protecting the human rights of community members, and seeking honest and open relationships built on mutual trust;
- establishing and maintaining an accessible and transparent process for community associations and residents to raise concerns and grievances and resolving these in a timely manner;
- respecting the cultural heritage, customs and traditions of the communities impacted by our activities and, where impacts cannot be avoided, working with competent professionals and in consultation with affected communities to assist in the identification and protection of cultural heritage;
- identifying and minimising, mitigating or compensating adverse social and environmental impacts from our operations;
- seeking to minimise economic and physical displacement through our land acquisition as well as conducting thorough engagement with affected landowners, offering adequate compensation and restoring the livelihoods of any displaced persons;
- contributing towards creating shared and sustained value and leaving a positive legacy beyond mine closure;
- building a workforce that is inclusive and representative of the diverse communities that host our activities;
- supporting capacity building and local economic development by training and hiring community members and by purchasing local goods and services, including promoting local business development and supplier opportunities;
- pursuing partnerships with governments, civil society organisations and other stakeholders to leverage synergies in facilitating community development.

APPLICATION

Responsibility for the application of this Policy rests with, but is not limited to, all Company employees and contractors engaged in these activities under the Company's operational control.

Every employee shares a responsibility for compliance with this policy and for dealing respectfully with stakeholders. The Company's managers are responsible for promoting and ensuring compliance with the Policy and any relevant business unit or departmental policies.

MONITORING AND REVIEW

The Board will periodically monitor the content, effectiveness and implementation of this Policy.

Material breaches of this Policy will be reported to the Company's Board of Directors (Board) and the ESG Committee of the Board.

Stakeholders are invited to comment on this Policy and suggest ways in which it may be improved. Comments, suggestions and queries should be addressed to the Board.

Approved by the Company's Board of Directors on 6th November 2020.

Adopted by the Company on 9th November 2020

4 ENVIRONMENTAL SOCIAL & GOVERNANCE COMMITTEE CHARTER

ROLE

The role of the Environmental, Social and Governance ("ESG") Committee is to assist the Board in fulfilling its oversight responsibilities by reviewing and monitoring any matters relating to the management of workplace, community or environmental impacts (in accordance with the policy set out in Annexure A), the management of stakeholder relationships (including relevant aspects of human resources), and permitting and relevant regulatory risks. The Committee will also seek to identify opportunities to strengthen the Company's license to operate and the sustainability and resilience of the communities and regions where Adriatic companies operate. It will provide scrutiny of and guidance to executive management on these issues.

COMPOSITION

The Board will strive to adhere to the following composition requirements for the Committee. However, the Board acknowledges that circumstances may not always allow adherence to the following requirements:

- the Committee must comprise at least three members;
- a majority of the members of the Committee must be independent non-executive Directors in accordance with the criteria set out in Annexure A. A senior member of the executive management team should also be a member of the Committee;
- the Board will appoint and remove and replace members of the Committee by resolution; and
- the Chair of the Committee must not be the Chair of the Board of Directors and must be independent.

PURPOSE

The primary purpose of the Committee is to support and advise the Board in fulfilling its ESG responsibilities by:

- recognising its legal and other obligations relating to environmental, social and external governance issues;
- evaluating and, where necessary, seeking to enhance relationships with stakeholders as a means of strengthening the Company's license to operate; and
- managing its activities in a sustainable manner including with respect to the Company's workforce, its communities and the environment.

DUTIES AND RESPONSIBILITIES

General Responsibilities

The Committee will use all reasonable endeavors to understand the Company's business and operations so as to assess whether the operating risks and sustainability issues, including any consequential financial risks faced by the Company, have been identified, eliminated or

minimized and/or that appropriate mitigation plans have been implemented which reduce risks to an acceptable level in line with the risk appetite identified by the Board.
The Committee will ensure appropriate management practices and assurance methodologies are adopted to inform the Board of the adequacies and effectiveness of the specific requirements outlined in this Charter.
The Committee will review, in a timely manner, serious ESG-related incidents or nonconformances, including monitoring investigations and corrective actions for quality and investigative veracity, and ensure that, as a result of such investigations, lessons have been learned and steps taken to avoid repeats.
The Committee will review disclosure of the Company's Environmental, Social and Governance policies and practices, including those contained in the Company's Management Information Circular and Annual Report before disclosure is made.

Environmental, Social, and Governance Responsibility
In assisting the Board, the Committee will use all reasonable endeavors to:

- review and monitor, and where relevant provide strategic guidance on, the processes in place which are designed to ensure compliance with all Company ESG policy commitments and the implementation of necessary management measures identified through environmental and social impact assessments;
- monitor, and where relevant provide strategic guidance on, management's setting, measuring and review of objectives and targets that aim to drive continuous improvement in ESG performance;
- monitor, and where relevant provide strategic guidance on, the adequacy of ESG reporting systems for actual or potential incidents, breaches and trends;
- review and monitor, and where relevant provide strategic guidance on, the environmental related contingency planning within the Company which is designed to ensure that all material environmental risks have appropriate contingency plans in place;
- review and monitor, and where relevant provide strategic guidance on, the plans, activities and corrective actions in place which are designed to ensure that there is appropriate engagement with communities impacted by the Company's operations, and review the handling of grievances raised by stakeholders;
- participate in reviewing due diligence relating to ESG aspects of potential acquisitions;
- review and monitor programmes designed to ensure employee alignment with the Company's desired standards, values and behaviours;
- periodically review the Company's ESG strategy and advise on ESG KPIs/targets to be included in corporate reporting;
- review and monitor, and where relevant provide strategic guidance on management's implementation of labour laws, relations with employee councils/unions, and the implementation, training and dissemination of personnel-related aspects of the Company's ESG policies (such as grievance, whistleblowing and anti-bribery and corruption policies);
- monitor relevant stakeholder perceptions of the Company; and

- support management to have a positive impact in its ESG activities.

Risk Management

The Committee (reporting its findings to the Audit and Risk Committee) will ensure management has established and operates a risk management system which is designed to:

- identify, assess, monitor and manage ESG operational risks to acceptable levels, including but not limited to environmental, safety, social, financial (i), legal, personnel and anti-corruption and bribery matters;
- establish an overall rating of the Company's ESG risks and related mitigation strategies;
- escalate risks to the appropriate level of the organisation dependent on materiality;
- oversee the production of a register of permits;
- regularly review the adequacy and effectiveness of mitigation measures in reducing such risks to acceptable levels; and
- help to identify opportunities for strengthening the Company's position on ESG issues.

In assisting the Board, the Committee will:

- liaise with the Audit Committee on risk management processes for the identification and management of material financial risks, which are the accountability of the Audit Committee;
- review any periodic risk management reports prepared by the executive management and present to the Board the overall results of this assessment and updates, as required;
- review and monitor the operational contingency planning and assurance processes within the Company to ensure all material risks and critical systems and processes are identified and that appropriate contingency plans are in place and are effective; and
- periodically review the effectiveness and suitability of the risk management system.

The Chairs of the ESG and Audit Committees will be informed of instances of concern relating to their areas of focus and which have been highlighted through the Company's whistleblowing facility.

Legal, Regulatory and Ethical Compliance

The Committee will:

review and monitor, and where relevant provide strategic guidance on, the Company's policies, procedures and systems for detecting, reporting and preventing breaches of conduct, data breaches and breaches of anti-bribery and corruption policy commitments; and

in conjunction with the Board and Audit Committee, use all reasonable endeavours to monitor the Company's compliance with:

(i) all relevant statutory and regulatory obligations, including those to the Shareholders of the Company;

(ii) all environmental licenses and permits;

in so doing, ensure that the Company keeps abreast of any changes or developments in environmental, social and governance legislation or substantive developments in international good practice standards, and inform the Board of any which are material to the operations of the Company; and

review and monitor, and where relevant provide strategic guidance, on the Company's whistleblowing and grievance-handling policies.

MEETINGS

The Committee will meet at least twice yearly in each financial year and additionally as circumstances may require for it to undertake its role effectively.

Meetings are called by the Secretary as directed by the Board or at the request of the Chair of the Committee.

Where deemed appropriate by the Chair of the Committee, meetings and subsequent approvals and recommendations can be implemented by a circular written resolution or conference call.

A quorum shall consist of two members of the Committee. In the absence of the Chair of the Committee or their nominees, the members shall elect one of their members to act as Chair of that meeting.

Executive management, technical personnel and external professional or expert advisors are to attend Committee meetings, or part thereof, as requested by the Chair of the Committee, to provide required reports and presentations to the Committee.

Decisions will be based on a majority of votes with the Chair having a casting vote.

The Chair of the Committee, through the Secretary, will prepare a report of the actions of the Committee to be included in the Board papers for the next Board meeting.

Minutes of each meeting will be included in the papers for the next full Board meeting after each Committee meeting.

SECRETARY

The Company Secretary or their nominee shall be the Secretary of the Committee and shall attend meetings of the Committee as required.

The Secretary will be responsible for keeping the minutes of meeting of the Committee and circulating them to Committee members and to the other members of the Board.

The Secretary shall commission and distribute supporting papers for each meeting of the Committee as far in advance as possible.

RELIANCE ON INFORMATION OR PROFESSIONAL OR EXPERT ADVICE

Each member of the Committee is entitled to rely on information, or professional or expert advice, to the extent permitted by law, given or prepared by:

an employee of the Company whom the member believes on reasonable grounds to be reliable and competent in relation to the matters concerned;

a professional adviser, whose appointment and fees are approved by the Chief Executive Officer, or expert in relation to matters that the member believes on reasonable grounds to be within the person's professional or expert competence; or
another Director or officer of the Company in relation to matters within the Director's or officer's authority.

REVIEW OF CHARTER

The Board will conduct an annual review of the membership to ensure that the Committee has carried out its functions in an effective manner and will update the Charter as required or as a result of new laws or regulations.
The Charter shall be made available to members, to senior management, to the external auditor and to other parties as deemed appropriate and will be posted to the Company's website.

REPORTING

The Chairman of the Committee (or their nominee) shall report the findings and recommendations of the Committee to the Board after each Committee meeting. The minutes of all Committee meetings shall be circulated to members of the Board.

All recommendations of the Committee are to be referred to the Board for approval.

The Committee is to review all major health, safety, environment or community issues as notified or otherwise advised by Executive Management at its next meeting and report on its findings and recommendations, if applicable, to the Board in accordance with standard reporting protocol of the Committee. The Committee shall also regularly review the operation of the Company's grievance mechanism, and how grievances are handled and resolved.

Adoption:

This Charter was amended, restated and approved by the Board on 6th November 2020

4.1 ENVIRONMENTAL, SOCIAL &GOVERNANCE POLICY

INTRODUCTION

This environmental, social and governance (ESG) policy (ESG Policy) regulates and provides guidance for Adriatic Metals Plc's (the "Company"), and its subsidiaries', management of activities to minimise adverse workforce, community or environmental impacts and to realise opportunities in these areas. The Company recognises that its principal concern must be the wellbeing of its people, whether employees, contractors, consultants, affected near-mine persons and communities, or other stakeholders. The health and safety of those persons, and the sustainability of the environment in which they work or live, is a critical factor in measuring the long-term success of the Company's business and, therefore, also for its investors. The Company is committed to implementing and maintaining the best practical standards of governance and transparency.

PURPOSE

Strong ESG performance is essential for the success and growth of the Company's business and its license to operate. The Company recognises its legal and other obligations to all legitimate stakeholders. With the recognised obligations in mind, the Company will manage its activities in a sustainable manner with respect to its workforce, the communities affected by its activities and the environment.

The Company is committed to managing its activities so as to minimise adverse workforce, community or environmental impacts. In so doing the Company will aim to comply with both the standards set out in the Equator Principles and the European Bank for Reconstruction and Development's Performance Requirements; including addressing ESG matters in its supply chain, the sustainable use of natural resources, responsible waste management, labour standards and the health and safety both of its employees and the communities in which it operates. The supply chain includes contractors, sub-contractors and suppliers of goods and services.

The Company also recognises the importance of the impact of its operations on climate change, use of land, water quality and availability and biodiversity. Our overall objective is to ensure that the communities where we work are ultimately enhanced by our presence.

PRINCIPLES

The Company will achieve this by:

- implementing a systematic approach to ESG risk management;
- as a minimum, complying with, and where possible exceeding, all applicable home and host country and international laws and regulations and applying internationally accepted industry standards where laws or standards do not exist. We oppose bribery and corruption and ensure that we have in place robust internal controls to prevent the paying or receipt of bribes;

- giving priority to the safety and health of our workforce and local communities;
- setting, measuring and reviewing objectives and targets that will drive continuous improvement in ESG performance;
- ensuring that our activities are underpinned by the principles of good governance, transparency and ethical conduct;
- seeking to work respectfully and in harmony with our host communities and with a commitment pro-actively to maximise the benefits which we share with local stakeholders through employment, training and procurement opportunities and our contribution to infrastructure and social investment;
- embedding ESG considerations in the Company's business planning and decision making processes;
- integrating ESG requirements when designing, purchasing, constructing and modifying equipment and facilities;
- reviewing the ESG contingency and emergency planning process to ensure high risk activities identified in the ESG risk management have appropriate contingency plans in place;
- being responsible and efficient in our use of resources such as water and avoiding, minimising or mitigating adverse impacts on water, air or soil;
- maintaining a culture in which employees and contractors are aware of our desired standards and their ESG obligations and are empowered to intervene or raise concerns on ESG issues;
- ensuring a fair and sustainable working environment for our workforce, free from bullying, discrimination and harassment;
- ensuring that the Company undertakes substantive assessment of our social and environmental impacts and agreed mitigation measures;
- undertaking and supporting research to gain a better understanding of ESG and using a scientific approach to support impact assessments and evidence based decision making;
- taking a collaborative and pro-active approach to engaging with our stakeholders;
- requiring Directors, contractors and employees to comply with our ESG expectations in a mutually beneficial manner; and
- supporting international good practice initiatives such as the Voluntary Principles on Security and Human Rights and the Extractive Industries Transparency Initiative.

APPLICATION

Responsibility for the application of this Policy rests with, but is not limited to, all Company employees and contractors engaged in these activities under the Company's operational control.

Each department of the Company is responsible for the development of its own internal policies to implement the principles set out in this Policy.

The Company's managers are also responsible for promoting and ensuring compliance with this Policy and their individual department's policies.

MONITORING AND REVIEW

Material breaches of this ESG Policy will be reported to the Company's Board of Directors (Board) and the ESG Committee of the Board.

The Board will monitor the content, effectiveness and implementation of this ESG Policy on a regular basis. There may also be independent reviews taken from time to time. Any findings, updates or improvements identified will be addressed as soon as possible.

Personnel are invited to comment on this ESG Policy and suggest ways in which it may be improved. Comments, suggestions and queries should be addressed to the Board.

Approved by the Company's Board of Directors on 6th November 2020.

Adopted by the Company on 9th November 2020

5 OTHER RELATED POLICIES

- Climate Change Policy available at https://www.adriaticmetals.com/downloads/corp-governance-files-/climate-change-policy_final.pdf
- Human Rights Policy available at https://www.adriaticmetals.com/downloads/corp-governance-files-/human-rights-policy_final.pdf
- Health and Safety Policy available at https://www.adriaticmetals.com/downloads/corp-governance-files-/health-safety-policy_final.pdf
- Human Resource Policy available at https://www.adriaticmetals.com/downloads/corp-governance-files-/human-resources-policy_final.pdf
- Procurement Policy available at https://www.adriaticmetals.com/downloads/corp-governance-files-/procurement-policy_final.pdf

6 MANAGEMENT PLANS

All Management Plans are in compliance with national legislation, requirements of international financing institutions (e.g. IFC Performance Standards, EBRD Performance Requirements) and other applicable good practices.

