

Chapter 7 – Environmental and Social Management

Vares Polymetallic Mine ESIA Final V1.0







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### 7 ENVIRONMENTAL AND SOCIAL MANAGEMENT

#### 7.1 Overview

This chapter of the ESIA describes how the Vares Project proposes to manage the environmental and social impacts and risks across the life of mine, as identified in Chapter 5. Adriatic Metals are currently developing their Environmental and Social Management System (ESMS), which will detail the proposed management and monitoring programme, and set out the method for implementation. This chapter summarises the contents of the ESMS.

Environmental and Social management measures cover the following Project components and activities:

- Construction of all project components including Vares Processing Plant, Rail head facility, haul route, Rupice declines and surface infrastructure.
- Rupice:
  - Dewatering for underground mining;
  - Underground mining activities;
  - Haulage of ore and waste to surface;
  - Crushing circuit;
  - Waste Rock Stockpile and Run-of-mine stockpiling;
  - Water and storm water management;
  - Backfill Plant;
- Haul Route:
  - Haulage of ore from Rupice to Vares Processing Plant (VPP);
  - Haulage of tailings from VPP to Rupice for backfill;
  - Haulage of tailings from VPP to drystack Tailings Storage Facility (TSF);
  - Haulage of final products to Droscovac rail head;
- Vares Processing Plant;
  - Crushing and grinding circuit;
  - Flotation;
  - Product handling and loading;
  - Drystack TSF.
- Closure activities across Rupice and Vares Processing Plant; and
- Post-closure monitoring.

### 7.2 Environmental and Social Management System

A management system is a set of policies, tools, procedures, and internal capacity to manage the environmental and social risks of the Project. A management system aids in assessing and controlling risks. A management system should be fit for purpose and designed to meet performance standards that are relevant to the Project and potential Project lenders or shareholders, such as the EBRD.



EBRD PR1 requires Adriatic Metals to develop and maintain an ESMS appropriate to the nature and scale of the Project and commensurate with the level of its environmental and social impacts and issues in line with GIIP. The management for the Vares Project therefore requires: (i) Environmental and Social Policies; (ii) Identification of risks and impacts (ESIA and wider project risk assessment); (iii) Environmental and Social Management Plan(s); (iv) Organisational capacity and commitment; (v) Supply Chain Management and (vi) Monitoring and review.

Adriatic Metals are committed to establishing an ESMS for the Vares Project in line with BiH legislation and the following guidelines and standards:

- EBRD Environmental and Social Policy, including Performance Requirements;
- ISO 14001 Environmental management systems;
- The UN Guiding Principles on Business and Human Rights;
- The ILO core labour conventions (those which deal with freedom of association; collective bargaining; the abolition of child labour; disavowal of forced and compulsory work; and the elimination of discrimination in respect of employment and occupations);
- The UK Bribery Act;
- The UK Modern Slavery Act; and
- The Voluntary Principles on Security and Human Rights.

The ESMS is currently in development and will take into account the findings of the ESIA and the resulting requirements for implementation and management of mitigation and monitoring. Key elements are defined in this chapter. Continual improvement of the ESMS will be undertaken throughout construction and the life of mine. The implementation of the ESMS will aim to minimise and mitigate potential environmental and social effects whilst simultaneously promoting health, safety, social and environmental standards of the BiH regulatory agencies and applicated international lending institutions.

The effectiveness and appropriateness of the ESMS will be regularly reviewed by the ESG committee and reported on at quarterly meetings, in accordance with the ESG committee charter.

The planning phase of the ESMS includes:

- Periodic review of applicable laws, regulation, policies and guidelines;
- Identification of any existing environmental and social baseline conditions and anticipated impacts identified within the IA;
- Definition of required mitigation and management to limit significant impacts;
- Definition of ongoing monitoring requirements;
- Definition of internal performance criteria;
- Development of community development initiatives to beneficially contribute to the long-term sustainability of local communities;
- Establishment of health, safety, environment and community targets;



- Establishment of monitoring programmes including data management systems and reporting;
- Identification of internal and external resourcing needs, roles, responsibilities, and chains of command required to deliver the provisions of the ESMS;
- Training programmes; and
- Implementation schedule and budget.

The ESMS will require continual reviewing and updating as the final configuration of the operation is designed in detail.