6.1 National Legislative Requirements and local permits

- Environmental Protection Law ("Official Gazette of the Federation of BiH", No. 15/21)
- Law on Environmental Protection of Zenica - Doboj Canton ("Official Gazette of the FBiH",no. 1/00)
- Law on protection against noise ("Official Gazette of Federation BiH" No. 110/12)
- Law on protection against noise ("Official Gazette of Zenica-Doboj Canton" No. 01/14)
- Law on Waste Management ("Official Gazette of the Federation of BiH", No. 33/03, 72/09 and 92/17)
- Law on Chemicals ("Official Gazette of the Federation of BiH", No. 77/20)
- Law on roads of the FBiH ("Official Gazette of FBiH", No. 12/2010, 16/2010 - corrigendum and 66/2013")
- Rules on special conditions for transported motor vehicles ("Official Gazette of the Federation of BiH", no. 07/07")
- Law on road transport of the Federation of Bosnia and Herzegovina ("Official Gazette of FBiH, No. 28/06)
- Rules on traffic signs and signalling on roads, manner marking of works and obstacles on the road and signs that participants in traffic is given by an authorized person ("Official Gazette of FBiH", No. 12/2010, 16/2010 - corrigendum and 66/2013")
- Law on occupational safety ("Official Gazette of FBiH", No. 79/2020")
- Law on the transport of dangerous goods ("Official Gazette of SFRY", No. 27/90 and 45/90")
- Mining law ("Official Gazette of the Federation of BiH", No. 26/10)
- Fire protection and firefighting law ("Official Gazette of the Federation of BiH", No. 64/09)
- Law on Healthcare ("Official Gazette of the FBiH", no. 46/10 and 75/13)
- Law on Protection of the Population from Infectious Diseases ("Official Gazette of the FBiH", no. 29/05)
- Law on Radiation and Nuclear Safety in Bosnia and Herzegovina ("Official Gazette of BiH", no. 88/07)
- Law on the Environmental Protection Fund of the Federation of BiH ("Official Gazette of the FBiH", no. 33/03)
- Law on Air Protection ("Official Gazette of the Federation of BiH", No. 33/03 and 4/10)
- Law on Nature Protection ("Official Gazette of the Federation of BiH", No. 66/13)
- Law on water ("Official Gazette of the Federation of BiH", No. 70/06)

- Law on water ("Official Gazette of the ZDK", No. 17/07)
- Law on geological exploration ("Official Gazette of the Federation of BiH", No. 09/10 and 14/10)
- Other related sub laws, rulebooks and procedures.

Two Environmental permits are obtained for Vares Project:

- Environmental Permit to the operator „Eastern Mining" d.o.o., Tisovci, Vareš, for underground exploitation and obtaining complex lead, zinc and barite ore with accompanying mineral components in the „Rupice" deposit, municipality of Vareš, permit number: UPI 05/2-02-19-5-60/20 SC from 5th February 2021. from Federal Ministry of Environment and Tourism
- Environmental Permit to the operator „Eastern Mining" d.o.o., Tisovci, Vareš, for the project of renewal of lead, zinc and barite ore exploitation and processing facility at the location of Veovača I - Tisovci I - Veovača II, permit number: UPI 05/2-23-11-195/19 from 20th May 2021. from Federal Ministry of Environment and Tourism

6.2 Air Quality and GHG Management Plan

The purpose of the Air Quality and GHG Management Plan (AQGHGMP) is to describe the potential risks to air quality, which are related to project activities, and to consider and determine protection measures that would prevent or mitigate negative impacts. The plan contains information on how the procedures, their effectiveness and measures will be monitored in case of exceeding the limit values. The aim of this plan is to achieve compliance with the standards related to air emissions and ambient air quality and to mitigate long-term effects on sensitive receptors (human and ecological) through several exposure routes.
The scope of the plan will apply to all works and activities related to the Eastern Mining project, that is to the concession area of the project, including employees, contractors, and subcontractors working for Eastern Mining.

Potential air quality emissions considered within this air quality management plan are categorised as:

• Fugitive dust:
  - Particulate matter generated from mining operations, earthmoving, material transport and handling, and unpaved road traffic, crushing and screening of ore ;
• Combustion emissions:
  - Internal combustion engines (heavy and light vehicles, equipment motors, back-up generators); and
• Nuisance odours:
  - Non-health-related gaseous emissions affecting employees or nearby residents.

Measures to mitigate the impact on air quality are:

- Fugitive Dust Mitigation Measures

To decrease potential impacts to air quality to the extent practical, substantial fugitive dust controls have been incorporated into the engineering design, which include:

- Enclosure of primary and secondary crusher with dust extraction and filtration devices;
- Use of water sprays at material stockpile/hopper loading points and other identified dust emission points, updated as required by the AQMP
- Dust raised from unpaved road surfaces during haulage has been identified as the most significant emission source. In order to remove the risk of unacceptable impact, it will be necessary to provide and maintain sections of hard surfaced road near residential locations and near to particularly sensitive habitats. These will be identified in the detailed design of the haul road.

Additional dust control measures will be systematically utilised by the Project during construction and operations, as set out in the AQMP; and include:

- Road control programmes – Appropriate dust suppression techniques will be undertaken, including spraying roads/vegetation with water and/or application of stabilising agents such as salt (winter), gravel, or environmentally inert chemicals, as appropriate. In addition, adequate equipment and personnel will be supplied to maintain road surfaces to control dust on the haul and access roads;
- Speed and off-road restrictions – Establishing and enforcing Project safety rules, including the posting and enforcement of speed limits on the haul and access roads and restricting off-road travel to the maximum practical extent will limit the potential for additional fugitive dust emissions, as well as public safety hazards. Those employees whose jobs include driving, as well as haulage contractors, will be advised of the safety rules and that driving off established roadways is not allowed. Instruction on driving safety and observation of speed limits will be included in the new employee orientation and annual refresher training and in task training for specific job assignment. This aspect is developed further in the Traffic Management Plan.

- Combustion Mitigation Measures

Combustion emissions have been reduced for the Project in the following ways:

- Use of modern, energy efficient electrical equipment and mobile plant with fuel-efficient engines;
- Use of equipment exhaust controls. Exhaust controls on mobile equipment must be properly installed, positioned, maintained, and replaced as needed throughout the useful life of the equipment. Procurement of updated equipment with emissions controls and proper operation, care, and maintenance of the equipment will reduce combustion emissions to acceptable levels for vehicles and generators, as well as allowing the equipment to run more efficiently and increasing its operational lifespan.

- Nuisance Odour Mitigation Measures

To reduce impacts from nuisance odours sewage treatment and waste storage facilities will be operated properly and monitored for operational performance, including nuisance odours.

- Project facilities will incorporate appropriate waste storage and handling procedures; and
- Sewage treatment facilities will be operated properly and monitored for operational performance, including nuisance odours.

GHG emissions have already been reduced through the design of the Project as follows:

- minimizing the land clearance for project facilities;
- minimise tree felling (only trees needing to be removed for safety reasons above the haul road will be felled);
- providing improved building fabrics for buildings to minimize heat losses as well as reducing noise impacts;
- the use of modern, energy efficient electrical equipment and mobile plant with fuel-efficient engines.
- A 32.4kWp roof-mounted solar PV array has been included at the VPP admin building. This is expected to save at least 20.6tCO_2e per year

GHG mitigation opportunities are also being explored further as the project design is advanced and operational activities are further developed. These include:

- Although haulage works are likely to be undertaken by contractors, consideration will be given to the choice of vehicles used for both the mine fleet and the haulage fleet. Where possible fuel efficiency will be a factor in the selection of vehicles as this will not only reduce emissions but also reduce operating costs. There is currently considered to be limited potential for the use of biodiesel to help reduce emissions, however the Project will continue to monitor potential options;
- In addition to the efficiency of the fleet itself, opportunities will be sought for improving the use of the vehicles. Scheduling of excavation and haulage activities to optimize activities and avoid double handling, where this is operationally practical. As the mine logistics and scheduling are progressed, consideration will be given to the optimisation of vehicle and equipment movements to improve efficiency and reduce overall CO_2 emissions; and
- The upgrading of energy-intensive machinery over time will be used to improve efficiency and reduce CO_2 emissions compared to plant that has been removed. Further energy efficiency opportunities will also be investigated.

Monitoring of air quality and GHG will be undertaken to determine whether construction or operational activities are causing adverse impacts upon the surrounding environment. Monitoring points for air quality are defined in table below.

Monitoring points					
Location	**Monitoring Location**	**Latitude/Longitude**	**Approximate Number of Dwellings**	**Distance**	**Source**
Semizova Ponikva	AQN8/AQ1	44°10'21.67"N	2	60-170m	Haul Road

Monitoring points					
Location	**Monitoring Location**	**Latitude/Longitude**	**Approximate Number of Dwellings**	**Distance**	**Source**
		18°17'21.27"E			
Vareš	AQ3/AQ2	44°16'15.84"N 18°32'63.42"E	>100	280-1000m	Haul Road
South of Vareš	AQN7/AQ3	44°14'42.46"N 18°32'18.09"E	20-30	80-300m	Haul Road
Bijelo Borje - Tisovci	N/A / AQ4	44° 8'17.08"N 18°20'3.87"E	4	7-100m	Haul Road
Tisovci	AQN4 (AQ5) & AQN5 (AQ6)	44°14'10.48"N 18°34'77.56"E	10	60-90m	Haul Road & Processing Plant
		44°14'20.02"N 18°34'81.46"E		60-120m	
		44°14'27.80"N 18°34'81.51"E		60-200m	
Przici	AQN3 (AQ7)	44°14'74.56"N 18°35'62.13"E	10-20	400-800m	Processing Plant

Beside those locations, additional temporary monitoring locations (on each active construction site) will be included in monitoring on weekly basis.

6.3 Biodiversity Action Plan

This BAP enables the project to meet the requirements of PR6 within an acceptable time frame, as stipulated in PR6, paragraph 6 as discussed above.

In July 2021, Natural England (NE), the government's advisor for nature in England, launched a new tool to help measure biodiversity net gain on development sites. PR6 does not require the use of a specific calculation tool, and as such in order to inform the net gain/loss calculations, The Biodiversity Metric 3.0 - Calculation Tool[1] was used as the most up-to-date tool in use in England. This tool is used to assess the baseline biodiversity value and the predicted value of habitats post-development (see Appendix 1). Existing habitat areas and their condition are taken from the baseline survey information and areas were measured using GIS. In terms of fitting the local habitats into a table that is designed for British ecosystems, a

[1] The Biodiversity Metric 3.0 updates and replaces the beta Biodiversity Metric 2.0 (JP029) published in 2019. Biodiversity Metric 3.0 is a biodiversity accounting tool that can be used for the purposes of calculating biodiversity net gain.

'best fit' was used in terms of the type and condition of forest areas. A summary is provided in figure below.

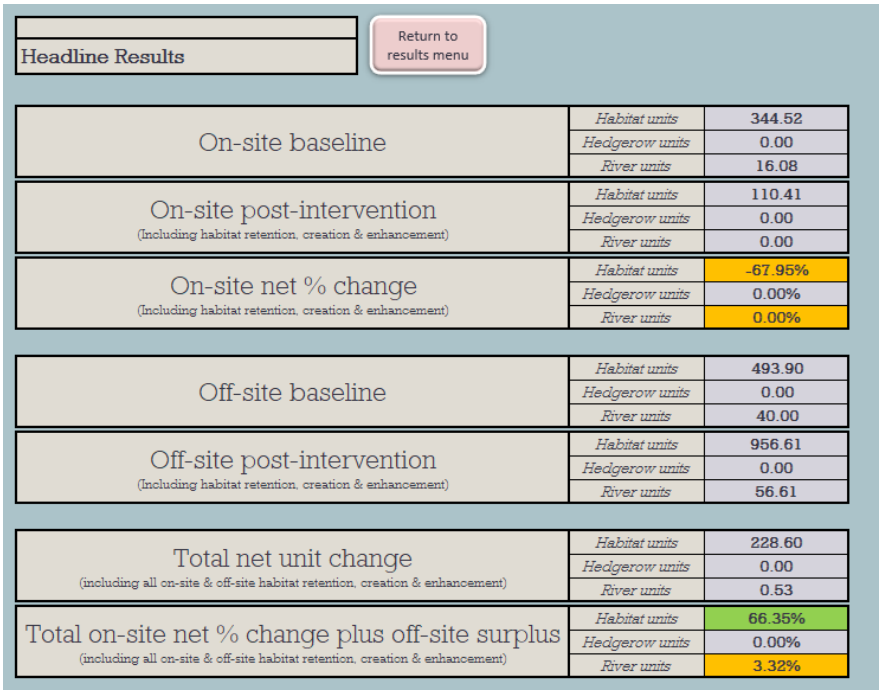

Figure: Summary of Biodiversity Metric

Table below summarises the PBF/ACH features requiring specific actions.

Biodiversity Action Plan - Key Actions				
I.D	**Ecological Receptor**	**Summary of Action**	**Rationale for Action**	**Timing**
BIO.01	Amphibians breeding along the Zagarski stream (Annex IV species) Yellow-bellied toad Green toad Greek frog Agile frog	Identify an area (approximately 1ha) where new wetland habitat can be created. New wetland to include new breeding ponds and terrestrial habitat, ideally fairly near the Zagarski stream or another nearby watercourse, on fairly flat ground and near existing forest/scrub or other habitat. Location to be agreed in consultation with Zenica Institute. Monitoring of new wetland and amphibian populations including breeding activity.	Annex IV species are triggers of critical habitat and therefore there can be no demonstrable impact to the population within the EAAA (i.e. local population) in the long term.	The ponds should be created prior to works along the Zagarski stream so that there is new breeding habitat available, and amphibians can be moved by suitably qualified ecologists (SQEs) during ground clearance. Amphibians should not be moved during their dormant period coinciding

				with frosty/snowy weather (usually mid-October to late March but will depend on local climate).
BIO.02	Invertebrates Annex II, IUCN EN White clawed crayfish (PBF) Annex II, IUCN DD Stone Crayfish	Creation of settlement pond(s) to intercept construction runoff that would otherwise contaminate the Mala River. Settlement ponds to be designed and constructed to enable sediment and any pollution to be captured and treated prior to its entry into the Mala River.	Annex II and IUCN EN species are PBF. In line with PR6, the project must demonstrate no net loss or ideally a net gain of PBF in the long term	Suitable measures will be in place prior to construction of any parts of the VPP that may cause runoff into the Mala River
BIO.03	PBF Watercourses from Plain to Montane Levels - Zagarski stream (Annex I Habitat)	Restorative management of a nearby stream/river (approx 3km) within the same or nearby watershed. Such an area of stream will need to be identified where clear benefits from management can be demonstrated (e.g litter removal, improve water quality, removal of weirs or small dams, removal of invasive species etc.).	In line with PR6, the project must demonstrate no net loss or ideally a net gain of PBF in the long term. As 1km of a PBF watercourse is likely being culverted, the only suitable option for mitigation/offset is to improve a stream which is in unfavourable condition nearby, over a greater length and over the long term.	An area will need to be identified so that management measures are in place prior to construction of the road through this habitat.
BIO.04	Priority Biodiversity Feature (PBF) Spruce Forest. (Annex I Habitat)	Purchase of an area of forest to the north of the haul road/Rupice, or enter into an agreement with the local Forestry Service to start Restorative Management (RM) of an area of retained forest nearby to improve biodiversity value - to include but not be limited to; selective felling to create fallen and standing dead wood, forced veteranisation of some trees, creating occasional clearings suitable for natural regeneration. Suggested area 50ha so that net gain can be demonstrated in	In line with PR6, the project must demonstrate no net loss or ideally a net gain of PBF in the long term. Offsets should be in place before any impact from felling/ground disturbance occurs.	An area of existing poor condition spruce forest nearby (to the north of Rupice/haul road to ensure connectivity with habitat to the north) will be identified, and options discussed with forestry service as to how the

		terms of quality of habitat when combined with restoration of decommissioned areas. Core area and buffer area to be established with the core area being 75% of the total area to ensure NNL. Tree nursery to supply locally native trees, shrubs and ground-flora to be set up/funded by the project. Monitor restoration success. Alternative/complimentary option - Adriatic Metals (AM) work with the bodies proposing the new protected area to the north east of the project area to develop and fund an appropriate forest management plan for the requisite type/area of forest.		requirements for RM outlined in BIO.04 (below) can be achieved.
BIO.05	Invasive species - Japanese knotweed	Identify, fence off and treat Japanese knotweed (JK) before it has the opportunity to be spread by project activities. Can be treated through herbicide application by trained personnel. Identified stands will require repeated treatment. Monitor treated stands and signs of new plants in project areas.	PR6 requires invasive species to be considered and treated where necessary. JK can spread through small living fragments of the plant becoming rooted and causes detrimental impacts to important habitats, especially to wetland areas where it can spread rapidly.	Prior to any potential impact on invasive plants including transport along haul route.
BIO.06	Any potential receptor	Ecological walkover of project areas by SQE and adjacent buffer areas to ensure no biodiversity features requiring specific or additional mitigation have established since the baseline surveys	Some potential Priority Biodiversity Features or species triggering Critical Habitat are mobile and may have colonised project areas since the baseline surveys were undertaken.	Immediately prior to any vegetation clearance or ground breaking.
BIO.07	Reptiles (Annex IV species) Nose-horned viper Wall lizard Sheltopusik	Careful removal of potential refugia under supervision by SQE prior to ground clearance. Strimming of taller or rank grassland and scrub to 150mm in height, removal of arisings and	Annex IV species are triggers of critical habitat and therefore there can be no demonstrable impact to the	Vegetation should be strimmed and arisings removed during the reptile active period as

	Green lizard Sand lizard Smooth snake	then leave for at least 3 days in suitable weather to allow reptiles to disperse to adjacent habitat. Creation of log and debris piles in retained habitat to provide basking sites for reptiles.	population within the EAAA (i.e. local population) in the long term. No project areas are likely to provide more than occasional or transitory habitat for these species but individuals may be affected during ground clearance.	far in advance of the works as possible, and kept strimmed (reptile active period is usually April to October in sunny weather, may depend on local climate). Careful removal of potential refugia to be completed immediately prior to and during any vegetation clearance or ground-breaking.
BIO.08	PBF Mountain Hay Meadow - will be lost permanently due to haul road construction.	Identify and purchase (a minimum 5ha) of species rich grassland/ existing upland hay meadow that is currently being lost to vegetation succession/ or being negatively impacted by agricultural practices, or an area of species poor grassland that can be restored. A private parcel of land would be better and a clear demonstration of commitment to biodiversity. Location to be agreed in consultation with Zenica Institute and availability of land for purchase. There are areas retained near the haul road that should be considered, as well as an area near the Veovaca open pit.	In line with PR6, the project must demonstrate no net loss or ideally a net gain of PBF in the long term. Offsets should be in place before any impact ground disturbance occurs. This habitat is also immediately adjacent to the proposed haul road and is vulnerable to residual runoff, dust and nitrogen deposition from trucks which cannot be 100% mitigated.	An area has been identified so that management measures are in place prior to construction of the road through this habitat.
BIO.09	PBF Hydrophilous Tall Herb vegetation (Annex I Habitat)	Manage approx. 1.5ha of this habitat through scrub and tree removal, and light grazing. The habitat is located immediately adjacent to the proposed haul road between Položac and Semizova Ponikva. If this area is not available, location to be agreed in consultation with Zenica Institute and availability of land for purchase.	In line with PR6, the project must demonstrate no net loss or ideally a net gain of PBF in the long term. This habitat is immediately adjacent to the proposed haul road and is vulnerable to residual runoff, dust,	An area has been identified soon so that management measures are in place prior to construction of the road through this habitat.

			nitrogen deposition from trucks. Over the lifetime of the project there is not a satisfactory level of confidence that adjacent PBF hydrophilous tall herb communities would not be affected by the project.	
BIO.10	(Precautionary PBF) Balkan endemic or FBiH, CR, EN or VU plant species Pančić blue sow thistle Heart-leaved ox-eye daisy Red helleborine Balkan endemic Dinaric widowflower Balkan endemic *Crepis conyzifolia* FBiH VU Angelica FBiH VU stemless gentian FBiH CR Marsh marigold	Restorative management of forest, hay meadow and hydrophilous tall herb vegetation will provide the key mitigation and enhancement required to maintain/increase local populations. Additional measure: Prior to ground clearance, during the growing season, individuals of these species will be identified and translocated by the SQE to suitable retained habitat within the EAAA. Populations to be monitored to ensure establishment over a number of seasons.	In line with PR6, the project must demonstrate no net loss or ideally a net gain of PBF in the long term. Species are precautionarily treated as PBF due to their unfavourable conservation status in the region or their endemism in the Balkans.	Identify a SQE that can be present prior to and during vegetation/ ground clearance and who can carry out the translocation of these plants if identified in areas to be cleared.
BIO.11	Annex I birds (PBF) Hazel grouse	Avoidance of vegetation clearance in the breeding season if possible. If not, a check of suitable nesting habitat will be undertaken by the project ecologist and any active nests protected until nesting is complete. The proposed forest RM in BIO.04 will benefit this species in the long term.	Annex I bird species which is a PBF. In line with PR6, the project must demonstrate no net loss or ideally a net gain of PBF in the long term. Species is threatened through habitat loss, poor forestry management and climate change.	Nest check immediately prior to vegetation clearance by SQE if undertaken during the breeding season (March to August inclusive)

BIO.12	Annex IV large mammals (ACH qualifying species) Brown bear Grey wolf Eurasian lynx European wildcat	Culverts and/or crossing points will be installed along the route of the haul road where it passes through the forested landscape to the north east of Rupice. A speed limit will be implemented on the haul road and appropriate signage will be installed along the route informing drivers of the potential presence of large mammals, especially at night. Beneficial management of retained forest away from the haul road will be designed to benefit these species through increased cover, denning site availability and foraging resource. Adaptive management may be employed if monitoring identifies regular road crossing points for large mammals. Appropriate food waste disposal especially at the Rupice project area (more remote) will ensure bears are not attracted to working areas where there could be interactions with personnel. Site personnel to receive briefings about litter disposal and behaviour should they sight these species. Remote camera monitoring of potential mammal crossing points along haul road by SQE, as well as Sajnovicki Kamen and Grcki Kamen to establish use by large mammals and to inform any ongoing mitigation should a regular road crossing point be located.	Annex IV species are triggers of critical habitat and therefore there can be no demonstrable impact to the population within the EAAA (i.e. local population) in the long term. The project areas are not considered critical habitat for these species which evidence shows may utilise the project areas only occasionally. Main potential impact arises from barrier effect of proposed haul road.	Speed limit and signage should be in place prior to first use of the haul road by haulage trucks. Briefings and waste regulations should be in place at the start of project work. Remote camera monitoring will be ongoing along the haul road to identify any areas which may be used as favoured crossing points by large mammals.
BIO.13	Annex IV and IUCN EN bats (lesser horseshoe)	General lighting strategy to ensure the abandoned mine entrance and Building 4 (B4) (administration building) at	Annex IV and IUCN EN species are triggers of critical habitat and	Strategy to be agreed with SQE prior to construction

		Droškovac are not blocked or illuminated by construction or operational work. Monitoring to ensure building(s) remain in use.	therefore there can be no demonstrable impact to the population within the EAAA (i.e. local population) in the long term.	work near mine entrance and B4.

6.4 Emergency Preparedness and Response Plan

This EPRP has been developed to describe the standards and specific procedures that will be followed by ADT and its contractors in the event of an emergency related to the Vares Mining Project (Project). During the construction phase of the Project, this document will serve as an operational guideline for the Project Managing Consultant (PMC) and ADT, to ensure appropriate management oversight is implemented during an emergency.

Emergency situations and corresponding procedures are defined including roles and responsibilities and communication with appropriate regulatory authorities. The document is also intended to serve as a training and reference guide for staff and contractors. Specific Emergency Response Plans will be developed, implemented and updated at various stages throughout the life of Vares Project to reflect the operating conditions and ensure conformance with standards.

It should be noted that due to the relatively remote nature of the underground mine, haul road and processing plant that the Company will need to be self-sufficient in key areas in terms of emergency response (for example, underground rescue), although it recognises that there are requirements to work with the local emergency response providers in responding to emergencies that occur where company activities are close to communities, such as around the processing plant, or where the project and the public are using the same infrastructure (namely the haul road).

6.5 Hazardous Materials Management Plan

The goal of the Hazardous Materials Management Plan is protecting all employees and community members from exposure to materials that may harm their health and preventing the spillage of dangerous substances into the environment. All environment components (air, soil, water) must be protected from the unwanted deleterious effects of hazardous materials on ecosystem function.

The most important aims for this plan are:

Comply with national and international requirements and good practice

- Reduction of using hazardous materials where is possible

- Avoid using chemicals and hazardous materials which are the subject of international bans or phase-outs (for example, ozone depleting substances)
- Using substitutes for hazardous materials with less toxic materials where this is feasible
- Prevent the release of hazardous materials into the environment as a result of their transport, storage, handling, use or disposal
- Assess and mitigate hazards and risks to human health and the environment associated with the transportation, handling, storage, use and disposal of hazardous materials
- Creating emergency plans in case of spills of hazardous materials that present a risk to human health and the environment

Hazardous materials will be used during all phases of Vares project. Most materials will be consumed on site but some materials will require disposal after use (hydraulic fluid, batteries). This Hazardous materials management plan describes the regulatory arrangements for transportation of these products to and from the Project site, and their proper and safe storage, handling and use.

Lead, mercury and thallium are also present in the ore and may become concentrated in the VPP, therefore specific requirements regarding the exposure of workers to these materials are detailed in the site-specific H&S Management Plan which will be developed for the operational phase.

Dangerous Goods and Hazardous Materials

The Feasibility Study identifies the following reagents which will be used in the metallurgical processing flowsheet, assuming a throughput of 800,000tpa:

Reagents	Consumption (g/t)	Consumption (t/y)
Lime (Quicklime)	605	484
Depressant (SMBS)	1,350	1,080
Depressant (Zinc Sulphate)	675	540
Activator (Copper Sulphate)	350	280
Collector (Aerophine 3418A)	85	68
Frother (MIBC)	120	96
Collector (SIPX)	175	140
Flocculant (Concentrate)	20	16
Flocculant (Tailings)	40	32

These will be appropriately stored and handled in accordance with local permit requirements and international good practice, including the use of internationally recognised warning symbols. It is planned that shipments of reagents, consumables, spare parts etc. will be delivered in containers to the railhead for onward movement to Rupice Mine and Vares Processing Plant using the haul-road.

Transport

These Hazardous materials will be transported based on the following:

- Eastern Mining will monitor storing conditions and proper handling with all dangerous goods and hazardous materials
- Non compatible materials will be transported in separate shipments
- Fire extinguishers and fire prevention materials will be adequate and appropriate for the material being transported
- Containers will be adequate for materials that are being transported
- All containers will be checked regularly in order to check for damage or leakage
- Containers for transporting of hazardous materials will be closed
- All containers for hazardous materials will have clear information and description for that material type in accordance with international symbols/codes. These labels will contain all necessary information for safe handling and transfer of hazardous materials, the risks they pose, MSDS codes and emergency response information
- Drivers will be trained and equipped to manage spills, first response and adequate communication

Actions to Avoid, Control and Mitigate

Inventory of hazardous materials is a key element of this plan. The inventory will list all materials on site and their locations and will include all information about products to ensure that all project employees have all necessary information for their safe transportation, storage, handling, use, and disposal, including risks posed and PPE requirements.

Typical Dangerous Goods and Hazardous Materials on Site by Project Phase

Product	Phase			
	Construction	Operation	Closure	Post-closure
Diesel fuel	Used throughout; stored at the Mine Site in up to 200 L barrels, double-wall tanks, or fabric bladders with secondary containment	Used throughout; stored at the main fuel storage facility at the Mine Site	Used in decreasing amounts as components are decommissioned; stored at the main fuel storage facility at the Mine Site	Use in small quantities within vehicles associated with monitoring, no on-site storage
Lubricating oil	Used throughout; stored at the Mine Site	Used throughout; stored at maintenance shops in bulk tanks with secondary containment	Used in decreasing amounts as components are decommissioned; stored at maintenance shops in bulk tanks with secondary containment	Use in small quantities within vehicles associated with monitoring, no on-site storage
Lubricants, greases	Used throughout; stored at the Mine Site	Used throughout; stored at maintenance shops in bulk tanks with secondary containment	Used in decreasing amounts as components are decommissioned; stored at maintenance shops in bulk tanks with secondary containment	Use in small quantities within vehicles associated with monitoring, no on-site storage

Product	Phase			
	Construction	Operation	Closure	Post-closure
Batteries	Used throughout; stored at the Mine Site and maintenance shops on pallets with secondary containment	Used throughout; stored at the Mine Site and maintenance shops on pallets with secondary containment	Used in decreasing amounts as components are decommissioned; stored	Used throughout; stored at the Mine Site and maintenance shops on pallets with secondary containment
Solvents	Used and stored at the maintenance shops; stored in up to 200-L barrels with secondary containment	Used and stored at the maintenance shops; stored in up to 200-L barrels with secondary containment	Used in decreasing amounts as components are decommissioned; stored at maintenance shops in up to 200-L barrels with secondary containment	Not required

Typical Dangerous Goods and Hazardous Materials on Site by Project Phase

Product	Phase			
	Construction	Operation	Closure	Post-closure
Lime	Used at temporary and permanent Water Treatment Plant (WTP); stored in large bulk bags at each plant and otherwise in bulk	Used at WTP; stored in large bulk bags at each plant and otherwise in bulk	Used in decreasing amounts as WTP is	Not required decommissioned; stored in large bulk
Flocculent	Used at temporary and permanent WTP; stored in 25-kg bags at each plant and otherwise in bulk	Used at WTP and process plant; stored in bulk	Used in decreasing amounts as WTP is	Not required decommissioned; stored in bulk
Surfactant	Not required	Used at process plant; stored in bulk	Not required	Not required
Domestic cleaning products	Stored and used primarily at camps and kitchens for cleaning	Used primarily at camps and kitchens for cleaning	Used primarily at camps and kitchens for Not required cleaning	Stored and used primarily at camps and kitchens for cleaning
Laboratory chemicals	Preservatives for environmental samples; stored in 1-L to 5-L containers	Preservatives for environmental samples, reagents for laboratory analyses; stored in 1-L to 5-L containers	Preservatives for environmental samples; Used as preservatives for	Preservatives for environmental samples; stored in 1-L to 5-L containers
Process Plant reagents	Not required	Dry reagents will be stored in bulk bags up to 1 tonne in size, liquids in tanks	Not required	Not required

Implementation

Minimizing impacts on the environment, workers and communities will include the following:

- Inventory all materials on site to include all information about products to ensure that all project employees have all necessary information for their safe transportation, storage, handling, use, and disposal
- Naming responsible persons for managing hazardous materials
- Understanding all hazardous materials and the environmental impacts associated with their transportation, storage, handling, use, and disposal
- Minimizing use or generation of hazardous materials when possible
- Storage of hazardous materials will be in accordance with international standards and international practice
- Storage for hazardous materials will be designed as a leak-proof, safe and appropriate and non-damaged
- Emergency plans will be in place in case of uncontrolled spills, in order to protect against potential environmental impacts
- Monitoring all discharges and reporting unplanned discharges should they occur
- Reporting accidents to Emergency or Spill Response Teams with all relevant information.
- Training Spill/Emergency Response Teams as well as all relevant staff in minor spills.

Storage for hazardous materials will be designed as safe and appropriate within suitably contained areas. All reagents will be stored and prepared in storage facility in a containment area. The reagent storage tanks will have indicators and instrumentation which will prevent spills from occurring during operation. Ventilation and fire and safety protection will be provided. The following measures for adequate handling of dangerous goods and hazardous materials will be implemented:

- Manufacturers will provide safe packaging and labelling of materials as a part of purchase agreements
- Storage for hazardous materials will be ventilated and dry
- Containers for storage of hazardous materials will be closed until required to prevent accidental leakage and/or spillage
- Incompatible chemicals will be stored separately in order to prevent chemical reactions
- Chemical storages will be designated as a non-smoking and storage away from food; eating and drinking will be prohibited
- Employees who are handling hazardous materials will be trained and provided with appropriate personal protective equipment

Actions to Avoid, Control, and Mitigate during Operation

The Hazardous Materials Management Plan will be continually updated in line with the inventory of all dangerous goods and hazardous materials on the Project site, along with all necessary information. It will be kept in a visible and easily accessible location at each site where the relevant dangerous goods and hazardous materials are stored. New employees who

are handling with hazardous materials will be trained and provided with appropriate personal protective equipment and existing employees will receive refresher training.