## 7.3 Environmental and Social Policy

A number of corporate policies relating to Environmental, Social and Governance have been developed and implemented by Adriatic Metals<sup>1</sup>. These policies are available on the Adriatic Metals website and form part of this ESIA package. In summary these policies include:

- Environment Policy;
- Social Performance and Community Policy;
- Procurement Policy;
- Modern Slavery Statement;
- Human Resources Policy;
- Health & Safety Policy;
- Human Rights Policy;
- Climate Change Policy;
- Trading policy and Dealing Code and
- Anti-Bribery & Corruption Policy.

## 7.4 Environmental and Social Management Plan

### 7.4.1 Management Plans

A set of Management Plans covering environmental and social aspects have been developed for the Project, these cover the construction period in detail, and will be updated to cover the operational period in detail, once construction is nearing completion. Environmental and Social Management for closure is covered in high level in both the Conceptual Mine Closure Plan as well as in topic specific management Plans. Nearing the end of operations these plans will be updated to describe detailed closure requirements. The management plans developed for the Project are as follows:

- Health and Safety Management Plan;
- Human Resources Management Plan (Workforce operational Manual);
- Air Quality and GHG Management Plan;

<sup>&</sup>lt;sup>1</sup> <u>https://www.adriaticmetals.com/corporate-governance/</u>



- Noise and Vibration Management Plan;
- Traffic Management Plan;
- Soils, Contaminated Land and Erosion Control Management Plan;
- Hazardous Materials Management Plan;
- Waste and Hazardous Waste Management Plan;
- Surface Mineral Waste Disposal Plan;
- Cultural Heritage Management Plan with Chance Finds Procedure;
- Community, Health, Safety and Security Management Plan;
- Contractor Environmental Management Plan;
- Land Acquisition, Compensation and Livelihood Restoration Plan;
- Biodiversity Action Plan;
- Water and Waste-water Management Plan;
- Stakeholder Engagement Plan;
- Emergency Preparedness and Response Plan and
- Conceptual Mine Closure Plan.

Adriatic Metals are responsible for ensuring that the implementation of the aforementioned management plans and monitoring strategies is effective across the life of the mine. Suitable staff, equipment, reporting mechanisms and financial resources will be necessary to implement the ESMS. The Management Plans are a part of the ESIA package and will be incorporated into the ESMS.

Many of the plans require activities to be carried out in a certain order, or a certain way, in order to achieve the impact elimination/reduction/mitigation. These will be carefully reviewed and incorporated into the various construction contracts, as the activities will be carried out by third parties not Adriatic themselves. This will be achieved through specific contract clauses, and in the case of key contracts, the requirement for contractors to have their own ESMS and/or develop site specific Environmental Management Plans. In the case of less experienced local contractors, Adriatic will provide support in developing these plans.

All management plans are "live" documents meaning they will be under continuous review to ensure items are implemented within the required time frame, and prior to certain activities occurring on site. All management plans will be reviewed no less than annually, or when any material changes to the Project or project related activities are realised.

The Biodiversity Action Plan required continuous review to ensure its activities are implemented in a timely manner. Partial implementation of the BAP is required prior to the commencement of construction as several actions will need to be complete before some earth works and site preparation activities can take place. This relates particularly to offset feasibility and commitments.



### 7.5 Organisational Capacity and Commitment

An Environmental, Social and Governance (ESG) Committee has been established 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 policies 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<sup>2</sup>.

The Implementation, management and monitoring of the ESMS will be the responsibility of the Environmental and Social Manager for the Vares Project, who reports directly to the General Manager for the Project. The Environmental team on site comprises several environmental technicians who have the day-to-day responsibility of ensuring that the actions of the ESMS are implemented. The social team is lead by a Coordinator for Social Management, who is supported by staff at the Vares Information Centre, and an external Human Resources company. The specific duties of the Environmental and Social team include:

- Compliance with legal and permitting requirements for the Project, in regard to environmental and social aspects;
- Compliance with international best practice requirements, including EBRD's Environmental and Social Policy (2019);
- Ensuring the implementation of the ESMS throughout the life of the Project;
- Development, Review and implementation of construction and operational management plans;
- Review, oversight and implementation of the ESIA;
- Ensuring that employees and contractors receive required training on the ESMS and specific ESMS aspects, as appropriate;
- Reporting to the Board and the ESG Committee on E&S performance;
- Monitoring and Reporting on the ESMS activities;
- Operate within and promote Adriatic's core values and ESG strategy
- Be the main point of contact for ESG-related initiatives within the company; working and aligning closely with senior leadership (and participating in relevant ESG committee meetings) to develop and implement new ESG policies and action plans
- Act as a catalyst for positive change on key ESG themes, including community relations, water issues, tailings management and transparency
- Drive improvements in ESG and overall sustainability performance
- Provide material and insights in support of developing external communications for Investor Relations and leadership engagements
- Manage relationships on ESG issues with relevant external bodies

<sup>&</sup>lt;sup>2</sup> Adriatic Metals Environmental, Social & Governance Committee Charter



- Drive the implementation of Adriatic's ESG strategy in coordination with senior leadership, relevant departments and third-party providers
- Develop metrics and related KPIs/targets to monitor and improve ESG performance across the company
- Collect and analyse ESG data at the asset and corporate levels
- Develop a strategy for the company's engagements with community, relevant international organisations and civil society
- Lead community and civil society engagement
- Plan and oversee social investment and, working together with other managers, promote local hiring and procurement
- Develop relationships with internal stakeholders to support the further integration of ESG in Adriatic's operations and strategic decision-making
- Support communications and investor relations in developing relevant content, including for publishing on Adriatic's external communication channels (website, social media, etc.)
- Monitor ESG trends, standards and initiatives on an ongoing basis

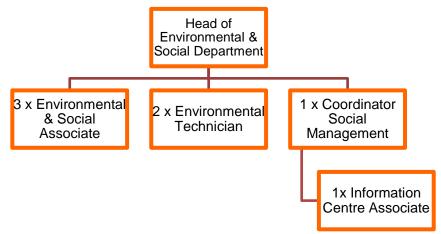


Figure 7.1: Environmental and Social Team Organogram

### 7.6 Supply Chain Management

Adriatic Metals' Procurement Vision definition is "sustainable, responsible local procurement that builds a lasting positive legacy and directly contributes to a robust supply chain and the economic and social development of the communities and countries in the region."

A dedicated procurement team is established for the Project to undertake supply chain and local procurement management. Procurement standards describe how Adriatic Metals purchase goods and services and define the roles and responsibilities for cooperation between the procurement team, business partners and Adriatic Metals' suppliers. The standards are based on corporate values, strategies, and policies with the aim to harmonize processes, systems and tools and to ensure compliant procurement work within Adriatic Metals and its subsidiaries.



Adriatic Metals is committed to:

- complying with all applicable legal requirements and other rules, codes and standards to which they subscribe;
- conducting due diligence to assess environmental and social risks related to the supply chain, monitoring these risks on an ongoing basis, and implementing measures, such as working with supply chain providers as relevant, to avoid or mitigate possible or identified risks;
- monitoring all suppliers to ensure compliance with the Company's Code of Conduct, Anti-Bribery and Anti-Corruption Policies;
- Endeavouring to minimise the barriers to participation in procurement activities for small and medium-sized enterprises (SMEs) by simplifying processes, ensuring that baskets of goods and services are not packaged in such a way as to make them only accessible to large companies and accommodating SME needs in payment terms to the extent possible;
- developing outreach processes to communicate procurement needs and opportunities and support local suppliers to build capacity and to compete for suitable contracts including supporting them to complete the contract process;
- considering investment in potential local suppliers where these are likely, as a result, to be competitive and sustainable;
- engaging with external stakeholders on supply chain opportunities and commitments, and publicly reporting on performance; and
- monitoring compliance with this Policy and the suitability of supporting standards and strategies, and reporting internally and externally on the progress of local procurement.

All suppliers will go through a pre-qualification stage covering the following aspects: Anti-Bribery & Corruption; ESG (Environmental, Social & Governance); Supplier Code of Conduct; Human Rights and Modern Slavery; and Health and Safety.

Two types of due diligence will be conducted through procurement process:

- Third party due diligence where Adriatic Metals will analyse the supplier and confirm that they will meet Adriatic Metals requirements prior to entering an agreement. This helps identify risk and determine if supplier meets the strategic, ethical and financial goals of the business.
- Ongoing Due Diligence is a part of contractor management and presents continued monitoring of the supplier. The frequency will be dependent on the criticality and risk level of the related supplier, but ongoing due diligence will be performed on all potential suppliers.