Actions to Avoid, Control, and Mitigate during Closure

During the closure phase all risks will decline other than for disposal of surplus materials. Surplus materials will be adequate collected, labelled and disposed at the planned site disposal facilities.

Actions to Avoid, Control, or Mitigate during Post-closure

The needs of materials will be reduced during the phase of post-closure. Fuel using by the vehicles for monitoring still be used. Procedures will be modified for the management of products for the lower level of activity during post-closure. Monitoring and inspection will continue on a regular basis.

6.6 Health and Safety Management Plan

This Health and Safety Management Plan (HSMP) is an integral document prepared for all projects and it applies to all preparation works, mobilization works, construction works, tests and commissioning phase which is applicable to both Eastern Mining and all its Contractors and Subcontractors.

The HSMP defines the tools and methods for managing the H&S throughout the project as well as general construction H&S rules for the project personnel to adhere to. EM as the Owner will have the responsibility of managing the H&S aspects of the overall project. EM ensures that HSMP will be strictly followed throughout the project. EM has the right to do periodic and random audits whenever necessary. If non-conformities are observed during these audits or regular site visits, EM has the right to give a "Stop Work Order". The work will not start until corrective actions have been taken and the risks eliminated or properly controlled.

The scope of this document includes Project H&S procedures and plans to be issued subsequently.

All projects involve the following type of activities:

- Mitigation measures for management of health and safety related topics; and
- Transportation of personnel, construction machinery, equipment, consumables, tools and utilities, project materials and waste soil & material to site and/or from site.
- Operation of Operation with major construction machinery for excavation, cut and fill, compaction in earthworks.
- Piping and steel cutting and fit up, welding and erection works.
- Equipment lifting operations.

- Movements Moves of construction machinery that elevated positions.
- Working at elevated places.

HSMP and all related plans and procedures shall be communicated to all people that have responsibility on site (acknowledgement records from all Contractor and subcontractor management are required) and each site worker will undertake appropriate safety site induction procedures as well as daily training in safe work practices relevant to their tasks.).

6.7 Human Resources Policy

INTRODUCTION

Adriatic Metals is committed to building a working environment that is secure, fair and diverse and a culture that fosters leadership and allows every person to make a contribution and to realise their potential. Sound employment practices are crucial to the development of a workforce with the necessary skills and qualities to support a successful, ethical and responsible business. We do not engage in, or condone, any form of child, forced or compulsory labour at any of our sites. Our approach is guided by international labour standards, in particular the International Labour Organization's core labour standards.

PRINCIPLES

Adriatic Metals is committed to:

- complying with all applicable legal requirements and other rules, codes and standards to which we subscribe;
- upholding the fair treatment of employees including no unfair discrimination in our hiring processes, remuneration and career progression, regardless of age, gender, sexual orientation, ethnicity, nationality, religion or disability;
- ensuring our people are trained to work in an ethical, safe, healthy and environmentally responsible ways and investing in our employees by providing appropriate training and development opportunities;
- promoting an inclusive and ethical working culture, aligned with our core values of Community, Sustainability, Environment and People, where the value of diversity is recognised, including through reflecting in our workforce the communities and countries where we do business, and where all employees feel valued and encouraged to contribute to their full potential;
- engaging on a regular basis with recognised employee representatives;
- putting in place an accessible and transparent grievance mechanism for workers to raise concerns, and promptly addressing, without retribution and in a confidential manner, complaints made in good faith about behaviours that run contrary to the provision of our Code of Conduct; and

- respecting the principle of freedom of association and the right to collective bargaining, and taking a collaborative approach with stakeholders on employment-related matters with the aim of promoting dialogue and industrial harmony.

APPLICATION

Responsibility for the application of this Policy rests with, but is not limited to, all Company employees and contractors engaged in these activities under the Company's operational control.

Every employee shares a responsibility for compliance with this policy. The Company's managers are responsible for promoting and ensuring compliance with the Policy and any relevant business unit or departmental policies.

MONITORING AND REVIEW

The Board will monitor the content, effectiveness and implementation of this Human Resources Policy on a regular basis. There may also be independent reviews undertaken from time to time. Any findings, updates or improvements identified will be addressed as soon as possible.

Material breaches of this Human Resources Policy will be reported to the Company's Board of Directors (Board) and the ESG Committee of the Board.

Personnel are invited to comment on this Human Resources Policy and suggest ways in which it may be improved. Comments, suggestions and queries should be addressed to the Board.

Approved by the Company's Board of Directors on 6th November 2020.
Adopted by the Company on 9th November 2020

6.8 Land Acquisition, Compensation and Livelihood Restoration Plan

Key principles that the Vareš mining project will follow with regards to land acquisition, compensation and livelihood restoration follow:

- The Project complies with BiH/FBiH law and applicable international standards (EBRD's PR5).
- The Project seeks to avoid impacts to livelihoods by minimising impacts to land, businesses, natural resources, and other assets. This is taken into consideration in Project design, which prioritises impact minimisation in choice of technology for mining, processing and tailings storage, and prioritises the use of land that was historically used for mining.
- Negotiated sale-purchase transactions are preferred, with expropriation used as a last resort only where amicable efforts fail.
- Compensation for private land, and any assets upon it such as houses, crops and trees, is paid at full replacement cost in the sense of EBRD's PR5.

- For any land required for the mine, the land acquisition process (identification of affected plots and owners/users, valuation of assets, negotiation, sale-purchase agreements) is managed directly by Eastern Mining
- For roads, the construction of which is a prerogative of the Municipality, this latter will manage the related land acquisition process, with Eastern Mining engaging the Municipality to achieve an outcome consistent with the objectives of PR5 for such land acquisition.
- All sale-purchase agreements are notarized and registered in the Real Estate Cadastre.
- Affected people have access to an out-of-court grievance mechanism.
- Impacts to livelihoods that might arise as a result of the land acquisition process are monitored and mitigated where Eastern Mining considers it necessary to do so per monitoring and assistance commitments in this Livelihood Restoration Plan.
- Affected people are informed and consulted within the broader framework of Eastern Mining's Stakeholder Engagement Plan and EBRD's PR10.
- Vulnerable individuals are identified and assisted where needed.
- All transactions and interactions are recorded and documented.

6.9 Noise and Vibration Management Plan

This Noise and vibration management plan (NVMP) has been developed to provide further details on the measures to be implemented during the construction and operational phase of project to ensure that the actual environmental impacts are consistent with those evaluated in the Environmental Social Health Impact Assessment (ESHIA), and that mitigation measures are applied as intended and effective.

The purpose of the NVMP is to provide a clear set of actions and responsibilities for the control and minimization of potential impacts on sensitive receptors within the Project area of influence. There are a number of linkages between this NVMP and other environmental plans as described below:

- Occupational Health and Safety Plan provide identification and assessment of the occupational risks related to noise and vibration,
- Traffic Management Plan provide mitigation measures to reduce noise emissions arising from construction vehicles and equipment.
- Community Health Safety and Security Management Plan provides identification and assessment of the community risks related to noise and vibration

This plan also provides the mechanism to adopt new measures throughout the ongoing construction and operation to improve noise and vibration management.

Design Mitigation

- Designed mitigation measures prior to start up, including housing for the crushing plant, will be in place before tests on the crushing plant are commenced. Soil mounds

constructed adjacent to haul roads will be located to provide additional attenuation between the haul trucks and the nearest community;
- During the detailed design stage, the use of noise barriers, baffles, or enclosures to provide abatement for noisy equipment such as generators, compressor, pumps and gearboxes will be included;
- Adequate distance between the stationary noise sources and the nearby communities should be maintained; and
- The façade of the proposed processing building will be designed to provide a minimum of 39dB Rw.

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Operational Plant Mitigation

- All mobile plant should undergo regular inspection and maintenance to ensure that the installed mufflers are performing to an adequate standard and that worn parts are replaced;
- Hard surface roads will be installed and maintained to reduce road noise and dust;
- Design of the haul road should minimise excess revving;
- A speed limit should be imposed to minimise aerodynamic noise.

During operations, the following noise abatement best practice measures will be implemented:

- Workers will be trained in noise abatement best practices, including avoiding unnecessary revving of engines and switching off equipment when it is not required;
- Haul routes will be well maintained and where steep gradients are required, operatives will be trained to minimize engine noise through avoiding unnecessary revving etc;
- Drop heights for materials will be minimised;
- Vehicle and plant start-ups will be sequenced to avoid simultaneous noise bursts;
- All vehicles will be fitted with reversing alarms set at lowest level subject to health and safety considerations;
- Provide an air inlet silencer and exhaust silencers for stationary combustion engines and other units (for example generators);
- Perform regular inspection and maintenance of material handling vehicles and equipment to ensure that they have quality mufflers installed, worn parts are replaced, and lubricants are applied so that the design noise-output specifications continue to be met;
- When plant equipment has to be replaced, the selected plant will have a sound power level equal to or less than the plant that it is replacing;
- Employees and contractors involved in mining and blasting operations will be issued with and wear appropriate hearing protection in high-noise areas. Such areas will be designated by signage in the appropriate language, and employees and contractors will be trained in hearing protection procedures;
- The static plant located in the crusher and processing areas will be housed within a building, and breakout points in the facade of these buildings (i.e. doors, windows etc.)

will be minimised, as well as minimising the reverberant noise inside the buildings, which will be controlled through sound absorptive material;

- Complaints related to noise associated with any of the project activities will be monitored through the stakeholder engagement activities and the Project's complaints and grievance process, including the use of drop boxes to encourage comments on performance;
- Noise monitoring will be undertaken in accordance with Section x below and following any complaints from within the affected community receptors;
- If possible, vehicle movements should be limited during the weekend and night time periods to reduce the noise impact during the quieter periods; and
- All measured data will be logged and maintained as a record for the site EMS, which should be available on request and published annually for the duration of the Project.

The following general measures will be implemented to minimize transportation-related noise impacts associated with the Project:

- Enforce speed limits in relation to road conditions and location of sensitive receptors such as populated areas;
- Maintain access road surfaces in good repair to reduce tyre noise; and
- Ensure continuous traffic flow to avoid prolonged idling.

Residential Mitigation Measures

A number of measures are recommended at key locations where project activities will be taking place close to residential properties, some of which are only occupied occasionally (i.e. are weekend retreats or summer holiday homes). These are outlined below:

- It is recommended that a 2.5m high acoustics barrier is installed between the haul road and ESR 4, as residential buildings are present at this location, assuming if these buildings are confirmed to be residential dwellings and there is adequate space to install an acoustic barrier. The choice may be given to the residents to whether an acoustic barrier is installed, or an alternative glazing and ventilation scheme is installed. The residential dwelling (holiday property) at ESR6 will require the installation of If the dwellings at ESR 5 and 6 are confirmed to be residential dwellings the installation of the glazing and ventilation scheme will be required.
- The alternative ventilation system should be installed to allow for adequate airflow to the building without requiring windows to remain open. Most forms of trickle ventilation allow for the windows to be opened when purge ventilation is required.

Sensitive receptors

All closest sensitive receptors are residential properties, therefore, the sensitivity of each is considered medium, even though some are not occupied all the time.

Receptor	Co-ordinates		Closest Project Area	Distance to Project (m)
	X	Y		

ESR 1	278637	4896957	Rupice Mine	441
ESR 2	283029	4894683	Haul Road	49
ESR 3	283299	4894617	Haul Road	69
ESR 4	285831	4891505	Haul Road	17
ESR 5	286446	4891153	Haul Road	14
ESR 6	286786	4890652	Haul Road	7
ESR 7	287835	4890897	Processing Plant	64
ESR 8	287929	4891029	Processing Plant	33

Noise monitoring will be undertaken at locations considered representative of sensitive receptors closest to the Project periodically through each stage of the proposed Project. Additional monitoring will be undertaken in response to noise complaints at any location.

The monitoring and audit planning required to validate the effectiveness of the mitigation strategies will be at sensitive receptors, with the following monitoring approach:

- Suitable Monitoring Equipment – Class 1 noise meters with environmental monitoring kits will be used for noise monitoring and suitable maintenance requirements and non-conformance events or activities will be identified. Chain of custody documentation will be required if equipment is hired in. The equipment will be calibrated before use and periodically sent to the manufacturer for laboratory recalibration.
- Noise Monitoring Procedures - The noise assessment will define the monitoring requirements and periods for the use of the equipment, which will be directed towards areas of the operation where the effectiveness of mitigation measures can be determined. The procedure will ensure that representative data is collected and suitable records retained throughout the duration of the Project and will include details of:
  - suitable monitoring locations;
  - duration of monitoring to be undertaken at each location for each identified stage of works; and
  - recording of all required noise data including noise level (LAeq), date, time, weather conditions and any other relevant information.
  - guideline noise levels
  - action to be undertaken in the event that guideline noise levels are exceeded at identified receptors.
- Complaints Procedure –The procedure will detail actions to be undertaken in the event that noise specific complaints are received by the operator either directly or through the dedicated liaison mechanisms implemented as part of the Project.

Vibration monitoring will be undertaken at locations considered representative of sensitive receptors closest to the Project periodically through each stage of the proposed Project. Additional monitoring will be undertaken in response to noise complaints at any location.

The monitoring and audit planning required to validate the effectiveness of the mitigation strategies will be at sensitive receptors, with the following monitoring approach:

- Suitable Monitoring Equipment - seismograph will be used for vibration monitoring at the existing sensitive receptors and suitable maintenance requirements and non-conformance events or activities will be identified. Chain of custody documentation will be required if equipment is hired in. The equipment will be calibrated before use and periodically sent to the manufacturer for laboratory recalibration
- Vibration Monitoring Procedures - The procedure will ensure that representative data is collected, and suitable records retained throughout the duration of the Project and will include details of:
- Suitable monitoring locations;
- Duration of monitoring to be undertaken at each location for each identified stage of works; and
- Action to be undertaken in the event that guideline vibration levels are exceeded at identified receptors.

Complaints Procedure – The procedure will detail actions to be undertaken in the event that noise specific complaints are received by the operator either directly or through the dedicated liaison mechanisms implemented as part of the project.

Residual Impacts

Standard noise and vibration mitigation and best practices will be adopted by the Project to protect workers and community receptors. During the early stages of operation, it is good practice to monitor noise and vibration at the nearest sensitive receptors to ensure the predicted noise impact is being experienced within the sensitive areas. Additionally, the effectiveness of mitigated noise activities will be monitored via the Project's complaints and grievances mechanism.

The summary of residual impacts:

Impact	Mining Stage	Impact before mitigation	Key Mitigations	Residual Impacts
Noise on existing community receptors	Construction and Operations	Minor (low)	Perform Regular maintenance and inspection of vehicles and mobile equipment, including mufflers. Enforce speed limits for heavy equipment and general traffic on all roads and maintain roads. Install noise attenuation devices on construction equipment and use temporary barriers where possible to reduce noise propagation. Position stationary noise sources away from residents.	Minor (low)

			Installation of noise insulation should be installed to the main processing building. Implement Noise Management Plan.	
	Haul Road	Major	Engage with occupants of ESR 4 and 6 to develop appropriate noise mitigation measures, such as installing an acoustic barrier between the haul road and the residential dwellings or an improved glazing and ventilation system at ESR 4 and install additional glazing and ventilation (air conditioning) for ESR6.	Moderate
Vibration on existing community receptors	Vehicles, Heavy Equipment	Negligible	Schedule high vibration-generating activities to daytime hours. Perform regular maintenance and inspection of equipment in accordance with the Air Quality and Vibration Management Plan. Monitor vibration-related complaints through the Complaints and Grievances Process.	Negligible
	General Project Operations	Negligible	Schedule high vibration-generating activities to daytime hours. Perform regular maintenance and inspection of equipment. Monitor vibration-related complaints through the Complaints and Grievances Process.	Negligible

6.10 Soils, contaminated land and erosion control Management Plan

The Soil, Contaminated Land and Erosion Control Management Plan (SCLECMP) is developed to provide further details on the measures to be implemented during the design, construction operational phase and rehabilitation and aftercare of Project to ensure that the actual environmental impacts are consistent with those evaluated in the Environmental Social Health Impact Assessment (ESHIA).

The SCLECMP includes a number of clearly defined measures and actions whose role is to reduce soil contamination and control erosion in this area which is the centre of mining activities. The SCLEMP defines:

- All soil handling and storage requirements for the project; and
- An accurate soil volume balance based on the finalised design criteria of the project, specifically to include all ground workings and storage locations.

The SCLECMP provides a clear set of actions and responsibilities for the control and minimization of potential impacts on sensitive receptors within the Project area of influence.

The SCLECMP represent one component of the overall Environmental Social Management System (ESMS). The ESMS includes a number of commitments and component management

plans which together form the basis for the ongoing design, construction and operations of the Eastern Mining Vares Project.

General soil mitigation measures

- Properly store the top layer of soil in stockpiles is necessary to maintain soil quality and minimise damage to the soil's physical (structural) condition so that it can be easily reinstated once respread and to avoid contamination with rocks or other materials
- Strip in advance the soil to basal layer along haul routes and the operational footprint of the storage mound.
- The size and height of the stockpile will depend on several factors, including the amount of space available, the nature and composition of the soil, the prevailing weather conditions at the time of stripping and any planning conditions associated with the development. Make stocks 3-4 m high for the top layer of soil that can be stripped and stored in a dry place condition, but heights may be higher if storage space is limited.
- Dump trucks are only to stand and travel on the basal layer (unless raising the next level in multi-tier mounds).
- The machines are to only work when ground or soil surface conditions enable their maximum operating efficiency.
- Single-tier mounds are preferred to multi-tier mounds as it avoids the need for trafficking on the soil being stored.
- Raise the soil using only the excavator and maximise the mound height before trucks allowed to access upper surface.
- In the raising of multi-tier mounds, trafficking is to be confined to the upper surface of the lower tier.

- When performing activities such as soil handling, soil extraction, storage, and soil relocation, it is necessary that the surface part of the soil does not mix with other parts-
- Handle the soil during dry periods, so as not to affect its compaction, but avoiding very windy days
- Reduce the possibility of soil pollution from spills of materials, leaking oil and lubricants, improper waste disposal
- Handle and store the soil with appropriate strategies and rules to avoid soil erosion, pollution to watercourses or increase flooding risk to the surrounding area.
- Review land resources and develop a land resource plan that contains any restrictions that the soil may possess in terms of handling, removal and storage of stocks.

To minimise the wetting of soils:

- Site soil mounds in dry locations and protect from run-off from adjacent areas. Drain if a wet location.
- Raise the soil mound to maximum height progressively along the axis of the mound and shape the mound as it is being built to shed water and whenever stripping is suspended.

- Measures are required to protect the face of the soil layer from ponding of water and maintain the basal layer in a condition capable of supporting dump trucks.

The Storage Operation:

- The mounds should be sited on dry ground, not in hollows and should not disrupt local surface drainage. Where necessary mounds should be protected from run-off/ponding by a cut-off ditch which is linked to appropriate water discharge facilities. Where the storage mound is in a hollow due to the removal of surface soils, measures should be undertaken to ensure that water is not able to pond within the storage area.
- All machines must be in a safe and efficient working condition at all times. The machines are to only work when ground conditions enable their maximum operating efficiency. The operation is to be suspended before traction becomes a problem or the integrity of the basal layer and haul routes fails; haul routes must be maintained.
- The operation should follow a detailed soil stripping/storage plan showing soil units to be stripped and stored, haul routes and the phasing of vehicle movements. The soil units should be defined within the site with information to distinguish types and layers, with information about ranges of thickness. Detailed daily records should be kept of operations undertaken, and site and soil conditions.
- Remove topsoil and subsoil to basal layer from the haul routes, footprint of the storage mound and any other operating area in advance. These soils should be stored in their respective mounds.
- The dump trucks must only travel within the haul route and operational areas. The trucks should enter the storage area, reverse and back-tip the soil load starting at the furthest point of the mound from the point of access. The backacting excavator pulls up the soil into a mound of the required dimensions. The excavator bucket can be used to shape and firm the sides as the mound is progressively formed to promote the shedding of rain, particularly at the end of each day, but also on the onset of rain during the day. This should include any exposed incomplete surfaces.
- The process is repeated with the tipping of soil against the forming mound, and without wheels traversing onto previously tipped material. The operation continues progressively along the main axis of the mound.
- Without the trucks rising onto the soil mound, the maximum possible height is related to the boom reach of the excavator (typically 3-4m).
- To raise the mound higher, the trucks will have to travel on the upper surface of the mounded soils. A ramp will have to be provided for the trucks to rise onto the surface of the first tier, which should be capable of trafficking without difficulty. The next tier would be formed repeating the process described above. If further tiers are required, the process would be repeated.
- Any exposed edges/surfaces should be shaped using the excavator bucket on the onset of rain during the day. All surfaces should be shaped to shed water at the end of the day. The final outer surface should be progressively shaped using the excavator bucket to promote the shedding of rain.

- Work should stop in wet conditions with measures undertaken to prevent ponding at the base of the mound and on the basal layer. At the start of each day ensure there is no ponding on the basal layers and operating areas.
- All measures will be part of the contracts with individual operators and an operating procedure will be developed for all contractors
- According to local construction law, each site must have a Site Organization Plan where subcontractors will be required to include these measures.

Design specific mitigation measures

- Soils at Rupice that are rich in clay- this type of soil should be handled only in the dry season
- It is necessary to reduce the potential for additional soil contamination when handling and storing materials from the VPP
- Soils in the Vares processing plant site that are contaminated (left from previous activities) will be treated as hazardous. Contaminated soils from within the Veovaca process plant site have been stripped and contained or capped / covered to contain the risk during the demolition process
- The top layer of soil from Veovaca TSF area and other areas around the site, such as new stretches of haul road and the areas around the Rupice mine portals and platforms will be removed and stored properly so that it can be reused
- Vegetation establishment on topsoil stockpiles will be encouraged in order to reduce erosion, but will be monitored for invasive species which will be removed
- Stockpiles will be maintained for the shortest time possible and used progressively to restore exposed areas such as road cuttings, to reduce erosion.
- Progressive rehabilitation of areas such as the waste rock stockpile and completed TSF lifts will be implemented
- A detailed soils balance will be maintained to ensure that sufficient soils remain for site closure
- At the TSF, the remaining subsoil will be compacted, to form an impermeable layer with basal drainage network to recirculate leachate to Vares plant site.
- The waste rock stockpile at Rupice will be a temporary stockpile and the material will be combined with tailings material and used as backfill for the mine. The area where it will be located has contained drainage which will divert any leachate to the water treatment plant to reduce the risk of contamination from leachate to surrounding soils.
- When closing the mine any remaining infrastructure or footprint will be contoured to minimize the risk of runoff, compacted and covered in subsoil and topsoil followed by revegetation. If the slope is more than 30 degrees, the area will require terracing before topsoil is spread and revegetation occurs.
- During operation of the mine the ore will be stored in ROM pads before being transported to VPP with all drainage contained reducing the risk of contamination to nearby soils.
- The tailings will be stored either in backfill material or in the dedicated TSF.
- At the end of the operational phase of the project all ore will have been removed from Rupice and processed at VPP.

Erosion control measures:

- Clearing the smallest areas possible,
- Ensuring that diversion berms/channels and retention ponds are in place before extensive clearance starts (including tree felling as we have seen how that can impact water courses)
- Ensuring that retention ponds are cleaned out and maintained, Revegetating slopes around platforms and along road cuttings as quickly as possible
- Establish drainage structures at the foot of each slope to prevent the flow of sheet metal across the platform
- Prevent land degradation when arranging the location for machinery
- Prevention of spillage of fuel, oil and lubricants from transport and construction devices
- Store hazardous substances on covered and impermeable terrain
- Proper disposal of all types of waste in designated places
- Implement the measures described in the Waste Management Plan
- Phased implementation of measures for rehabilitation and rehabilitation of degraded areas
- All the above measures will be included in the design of the main project, like:

- clearing the smallest areas possible,
- ensuring that diversion berms/channels and retention ponds are in place before extensive clearance starts,
- ensuring that retention ponds are cleaned out and maintained,
- revegetating slopes around platforms and along road cuttings as quickly as possible, etc.

Monitoring and Audit

Auditing includes:

- Topsoil storage mounds will be inspected quarterly for signs of erosion, vegetation establishment and elimination of invasive species
- 5 yearly assessments of soils in key locations and those that are at increased risk of contamination (including VPP and down gradient of the Tailings Storage Facility); and
- Guidelines for actions where there may have been a significant change to the baseline conditions

Closure:

- Prior to closure, sampling will be done to assess the change in the baseline conditions so that appropriate implementation of remediation measures can be implemented during the closure of the mine. Particular importance will be placed on locations which are particularly susceptible to human health or environmental pollution.

In addition to the above, the following activities will be performed:

- Respecting Site Organization Plan prepared according to local legislation (Decree on the arrangement of the construction site, mandatory documentation on the construction site and participants in the construction "Official Gazette of FBiH", No. 48/09)
- Revision of documentation for design specific mitigation measures
- Supervision of all activities through all phases of the project

6.11 Surface Mineral Waste Disposal Plan

The Surface Mineral Waste Disposal Plan (SMWDP) is developed to provide further details on the measures to be implemented during the operational phase of project to ensure that the actual environmental impacts are consistent with those evaluated in the Environmental Social Health Impact Assessment (ESHIA). This plan also provides the mechanism to adapt new measures throughout the ongoing construction and operation to improve the management and identification of waste rock characteristics.
The SMWDP represent one component of the overall Environmental Social Management Strategy (ESMS). The ESMS includes a number of commitments and component management plans which together form the basis for the ongoing operation of the Eastern Mining.

Metals mining typically generates waste rock that needs to be disposed of and normally is stored on surface, where it remains permanently, as waste rock dumps, under atmospheric conditions. In open-cast mining these waste rock dumps can be substantial in size, in underground mining scenarios they are typically much smaller in volume. These waste rocks can be reactive under atmospheric conditions and can lead to the generation of acidic drainage and sulphate/metals leaching, and release of contaminated waters to the surrounding environment, if disposal is not arranged to minimize reaction between the waste rocks and atmospheric oxygen and moisture. Mine development needs to take this into account, and the science of acid rock drainage (ARD) is used to predict and understand the reactivity of the waste rock masses, with a view to arranging permanent storage in a manner that minimizes future environmental impacts.

The waste rocks that will be produced by the Rupice mining operation have been comprehensively investigated in terms of reactivity under atmospheric conditions and the potential for acid generation and sulphate/metals leaching. The investigation was carried out using rigorous scientific methodology and industry-standard test-work. The work was performed on-site at Rupice using a combination of geological and chemical expertise. The waste rock package and how it would behave under long-term storage under atmospheric conditions has been understood.

Ore grade materials have been demonstrated experimentally to be prone to acid generation and sulphate/metals leaching if exposed to atmospheric conditions for significant lengths of time. Waste rock materials include reactive waste rock that is prone to relatively mild acid

generation and sulphate/metals leaching, and unreactive waste rock that is not prone to acidification but may leach sulphate and metals under near-neutral conditions. It will be predictable from the mine-schedule what quantities of ore, reactive waste rock and unreactive waste rock will be stored at any given time during mine-life.
Monitoring of rock drainage will be undertaken to determine whether construction or operational activities are causing adverse impacts upon the surrounding environment. Monitoring points will be defined during construction phase, those are spots where all effluent is collecting and potentially can go into environment. Samples will be carried out after heavy rainfall events or in snow meting period, if appeared. Visual inspection is necessary at least once a week.

The following parameters need to be measured in in-house laboratory, and when necessary, can be send to external laboratory for check:

- Physical-Chemical Parameters (pH, Total dissolved solids TDS, Total suspend solids TSS, Conductivity, Dissolved oxygen DO, Turbidity NTU, Ammoniacal nitrogen)
- Major Ions: (Alkalinity-total as bicarbonate, Ionic balance, Carbonates, Calcium, Magnesium, Sodium, Potassium, Chloride, Sulphate, Fluoride, Phosphate)
- Minor Ions: (Aluminum, Arsenic, Barium, Boron, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Mercury, Nickel, Selenium, Tin, Zinc, Thallium)

Results will be in database, with tracking the trend and will be available to all responsible parties.
All water monitoring (surface and groundwater) will be in accordance with the Water and Wastewater Management Plan.
In summary, monitoring includes the following:

- Rock drainage monitoring and visual inspections will be undertaken following heavy rainfall events or in snow melting period, during the life of the emplacement to identify any issue with the proposed management measures. If acid generation is identified, monitoring of rock drainage would increase in frequency; and
- Visual inspections of waste rock areas and water quality monitoring will be undertaken if seepages are detected.

6.12 Waste and Hazardous Waste Management Plan

This Waste and Hazardous Waste Management Plan (WHWHWMP) aims to identify measures for minimizing impacts of waste and hazardous waste disposal and to finding the best tools to minimize, recycle, collect, store, segregate, process, transport, and safely dispose of wastes which will be generated during all phase of Vares Project.

The Waste and Hazardous Waste Management Plan will be applied during all phases of the project. During the different phases, different types of waste will be generated. The goal of this WHWMP is to find the most acceptable way for collection, segregation, storage, handling,

transportation, and disposal of all types of wastes generated from the Vares project in the best acceptable way in order to protect community health and safety and to protect the environment.

Management and disposal of non-hazardous wastes will be as follows:

- At each location where waste is generated, special containers according to the type of wastes present will be provided to facilitate safe and environmentally sound temporary storage. This includes underground work areas and rest areas.
- Non-recyclable waste from offices, canteen and rest areas, warehousing, maintenance areas, workshops, processing plant and mine facilities will be collected in special bins and temporarily stored on site at Rupice and Vares PP
- Waste for recycling will be stored on each site in special places for that purpose
- Segregated wastes will be moved from Rupice to Vares PP by ADT and consolidated for disposal off site, to avoid contractors waste collection vehicles travelling to the mine
- Registered waste disposal contractors will collect the waste from VPP. Appropriate documentation will be maintained.
- Registered recycling contractors will collect recyclable materials (glass, plastic, cardboard, metal, waste oils etc)[2]

Management and disposal of hazardous wastes will be as follows:

- Storage of hazardous waste will be in accordance with international standards and international common practice. Containers for storage of hazardous waste will be designed as leak-proof, secure and appropriate and sited so they are not damaged accidentally
- All containers for waste will have a clear information and description for the waste type in accordance with international symbols This will contain all necessary information for safe handling and transfer of waste. Any unidentified wastes will be considered as hazardous waste. All waste labels will include information about waste type
- All containers for hazardous waste will be checked regularly for damage or spillage
- Containers for hazardous waste will be closed and waste will be stored in the best way to prevention chemical reactions due to degradation or between materials
- Hazardous waste other than that listed below (waste oil, electrical and medical) will be disposed of periodically to licenced facilities in neighbouring countries.
- Waste oil will be disposal of separately in special containers. Containers for storage of oil will be designed as leak-proof, safe and appropriate and non-damaged and containers will have "Waste Oil" sign. They will be stored in a bunded building or area, with the bund 110% of the volume of all the containers and give to licenced companies for further treatment.
- Electrical waste will be stored separately and collected by licenced companies
- Medical waste will be stored separately and collected by licenced companies

[2] List of licenced companies available at: https://www.fmoit.gov.ba/bs/okolis/upravljanje-otpadom

- Waste explosives will be stored separately in their original container and marked as explosive waste and collected by licenced companies[3]

6.13 Water and Wastewater Management Plan

The Water Management Plan describes the process for managing water through the construction and operational phases at the site. It provides detail on the specific operational conditions as determined from water permits and authorisations; the local community requirements; the site social and environmental characteristics; and all operational programs and management plans required to manage water on site. The plan addresses the surface water and groundwater environment. It should be used as an integral part of the Environmental Management System. The Plan should be reviewed annually and/or in response to any changes in site specific conditions, permits, or incidents.

Water and Wastewater Management Plan - Key Actions				
I.D	**Action item**	**Summary of Action**	**Rationale for Action**	**Timing**
WWP.01	Assurance of Water Supply VPP	JKP Design and assurance contracts. Maintenance and monitoring including contingencies for drought conditions.	Third party water supply, requirements for system rehabilitation, infrastructure limitations in network, little to no recourse for project water recycling.	Detailed design stage ahead of commissioning.
WWP.02	Assurance of Water Supply Rupice	JKP Design and assurance contracts. Maintenance and monitoring including contingencies for drought conditions. Control rules associated with minimum environmental flows in both the Vruci Potok and Borovica for ongoing use of the smaller water supply systems.	Third party water supply, requirements for system development, infrastructure limitations in network, catchments already experiencing water stress.	Detailed design stage ahead of commissioning.
WWP.03	Water classes and treatment	Ensure compliance for each water class, detailed design required for sewage and ARD systems. Temporary arrangements for construction. Ongoing compliance monitoring.	Multiple water streams including impacted water as well as non-contact water.	Construction and operation phases.

[3] List of licenced companies available at: https://www.fmoit.gov.ba/bs/okolis/upravljanje-otpadom

Water and Wastewater Management Plan - Key Actions				
I.D	**Action item**	**Summary of Action**	**Rationale for Action**	**Timing**
WWP.04	Water storage	Potential demand and supply imbalances and ESIA commitments necessitate use of water storage. Capacities are needed for assurance and supply reliability. Pond capacities need to be designed to maximise effective storage whilst accepting that rainfall extremes have the potential to exceed capacity, therefore storage ponds cannot be designed to attenuate all run-off and surface borne water.	Each site will require its own stand-alone reliable supply as well as retention of excess storm water. Water storage at different scales is therefore needed to maintain continuity of water services.	Construction and operation phases.
WWP.05	Managed Release Water	Water that has been treated and is of suitable quality to be discharged to the environment is termed managed release water. The project does not use natural dilution within receiving water courses as the means of attenuating potentially harmful contaminant loadings. The range of discharges from the project are varied. Treatment specifications for waste water flows will need to be designed to be protective of receiving water quality without recourse to dilution.	To maintain conformance with project guidelines and standards for water release.	Detailed design stage ahead of commissioning.
WWP.06	Water Balancing	Demand analysis and a detailed water balance should be developed and updated during the detailed design, construction, commissioning and operational phases.	To ensure that there is sufficient supply to meet demand and that systems are working within their optimum performance limits as well as ensuring sufficient storage and treatment capacity is retained.	Detailed design stage ahead of commissioning.
WWP.07	Water Accounting	Evaluation of actual water use against design, development of closed loop systems promoting higher efficiency. Year on year continual improvement, metering.	Year on year assessment and demand analysis of water use and improvement of water efficiency promoting higher efficiency and ensuring adequate	Construction and Operations

Water and Wastewater Management Plan - Key Actions				
I.D	Action item	Summary of Action	Rationale for Action	Timing
			retention of water or capacity to meet demand forecasts.	
WWP.08	Specific operational requirements	Control and training scheme are necessary for the operation of the site's drainage system.	Develop control rules for the drainage system. Water consumption targets shall be set. Need a rational system for checking leaks, high levels, potential reuse and minimising risk of flooding or non-containment.	Construction and Operations
WWP.09	Operational Monitoring	Water demand shall be continuously metered and monitored. The contractor shall forecast monthly usage requirements, review their usage on a monthly basis and compare it to the forecast. Review the running totalised flow on a monthly basis and compare it to agreed water demand targets. An inspection regime shall be created for all water distribution pipelines and equipment. Suitable procedures shall be put in place for the maintenance of any pumps, filters or other equipment	Detect contamination, non conformance. Adequate design, construction and operational controls should be defined to avoid comingling of treated raw and recycled water.	Construction and Operations
WWP.10	Permits and authorisations	Secure abstraction licenses (temporary) required for dewatering and water supply and discharge including any large scale continuous pump tests. Abstraction license along with Contract/ Memorandum of Understanding to confirm permanent supply allocation.	Necessary to maintain operations proficiently so as to maintain the authorisation.	Construction and Operations

Water and Wastewater Management Plan - Key Actions				
I.D	Action item	Summary of Action	Rationale for Action	Timing
		Wastewater discharge licence and annual data reporting.		
WWP.11	Data management	Recorded data on water quality sampling, water usage, water discharges, compliance requirements, water forecasting and water recycling along with other hydrometric data including the control levels of major storage facilities, release regimes and the water accounting system.	Necessary for ensuring that the data quality is acceptable, reliable and meets project standards for repeatability and certification	Construction and Operations
WWP.12	Risk, Contingency and Emergency Response	Formal water risk and mitigation approaches to supply security, drought estimation and determination of contingency measures, vulnerability assessment for surface water, groundwater and receiving downstream waters including undertaking spill modelling, point source contamination risk assessment and assessment of ARD / Dam break TSF water risk. Further systematic water balance and modelling runs to determine risk of schedule slippage and concurrency of peak demands. Efficiency management and Flood risk drainage and operational surface water control.	Minimisation of disruption / outage is paramount for the continued uninterrupted operation of the operations. Following risk analysis contingency planning should be developed to specify the necessary water infrastructure aspects that require additional sparing, additional capacity, or concept alternatives i.e. back-up treatment or storage. Emergency response planning is necessary for Flood risk and extreme event simulation.	Detailed design stage ahead of commissioning.

Project Water Requirements and Interactions

Water Management Objectives and Requirements	
Objective	Specific Requirements
Manage water abstractions	Confirm long term sustainable yield assessment for all water sources
	Implement measures for the retention of minimum environmental/ ecological flows in surface waters

during construction and operation to protect sensitive habitats and species, water dependent ecosystem services, and community users.	Implement measures to protect water dependent ecosystem services
	Implement measures to protect community water sources
	Undertake effective monitoring to ensure water supply sources are being effectively managed for long-term sustainability.
Implement cost effective efficiency measures to minimise water use during construction and operation.	Maximise the re-use and recycling of water throughout the project life-cycle.
	Develop and implement cost effective measures for reducing water use
	Develop water efficiency targets and implement performance monitoring
Manage water to minimise flooding, ensure sustainable drainage of project infrastructure and minimise impacts on communities and habitats.	Undertake pre-construction evaluation of hydrological conditions to inform the design
	Develop a Water Management System to maintain natural flows, prevent sedimentation, protect downstream communities and restore quality to pre-disturbance conditions.
	Design structures to maintain natural flow and habitat conditions, and allow natural regeneration of function.
	Design structures to convey the 1:100 year flood event and be resilient to climate change. The TSF facility hydrology is being designed to more stringent standards (1 in 200 and 1 in10,000 year flood return intervals)
	Manage overland flows and ground conditions to minimise sedimentation and prevent pollution to downstream watercourses
	Implement maintenance programmes to ensure structures and drainage systems perform effectively.
	Implement compliance monitoring to ensure Project targets are being met
Implement effective discharge management and monitoring to protect receiving waters in the long-term.	Undertake pre-construction surveys to inform the development of discharge design and monitoring requirements
	Develop and implement site specific criteria for the protection of sensitive habitats and/or downstream communities.
	Develop Acid Rock Drainage (ARD) plans for the effective control of discharge requirements in critical asset at Rupice.
	Implement effective monitoring procedures to manage long- term potential downstream impacts.
	Ensure compliance with Project Standards for effluent discharges.
NB: Specific requirements have been committed to as part of the ESIA and are provided in the ESMP	

Project Water Classes and Treatment			
Water Class	**Description**	**Main Water Quality Characteristics**	**Required Treatment**
Raw Water	Raw water (or freshwater) is natural water available for use which is sourced from clean/natural rainfall catchments and includes the JKP sources and the smaller existing	Source dependent, the expectation is that the JKP sources (groundwater) are of good quality there will be suspended sediment, ionic and microbial loadings in the	Raw water abstracted from the sources will not undergo treatment.

Managed Release Water	Water that has been treated (at all levels) and can be discharged to the environment. This may include dewatering from the mine	Below all discharge criteria applicable to a given site	Dependent on particular water class and source
Fire Water	Water that will be held in storage for use for emergencies	Raw water requiring a periodic replenishment following drills and evaporation losses	N/A
Potable Water	For drinking, cooking and cleaning purposes	Below WHO drinking water quality criteria	Disinfection, potabilisation
Service Water	Water available for industrial use (e.g. maintenance, processing, dust suppression)	Low levels of contaminants (if any)	N/A
Non-Contact Water	Runoff (or stormwater) which has been collected after its contact with low risk catchments (roads, admin areas, etc.) leading to a change in water physical characteristics only (no major change	High sediment load (high TSS)	Attenuation through sedimentation traps, screening and swales only
Treatment Effluent	Effluent water out of treatment plants	Treated to meet discharge criteria	Not anticipated, if high ionic concentrations occur at the VPP then off-site disposal of a quantum (to refresh) will be undertaken to an appropriate
Reuse Water	(or Recycled Water) Effluent water which has a suitable quality to be recycled and reused through the	Low levels of contaminants (if any)	N/A
Grey Water	Water from various use areas (domestic or industrial) which can be recycled and reused through the Service Water system with minimum of		N/A
Sewage	Water from all forms of ablutions, kitchens, medical facilities, floor drains and domestic cleaning	High microbial concentration, pathogens and greases	Sewage treatment
Impacted Water	Rainfall (or stormwater) and seepage water which has been collected after its contact with high risk catchments (e.g. stockpile, waste dumps) leading to a significant change in the water chemistry.	High sediment load, high metal content and significant change in chemistry from raw water	Managed using a single stage conventional low density lime neutralization plant treatment process
Other Process Water	Water required for industrial processes at the site which then becomes industrial effluent and must be	High levels of contaminants, oils	

1. The project water classes and their respective treatment requirements need to be managed to ensure compliance to the project standards (for discharge and maintaining good water quality and aquatic environment status in the receiving waters).
2. Treatment systems for sewage and ARD water (and potentially minewater inflows) require detailed design and commissioning.

3. At construction stage, contractor and EPC workforces will require temporary, skid-mounted wastewater treatment systems run on electrical power generation sets at Rupice. At Veovaca, sufficient ablutions and treatment capacity from the existing JKP sewerage network will be employed.
4. Monitoring: Water quality within the settlement pond(s), catch drains and the Mala River, Vruci Potok and Borovica downstream from the pond(s) and site will be monitored during construction and operation of the Rupice, VPP and TSF facilities to ensure contaminants entering the drainage system are being treated correctly prior to water being released into the Mala River.

The surface water monitoring points established in the ESIA that need to be maintained for surveillance during construction and operations are identified below:

Surface Water Monitoring to be retained during Construction and Operations		
Catchment	**Monitoring Identifier**	**Description**
VPP	PPV-4	Mala River upstream of VPP and TSF
	PPV-3	Mala River below existing TSF and VPP
	PPV-10	Mala River upstream of new TSF
	PPV-11	Mala River downstream of new TSF
Rupice	PP-I	Borovica - downstream of Sastavce tank
	PP-II	Borovica – downstream of Borovica Donja
	PP-III	Borovica – upstream of Sastavce tank (east tributary)
	PP-IV	Borovica – upstream of Sastavce tank (west tributary)
	PP-V	Vruci Potok
	Spring Vruci Potok	Public spring on road
	Spring Borovica Donja	Resident's spring

Monitoring should be conducted monthly during construction works and quarterly during operations with results reported in the Annual Environmental Monitoring. The parameters for monitoring should include the organic, inorganic and microbial suite with physico-chemical parameters as currently established (the current stream-lined parameter list). Modification to the monitoring should be reviewed on an as needed basis including frequency and parameters. For example, if indications of contamination are observed monitoring frequency should be increased and additional indicator parameters used in order to identify contaminant source to rectify the non-compliance.

Additional surface water monitoring points over and above those established in the ESIA (using the same sampling and analytical programme) that should be undertaken for surveillance during construction and operations are identified below:

New Surface Water Monitoring to be commissioned for Construction and Operations		
Catchment	**Monitoring Identifier**	**Description**
VPP	PPV-xxx	Bukov Potok exit culvert below new TSF
Rupice	PP-xxx	Bukovica downstream of JKP abstraction

Solid wastes generated from the water treatment systems including sanitary sludges and ARD contaminated lime wastes will need to managed either through off-site disposal or purpose built contained facilities on-site.

The Mala River is known to support white clawed crayfish. It is possible that the Bukovica stream supports stone crayfish. In order to ensure no net loss of these species PBF, it will be necessary to prevent impacts to the quality and quantity of water within the Mala River and the Bukovica as a result of the project. More detail is provided in the project Biodiversity Action Plan (BAP). One key mitigation is the design and construction of a settlement pond(s) downstream from the proposed TSF to ensure any runoff from construction is captured and treated appropriately before reaching the Mala River. The pond(s) will be designed to the appropriate engineering specification (see TSF design report, water balance).

Water Storage

Minimum Requirements for Key Water Storage Facilities	
Item	**Minimum Storage**
Raw Water supply to treatment plant	1 day
Potable Water	2 days
Fire Water	120 m^3

Managed Release Water

The range of discharges from the project are varied and may include the following classes:

- Non-Contact water – run-off that is not severely impacted and has come into contact only with low risk catchments;
- Treatment effluent – treated water that is able to be discharged;
- Excess reuse water – the retention of water for recycling is an integral part of the water balance, it is envisaged that extreme storm events will lead to overflows and managed release of the recycling water held in storage;
- Grey water – the term grey water is useful to consider because it represents a separate class of water from black water or sewage with arguably more opportunity for re-use as it requires less treatment and sanitary control. However this opportunity can only be realized if grey and black water systems are operated separately;
- Sewage; effluent from the project's toilet blocks, personnel ablutions and other sanitary waste streams which may include laundry and food preparation facilities.
- ARD impacted water – metalliferous and potentially low pH leachate will be generated from the stockpiles and form 'contact-water'. Control schemes have been designed for this form of drainage to cater for extreme weather events in terms of sufficient storage capacity to attenuate peak flows and an active (low

density) lime treatment system to neutralise the water and precipitate out as sludge, the majority of metals; and

- Process water – requiring separate treatment from the other release water streams due to its chemical origin which could be incompatible with the functioning of other systems (toxic shock).

Further managed release streams include dewatering from the mine. Dewatering disposal options have currently been identified as:

- Re-use and recirculation in the mine for mine services water;
- Infiltration back into the mine system; and
- Combination with ARD water from the stockpiles if necessary.

Water Balancing

1. Demand analysis and a detailed water balance should be developed and updated during the detailed design, construction, commissioning and operational phases to ensure that there is sufficient supply to meet demand and that systems are working within their optimum performance limits as well as ensuring sufficient storage and treatment capacity is retained.

Water Accounting

- Water abstraction rate;
- Water recycling rate;
- Water disposal rate;
- Net consumption rate (calculated for water losses (evaporation, dust suppression etc);
- Water harvesting rate; and
- Water quality indicators.

1. It has been assumed that the water accounting framework is established and monitored by the Eastern Mining Environment Team. Any required remedial measures will be implemented by the Contractor.

Specific Operational Requirements for Water Efficiency and Water Management

1. Freeboard, outflow and control rules for the release and regulation of water from the drainage system.
2. Monthly water consumption targets shall be set by the operator in conjunction with contractors. These shall be based on the previous month's consumption figures and the construction activities scheduled for the current month.
3. The contractors in conjunction with the owner shall put in place procedures to monitor the usage and status of potable and service water on a daily basis and shall act on the occurrence of anomalous high or low usages or levels. This shall include system walk

downs to check for leaks, investigation and identification of high water users and other water saving initiatives as appropriate.

4. The contractor in conjunction with Adriatic shall ensure that, where appropriate, greywater and blackwater recycling measures are installed and properly maintained to ensure maximum benefit and to minimise the water demand.
5. Where possible, the project shall reuse clean serviceable non-contact water for subsequent low-grade uses such as dust suppression subject to it meeting suitable water quality criteria.

Operational Monitoring (non-Environmental)

1. The contractor shall undertake water quality testing of the water distribution networks. They shall also establish procedures to periodically sample the water quality of all drainage within their facilities to determine the hydrocarbon/contaminant content. Water shall meet the requirements of the relevant legislation, standards and guidelines. The sampling shall monitor levels of BTEX, phenol, gasoline, diesel, fuel oils, kerosene, heat transfer fluids, transformer oils, lube oils and hydraulic oils.

2. Wherever possible, wastewater shall be reused or recycled. This should be set out in a development plan as part of the project CEMP (Construction Environment Management Plan) of which the contractor has responsibility and shall establish procedures to monitor any greywater and blackwater flows on the site. They shall also undertake water quality testing of any recycled greywater and blackwater to ensure that it meets the requirements of the legislation, standards and guidelines.

3. Adequate design, construction and operational controls should be defined to avoid comingling of treated raw and recycled water.

4. Maintenance activities that require drainage of water from the water distribution pipelines or equipment shall be undertaken so that the drainage is collected and disposed of at suitable facilities.

5. Water quality will be regularly monitored against compliance with relevant storm water quality standards prior to release of retained surface water. Extreme rain events that exceed pond capacities are expected to be sufficiently diluted and will not impact the natural water courses if overspills occur. Ponds will be shaped to facilitate settling of suspended solids.

6. Groundwater levels in relation to the possible inflow into the underground mine require monitoring. Piezometers have shown rapid responses to rainfall and seasonal (snow melt) events indicating that some rapid infiltration and recharge mechanisms could exist. Groundwater monitoring of water levels and groundwater quality should

be maintained throughout mining to evaluate hydraulic responses, indications of potential inflow and development of water quality changes as a result of mining on the groundwater system.

4. COMMUNITY AND STAKEHOLDER ENGAGEMENT PLAN

This section of the ESMS provides an overview of Eastern Mining plans and commitments to provide ongoing opportunities for community and stakeholder engagement with the Vares Project, as well as with plans to advance sustainability initiatives during Project exploration, Construction, Operation and through to Decommissioning phases.

These plans and commitments are consistent with Eastern Mining Environmental and Social Policy and commitments to working shoulder to shoulder with the community and stakeholder groups to achieve the responsible development of the Vares project and to contribute to the sustainable development of the communities around it.

Stakeholder Engagement Plan (SEP) is a critical element of Eastern Mining Environmental and Social Management System ESMS to ensuring smooth implementation and sustainability of Vares project activities.

Stakeholder engagement plan is developed on the sound principles of transparency, fairness and equity, consensus building, continuous dialogue and feedback. The stakeholder engagement plan encompasses the following key elements, stakeholder mapping, engagement strategies, awareness creation among vulnerable groups, grievance redress mechanisms for affected communities and disclosure of relevant project information.

6.14 Stakeholder Engagement Plan

Stakeholder Identification

Stakeholder identification is a crucial step in managing the overall stakeholder engagement process. Accurate stakeholder identification reduces the risk of a narrow stakeholder group dominating the consultation process and helps a project sponsor identify and address legitimate concerns related to project impacts.

In order to develop an effective SEP, it is necessary to determine who the stakeholders are and understand their needs and expectations for engagement, and their priorities and objectives in relation to the Project.

For the Project, stakeholders are identified by:

- Identifying the different categories of parties who may be affected by or interested in the project; and
- Identifying specific individuals or organizations within each of these categories, taking into account:
    - Expected geographic area of influence of the Project;

- Nature of impacts that could arise and therefore the types of government bodies, non-governmental organizations, academic institutions and other bodies who may have an interest in these areas; and
- Recognition that the process of identifying the individual and organizations within each group is a continuing one, including contacts the Project has already made and those it may make as a result of changes to the Project design or ongoing consultations.

At Vares, stakeholders exist within the following categories:

- Government authorities at the federal, canton and municipal levels;
- Project-affected communities, including individual residents as well as non-organized groups with particular areas of interest or that may be at risk (elderly, gender, people with disabilities, ethnic minorities, etc.), including community leaders and representatives;
- Multi-national and international organizations (UN agencies, World Bank, multi-lateral and bi-lateral development agencies, etc.);
- Non-governmental organizations at the international, national, regional and local levels, including organised community-based organisations or interest groups (labour, youth, education, religious, business, etc.);
- Commercial organisations and business associations;
- Project employees; and
- Media.

Stakeholders Consultation

Eastern Mining will ensure all stakeholders are properly consulted, engaged and involved where necessary at all stages of its operations and projects.

External Communication and on-going Reporting of Affected Communities

Communication with the community and other stakeholders shall be conducted in accordance with the Stakeholder Engagement Plan (SEP). The SEP sets out and defines a framework of standardized measures to be undertaken for proactively engaging and communicating with external Project stakeholders and to guide the strategies to engage with them according to their respective needs and interests. It is designed to demonstrate that Eastern Mining will undertake consultation and participation that is meaningful, consistent, comprehensive, coordinated and culturally appropriate in line with all the relevant legal and regulatory commitments including international good practice and national requirements.

Vares Information Centre

The Vares Information Centre, located on the main street of Vares was opened in 2019. The centre is open from 08:00 until 16:30 Monday to Friday and it is closed on weekends and Public Holidays. There is one member of staff, who works full time.

The aim of the Information Centre is to continue developing a two-way cooperative relationship with the community, to satisfy their requirements in terms of information dissemination and to collect comments and feedback on the Project and current activities. This is monitored through the recording of all stakeholders visiting the centre. Should a community member ask a question where the team are unsure of the answer, then the query will be passed to senior management to respond. The Information Centre also operates a formal complaints procedure, should a member of the public come in with a complaint this is recorded in a dedicated form and passed to the appropriate member of management.

A report is prepared monthly by the Information Centre, providing a summary to company senior management and directors. This covers total number of visitors and queries, the most common questions and discussion, any outstanding issues and an overview of social media presence and outreach during that period. The primary queries brought up by visitors to the Information Centre include:

- Employment opportunities;
- Accommodation offer for workers;
- Company sponsorship of local events / teams; and
- General enquires regarding status of Project.

Photo 1 Eastern Mining Information Centre, Vares

The Information Centre administers a formal grievance mechanism, discussed in Chapter 5 of this SEP, as well as the formal register of stakeholders engaging at the centre and a record of all donations, requests and sponsorship carried out by the company. All Project related documentation such as the Scoping Study, Environmental Assessment for local permitting procedures, non-technical summaries of all technical aspects and the permitting register will be available on request. Any interested party can submit their request through the Information Centre. Having this information to hand will assist the Eastern Mining employees in ensuring all responses to queries are consistent and accurate.

Should anyone wish to pass a query on to senior management, a contact form can be filled in. This form allows the stakeholder to state their concern or query, providing formal written documentation. This is passed on as appropriate and stored electronically in line with GDPR requirements.

The Information Centre is an invaluable resource for Eastern Mining and has thus far been effective and efficient in engaging with community members. This will need to continue throughout the life of the Project.

GRIEVANCE MECHANISM

The purpose of the grievance mechanism is to demonstrate responsiveness to stakeholder complaints and ensure stakeholder engagement throughout the Project. All stakeholders are encouraged to submit written grievances to Eastern Mining's management team and should be reassured those submissions will not be used in any way to intimidate those submitting the complaints. The grievance mechanism is resolved quickly and efficiently in a transparent manner that is culturally acceptable without manipulation, interference, coercion, intimidation, and retaliation[4]. All interested parties can get a copy in the Information Centre, or at the office at Tisovci, through representatives of local communities and in the coming period will be available on the company's website. From January 2021, the introduction of anonymous submission of grievances is in process. In the coming period, mailboxes will be available for complaints in communities where the Project has a direct impact, in places where notice boards are placed. The procedure outlined below will be used to ensure the grievance mechanism is in line with international best practice requirements.

Definition

A grievance is a concern or complaint raised by an individual or group affected by Eastern Mining's activities. Both concerns and complaints can result from either real or perceived impacts of a company's activities and may be filed in the same manner and handled with the same procedure. The grievance procedure should be used by everyone without concern or fear of retribution. According to the UN Guiding Principles on Business and Human Rights, the company's grievance mechanism has been developed in a way that is accessible, predictable, fair, transparent and based on inclusion and dialogue[5].

A grievance is not*:*

- A question, suggestion or general comment on the company or project; and/or
- An appeal or request for assistance.

These forms of feedback are also relevant to Eastern Mining and are currently being recorded at the Information Centre, but they should not be officially listed as grievances.

Process

The grievance mechanism process currently in place for Eastern Mining is presented in Figure 5.1. The process has multiple stages and levels of review as the grievance progresses. Nominally, this covers the following aspects:

- receiving and recording the grievance;
- inspection and investigation;
- response; and
- an appeal process.

[4] EBRD Performance Requirement 10: Information Disclosure and of information and Stakeholder Engagement
[5] UN Guiding Principles on Business and Human Rights

A grievance form (Figure 5.2) has been developed, requiring the following information:

- *Name;
- *Contact Details;
- *Age;
- *Gender;
- Title of Grievance;
- Location;
- Date and time of incident;
- Description;
- *Signature or stakeholder;
- Signature of Eastern Mining receiving employee; and
- Date logged.

If stakeholders choose to submit an anonymous complaint, the items marked with an asterisk will not be filled in.

A grievance logbook is established and only one grievance, linked to the work of contractors carrying out snow clearing, has been recorded as of May 2020. In the coming period, the complaint mechanism will be available on the company's website.

The grievance mechanism has now been rolled out across all closest communities through in person meetings and telephone calls, due to the C-19 restrictions. Community leaders have distributed information regarding the grievance mechanism and during household surveys, the implementation of the mechanism is checked and tested with community members. During the first session of the Public Liaison Committee, the members were also introduced to the grievance mechanism and copies of it were handed to them. The proposal is that if an anonymous complaint is filled, the answer to it will be submitted on the notice board of the local community where the complaint was filed and also, the representative of the local community will be informed. If the complaint is filed in another way (Info centre), the answer will be forwarded through other Eastern Mining's social channels, social media or newsletters.

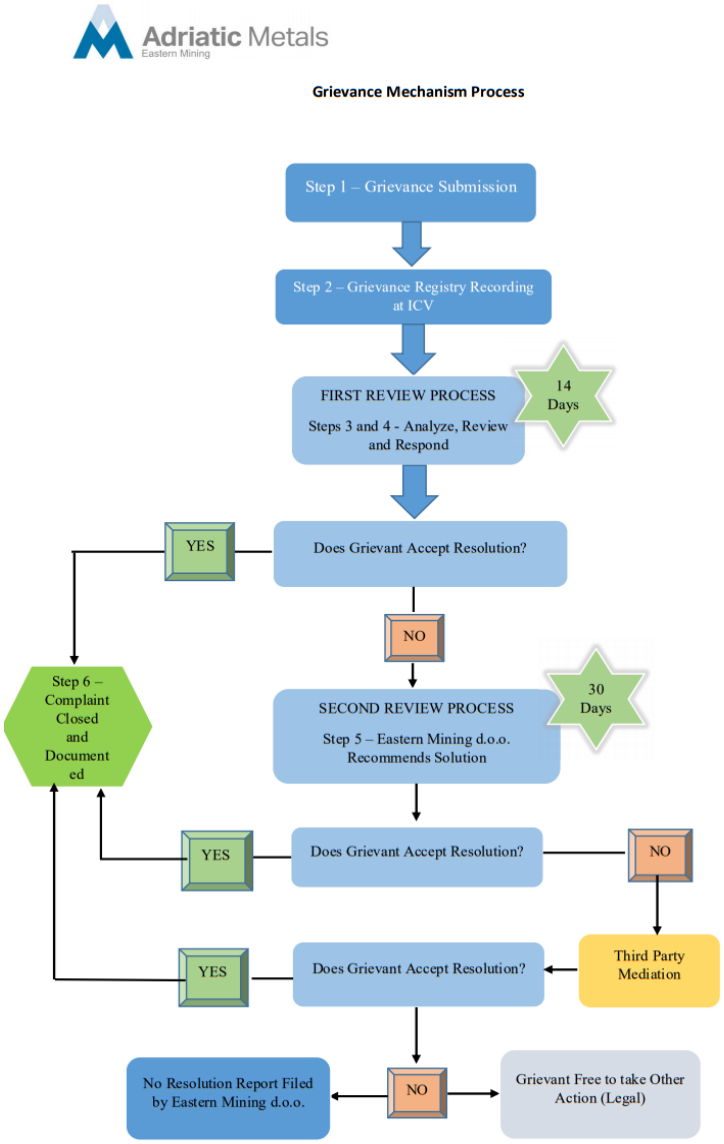

Figure 2.0 Grievance Mechanism Process

Adriatic Metals
Eastern Mining

Complaint form

If you want your complaint to be anonymous, please leave the fields marked with an asterisk empty.

*

NAME OF COMPLAINANT:

*

TEL NO:

*

AGE:

*

SEX

M

F

*

ADDRESS:

TOWN/COMMUNITY:

DETAILS OF COMPLAINT / INCIDENT

Complaint short title:

Date:

Place of incident:

STATEMENT/BRIEF DESCRIPTION

If insufficient space please write on seperate sheet, sign, date and attach to this form.

Signature (Complainant):

Date:

Signature (ICV Staff):

Date

6.15 Community Health, Safety and Security Management Plan

Eastern Mining has developed this plan to describe future actions to manage potential risks and impacts related to community health and safety. These risks and impacts will be managed throughout the Project, and in particular during construction.

The primary purpose of the Community Health, Safety and Security Management Plan is to:

- Identify possible health and safety risks in the communities affected by the Project, which have been addressed as part of the ESIA process;
- Implement mitigation measures for the identified impacts;
- Develop a plan and program for monitoring the identified risks and to respond to the identified risks in accordance with the guidelines of the legislation of Bosnia and Herzegovina and the best international standards;
- Provide a safe environment for community members, including vulnerable groups;
- Define the scope of the Management Plan, including the roles and responsibilities for its implementation;
- Establish continuous cooperation with the community and other participants with the aim of mitigating health and social conflicts in the community;
- Develop effective relationships with health care providers and work to improve their ability to respond to health risks and community needs.

In order for the Plan to be effective, it is necessary to ensure the implementation of targeted risk reduction prevention programs, with the implementation of effective monitoring and evaluation programs. The Community Health, Safety and Security Management Plan will apply to all activities undertaken during the construction, operation and closure of the Project.

This plan is in correlation with following management plans:

- Noise and vibrations management plan;

- Air quality and GHG management plan;

- Emergency preparedness and response management plan and

- Traffic management plan.

During the development of the baseline study, factors that may affect community health (public health) and safety were identified:

- Increased risk of traffic accidents, i.e., traffic injuries, especially on the haulage route in the northern part of Vares, at crossings and use of the main road;
- Environmental impacts on human health, in terms of air pollution and release of certain particles into the air as well as the effects of noise that will be the result of work activities;

- Potentially high levels of thallium and mercury in metallurgical testwork and potential pathways that could potentially contaminate water sources during project implementation.
- The Community Health, Safety and Security Management Plan aims to define future actions to manage potential risks and impacts related to community health and safety. These risks and impacts will be managed throughout the Project, and in particular during construction.

Project activities and potential impacts			
Project Activity	**Impact Pathway**	**Receptor**	**Impact Description**
Socioeconomic Impacts			
Construction: Project announcement and start of construction activities Operation: Operational Activities	The Project announcement could generate expectations of economic opportunities.	Economically active population Direct and indirect communities	**SE01 - Project-induced population immigration** Influx of local, regional, and international workforce, as well as unemployed population, may occur throughout different Project stages, increasing demand of local services, straining their access / availability, and potentially increasing tensions with local communities.
Construction: erecting of site fencing and start of heavy vehicle use Operations: Restricted access to working areas Closure: Restricted access until closure activities complete	Public access to the construction site will be limited by a perimeter fence and security booths. Project vehicles will use local roads.	Direct and indirect communities	**SE02 – Reduction of public access** The Project site will not be accessible to local public who may have used it previously (e.g. to traverse to other locations or for recreational hunting purposes). Includes reduction of access to informal swimming activities in the historic iron ore pit around which the haul road transport route is planned.
Construction and Operation: Use of security personnel on site	Security guards will be posted in the Project site to secure entrances.	Direct and indirect communities	**SE03 – Presence of security guards** Security personnel may interact with local communities and the potential use of excessive or disproportionate force may occur.
Construction: Start of heavy vehicle use and workforce vehicles	During construction activities, heavy vehicles and workforce commuting will use existing roads until a new road is built.	Local road users, Direct and indirect communities	**SE04 – Deterioration of existing public roads and increased traffic** Heavy vehicle use can deteriorate and damage existing roads. Their use will increase traffic and transport time for local land users.

Project activities and potential impacts			
Project Activity	**Impact Pathway**	**Receptor**	**Impact Description**
Construction: Increased population and vehicle use during construction of haul route. Operation: Increased population means more road users	Multi-use haul route and increased vehicles on existing roads due to immigration.	Local road users, Direct and indirect communities	**SE05 – Increased traffic** Workers' use of private vehicles can strain traffic loads, decrease availability of parking spaces and increase costs of vehicle-related services in the area.
Start of construction activities	Construction activities will require 208 workers on site, between skilled and unskilled labour. Local supplies will be procured.	Economically active population, General local businesses	**SE06 – Increased economic opportunities** Local employment could lead to increased income stability and a higher demand for specific professional skills. Supply chain growth may lead to higher demand for local goods and services giving way to indirect economic opportunities. These opportunities may incentivise young adults and sectors of the economically active population that had previously left in search of jobs to return to the Project area.
Operation and procurement	New workers are anticipated to work at the Project site. Project will require additional procurement of goods and services.	Project workforce, Economically active population	**SE07 – Diversification of economic opportunities** New direct and indirect jobs will be required during the mine operation, leading to a higher demand for skilled staff. As job transition occurs, the job sector might diversify, and local supply chain could become more specialized.
Construction, operation and closure	Payment of taxes and royalties	National, cantonal and Local governments, Economically active population, General local businesses, Direct communities	**SE08 – Macroeconomics** Positive impact from project royalties and taxes that will be paid at the state and cantonal level, and then distributed to the municipality level. Further economic impacts from Project, employee and contractor expenditures and employee tax contributions.
Construction: Project announcement and construction activities Operation:	Project activities will be undertaken in an area with historical mining activities and underutilised infrastructure.	Economically active population, General local businesses, Direct communities	**SE09 – Increased shared value and sense of place** The return of population, particularly those of working age, to the area and the reinvigoration of mining activities could have non-monetary beneficial effects. For example, the rehabilitation of unused infrastructure,

Project activities and potential impacts			
Project Activity	**Impact Pathway**	**Receptor**	**Impact Description**
Ongoing Project activities			restoration of shared community values (esteemed professions) and the continuation of a mining tradition which could reinforce community cohesion.
Operation: Use of newly constructed haul road	A new, unlit road will be built as an alternative road with public access.	Land road users, Local businesses	**SE10 – Increased public infrastructure** Road construction and road improvement activities will benefit local road users, decreasing traffic on existing roads and increasing access routes.
Mine closure	Workers will be laid-off progressively as operations cease.	Project workforce Direct communities Local businesses	**SE11 – Job losses** Workforce and staff members will be progressively laid-off as mine shuts operations. Economic dependency on mine activities may result in economic losses for local businesses and communities
Post-closure Rehabilitation	Rehabilitated areas and reuse for industrial facilities	Direct communities Local businesses	**SE12 – Disruption of place-based attachment** Potential unemployment, job transitions and the rehabilitation of Project areas and associated facilities may disrupt the sense of belonging for the community and increase the need for local businesses to diversify their sectoral services.

Potential effects identified during the impact assessment phase are included below.

Community Health, Safety and Humans Rights Impacts			
Project Activity	**Impact Pathway**	**Receptor**	**Impact Description**
Construction: Project announcement and construction activities Operation: Operational activities	Workers will be accommodated in, and commute from, local communities.	Project workforce, Direct and indirect communities	**CHR01 – Increase in communicable diseases** Workforce interactions could occur with local communities, potentially resulting in increased rates of communicable diseases such as Sexually Transmitted Infections (STIs), respiratory diseases and epidemics (COVID-19).
Construction: Project announcement and construction Activities Operation: Operational activities	Changes in consumption habits based on increased income.	Project workforce, Direct and indirect communities	**CHR02 – Increase in non-communicable diseases** Changes in habits affecting health performance (alcohol, smoking, drugs) and exacerbating risks of non-communicable diseases (hypertension, diabetes, strokes, cancer, among others).

Construction and Operational activities	Hiring practices and income gaps may result in unequal benefits. May affect working environment.	Project workforce, Direct communities, Local organizations	**CHR03 – Inequity and potential contribution to existing human rights issues** Potential biases in work and labor practices could limit the Project's ability to respect rights of minorities, freedom of movement, protection of the child, health, equality before the law and non-discrimination, as well as labor rights (e.g., freedom of association, child labor, forced labor).
Construction and Operational activities	Greater expendable income in existing households, change in consumption, and influx of workers	Project workforce, Direct communities, Local organizations	**CHR04 – Exacerbated conditions for GBVH** Paired with a population influx, greater expendable income and consumption of alcohol are linked to increased cases of domestic violence and GBVH.
Construction: earth works, storage of topsoils. Operation: ore extraction and waste management	Different environmental impacts felt by social receptors.	Project workforce, Direct communities	**CHR05 – Increased community exposure to pollution** Project workforce and community members may be exposed to potential air emissions, water and soil contamination, and hazardous substances, decreasing community health and safety conditions.
Construction and Operation: Use of security personnel on site	Security guards will be posted in the Project site to secure entrances.	Direct and indirect communities	**CHR06 – Security Conflict** Security personnel may interact with local communities and the potential use of excessive or disproportionate force may occur.
Construction and operational phases	Multi-use haul route and increased vehicles on existing roads due to in migration.	Local road users, direct and indirect communities	**CHR07 – Increased Road Traffic Accidents** Increased traffic and the dual use of the haul route will lead to an increased risk of road traffic accidents. A higher population will inevitably lead to more pedestrians posing greater risk to increased accidents.
Construction and Operation	Limited health facilities	Direct communities, indirect communities and employees and their families and dependents.	**CHR08 – Impact to local health services** An increased population and potential for mining related activities will lead to an increased strain on the already limited health care facilities in Vares.

6.16 Cultural Heritage Management Plan

Eastern Mining recognizes the importance of cultural heritage for present and future generations as a source of valuable scientific and historical information, a tool for economic and social development and as an integral part of the cultural identity and practice of the population. Eastern Mining aims to ensure all of the above to protect cultural heritage throughout the Project. In addition, the company recognizes the importance of complying with national and international laws and regulations relating to cultural heritage.

This management plan applies to all employees and contractors as well as subcontractors working for Eastern Mining, as well as all activities related to the company that covers the concession area of the project that deals with specific issues related to cultural heritage sites and their management.

The purpose of the Cultural Heritage Management Plan is to identify and document cultural heritage sites within the concession area and to develop measures for the preservation and protection of cultural heritage within the concession area.

Eastern Mining intends to conduct all its practices in accordance with international best practices, respecting the principles and policies of the European Bank for Reconstruction and Development (EBRD) and the International Finance Corporation (IFC).

The purpose of the Cultural Heritage Management Plan is to identify and document cultural heritage sites within the concession area and to develop measures for the preservation and protection of cultural heritage within the concession area.

This plan is intended to provide guidance and the necessary management tools and procedures to enable Eastern Mining and its contractors to meet these obligations.

The goals of the Cultural Heritage Management Plan are:

1. To protect both identified and unidentified cultural heritage from damage;

2. Appropriate management of cultural heritage, such as saving and preserving cultural heritage through efforts to ensure effective and open consultation with the local community;

3. Ensuring that local communities are informed about activities and responding quickly and efficiently to problems or complaints;

4. To provide an effective framework for monitoring, auditing and reporting to assess the effectiveness of implemented controls;

5. To define roles and responsibilities;

6. To list the required activities and measures for effective management of risks and impacts on cultural heritage;

7. Development of a mechanism for stakeholders related to cultural heritage and procedure of resolution, informing the local population about it;

The Cultural Heritage Management Plan considers Eastern Mining's general approach to cultural heritage management procedures and methodology.

6.16.1 CHANCE FINDS PROCEDURE

A chance Finds procedure has been developed. This applies to all Eastern Mining employees, visitors, contractors and subcontractors. This procedure describes the steps to be taken in the event of accidental discovery of a cultural heritage site during the undertaking of Eastern Mining activities. A Chance Finds procedure is a project-specific procedure that describes the actions that the company needs in case cultural heritage resources, especially archaeological resources, are encountered during the construction or operation of the project which are previously unknown. The procedure, as described in the IFC Performance Standard 8 and the EBRD Performance Requirement 8, is a procedure that prevents accidental findings from being interfered with until an assessment by a competent professional is performed and actions are performed in accordance with the requirements.

If any person discovers a physical cultural resource, such as (but not limited to) archaeological sites, historical sites, remains and objects, or a cemetery and / or individual tombs during excavation or construction, they should take the following steps:

1. Stop all work near the site until solutions are found to preserve these artifacts or obtain some advice from the relevant authorities;
2. Immediately inform the environmental and social manager who will inform the competent institutions;
3. Make an Incident Report and photograph the worksite;
4. Demarcate the discovered place or area; secure the worksite to prevent any damage or loss of portable items;
5. Decisions on the manner of handling the site shall be made by the competent institutions. This may include changes in appearance (for example, when immovable remains of cultural or archaeological significance are found) conservation, preservation, restoration and rescue; and
6. Work may be resumed only after the issuance of approval or a permit by the competent institutions.

One of the main requirements of the procedure is reporting. All sites must be registered. A photo log, copies of communications with decision-making authorities, conclusions and recommendations / guidelines, implementation reports may all be necessary, depending on the archaeological or cultural heritage significance of the find.

6.17 Traffic Management Plan

During the construction phase, the existing roads will be used initially to access the Rupice mine site and VPP, but the works also include the upgrade of sections of the proposed haul route and the construction of new sections. Haul trucks with a carrying capacity of up to 30 tonnes will transport the ore and waste material 24.5km between the processing plant and Rupice Mine area. The route will also be used for the transport of workers, supplies such as diesel and consumables, service vehicles and maintenance equipment. The road, designed to be a gravel road with some surfaced sections, will be maintained on an ongoing basis. The road will be designed by a local engineering group and constructed and maintained by local contractors. This will include ongoing maintenance and keeping the route clear in winter conditions.

The haul route has been designed to avoid communities as far as possible, particularly in the stretch from Vareš town to Rupice. Whilst it will be a publicly accessible route, signage will be installed to advise users of the heavy vehicles using the road. The route of the road passes through the following cadastral municipalities: Borovica, Pogar, Dragovici, Vares, Mir and KO Przici. The route is divided into two sections (not contiguous), the newly designed section of the route is approx. 15.5 km and a section on existing roads of approx. 9.5 km. A certain part of the route which follows the existing roads will need to be rehabilitated and widened in order to accommodate the passage of freight trucks in both directions. The calculated speed for the newly designed road is 30 km / h.

The phases of the project will depend on the haul route for the transportation of construction materials, explosives and transport of the workforce as well operating of a multitude of heavy construction phase vehicles in a relatively short time frame. Transport of construction materials from project sites and local suppliers will take place on the existing road network, which includes gravel roads (e.g the route between Vares and Tuzla). The purpose of the Traffic Management Plan is to implement the mitigation measures identified in the impact assessment, meet the requirements of applicable legislation and standards, set roles and responsibilities, identify transport routes and implement safety measures on these routes, list measures for on-site traffic management, provide training requirements for drivers and workers and monitor compliance with the plan and outcomes arising from this.

Increased traffic volumes and presence of heavy vehicles on the roads were evaluated as a potential impact, based on planned activities. However, unplanned events such as road accidents could occur involving the transportation of construction materials and machinery on roads which will also be used by private users. Increased risks could occur on the route for extraction of materials / waste in the northern part of Vareš, at crossings and uses of the main road. Larger volumes of traffic could increase land road users' risks, resulting in:

- Unintended vehicle collisions resulting in injuries and fatalities;
- Spills of hazardous materials or hazardous waste;
- Public and private asset loss or damage;

- Collisions with local people or animals in crossing areas or in case of lack of crossing points, pavements or traffic signs.

In addition, noise and vibrations resulting from supply trucks associated with the development, in the form of traffic on public roads, may also affect ambient noise and vibration levels in the vicinity of existing receptors. Heavy plant and haul trucks will access the site via the public road traffic network, they will stay within the site area for the lifetime of the project. Any subsequent effects on ambient noise levels in the vicinity of the public road network will occur over a short period of time during the setup and decommissioning of the mine.

It is assumed that the movement of light vehicles, used for the transportation of supplies and site staff along public roads will be restricted to daytime hours for safety reasons.

Soil mounds constructed adjacent to haul roads could be located to provide additional noise attenuation between the haul trucks and the nearest community; this will be incorporated into the design of the road.

Potential air quality emissions considerations relating to traffic are categorised as:

Fugitive dust: Particulate matter generated from material transport and handling and unpaved road traffic. The erosive action of vehicle traffic on haul roads is considered to be a significant potential source of dust as the mechanical action of wheels on the road surface causes dust lying on the road surface to be thrown up and become entrained in a moving airflow. The deposition of this dust is dependent on the particle size and meteorological conditions. The erosivity of unsealed haul roads depends on the number and size of wheels, vehicle speeds and the moisture content of the surface material.

Additional dust control measures will be systematically utilised by the Project during construction and operations, as set out in the AQMP; and include:

Road control programmes – Appropriate dust suppression techniques will be undertaken, including spraying roads/vegetation with water and/or application of stabilising agents suchas salt (winter), gravel, or environmentally inert chemicals, as appropriate. In addition, adequate equipment and personnel will be supplied to maintain road surfaces to control dust on the haul and access roads.

Speed and off-road restrictions – Establishing and enforcing Project safety rules, including the posting and enforcement of speed limits on Project haul and access roads and restricting off-road travel to the maximum practical extent will limit the potential for additional fugitive dust emissions, as well as public safety hazards. Those employees whose jobs include driving as well as haulage contractors will be advised of the safety rules and that driving off established roadways is not allowed. Instruction on driving safety and observation of speed limits will be included in the new employee orientation and annual refresher training and in task training for specific job assignment.

7 COMPETENCY, TRAINING AND AWARENESS

Eastern Mining will ensure that any persons performing tasks that have the potential to cause a significant environmental effect to have appropriate education, training or experience, and retain associated records of such. Eastern Mining will identify training needs associated with its ESIA and the ESMS and will provide training or take other action to meet these needs and retain associated records.

Eastern Mining will establish, implement, and maintain procedures to make persons working for it or on its behalf aware of:

- the importance of conformity with the environmental and social policy and procedures and with the requirements of the ESMS.
- the significant environmental and social aspects and related potential environmental and social effects associated with their work, and the benefits of improved personal performance.
- their roles and responsibilities in achieving conformity with the requirements of the ESMS; and
- the potential consequences of departure from specified procedures.

8 MONITORING AND REVIEW

Monitoring, reporting and review of all management plans is a key component of Eastern Mining ESMS. Environmental and social monitoring will be a normal component of project monitoring and evaluation. Project monitoring will be carried out to ensure mitigation measures as contained in approved project environmental and social management plans, emergency response and health and safety plans are adequate, effective and are working.

Environmental and social performance monitoring will be mainstreamed in Eastern Mining operations and all phases of project cycle.

ESMS and its attendant plans are living documents that will be reviewed and updated regularly during all phases of the Project. Together, the Vares Project Environmental and Social Management System and its supporting plans and procedures are designed to provide an appropriate level of detail and control that addresses Eastern Mining project environmental and social impacts, regulatory compliance requirements, stakeholder interests, and other practical environmental and social management issues associated with Vares project.

Responsibility for monitoring of project activities will be shared between contractors and their subcontractors, H&S and Eastern Mining Environmental and Social Management team. For infrastructure type interventions, contractors and their sub-contractors will develop an internal monitoring and auditing system to monitor the implementation of all approved environmental, social, health and safety management plans and report to Eastern Mining Environmental and Social Manger.