Adriatic Metals will work with suppliers throughout all stages of the procurement process. This will include regular communications and supplier relations meetings, capacity-building and assistance for start-up companies in the local area, and for suppliers to gain recognised accreditations where relevant.



### 7.7 Contractor Management

Contractors will be engaged to undertake mining and hauling activities for the Vares Project. Contractors will go through a tendering process as laid out in Figure 7.2.

All Adriatic Metals procurement activities will be regularly reviewed by Internal Audit and will be measured against the procurement governance principles. The procurement governance follows three major principles:

- Applied 'segregation of duties' and 'four-eye principle'
- Available process definition together with clear allocation of roles and responsibilities
- Consistent, transparent and archived documentation of the deliverables of the process steps.

To facilitate compliance with these major principles, the Matrix Procurement flowchart is presented in Figure 7.2. Note that ongoing monitoring throughout the period of the contract will be undertaken to ensure continued alignment with the policies and procedures of Adriatic Metals.



Procurement process flow

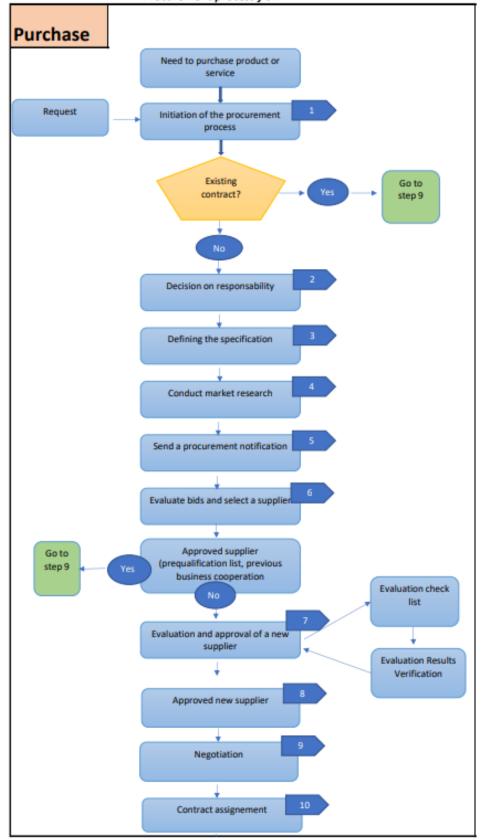


Figure 7.2: Procurement Matrix Flowchart



In regard to environmental and social aspects, a checklist has been developed (Table 7.1) that will need to be covered by all contracts for the Project. These aspects will be screened during the tendering process.

|               |                                                                                                                                                                                                                                                                    | of ESG topics to be covered in Adriatic Contracts                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|               | Торіс                                                                                                                                                                                                                                                              | Desired outcome/control objective                                                                                                                                                                                                                                                                                                                                                                                                                             |
|               | ESMS and EMP                                                                                                                                                                                                                                                       | Establishment of an ESMS if required and development of an EMP linked to project ESIA and ESMS commitments, permit conditions, national regulations                                                                                                                                                                                                                                                                                                           |
|               | Policy framework                                                                                                                                                                                                                                                   | Adherence to Adriatic policies and EBRD Performance<br>Requirements, ESAP requirements.<br>Deliver against Adriatic's commitments register                                                                                                                                                                                                                                                                                                                    |
| hing          | Coordination with<br>Adriatic                                                                                                                                                                                                                                      | <ul> <li>Contractor to appoint coordinator with responsibility for ESG;</li> <li>Provision for regular coordination meetings to be convened by<br/>Adriatic;</li> <li>Agree reporting lines and times to Adriatic in case of ESG incident,<br/>according to severity of incident;</li> <li>Ensure joint plans produced in preparation for when the project is<br/>going through a change that may have intrusive impacts for<br/>community members</li> </ul> |
| Overarching   | Monitoring                                                                                                                                                                                                                                                         | Environmental performance monitoring with regular reporting,<br>feedback and review of performance and of non-conformances;<br>Key environmental parameters to be monitored                                                                                                                                                                                                                                                                                   |
|               | Staff induction and briefing arrangements                                                                                                                                                                                                                          | <ul> <li>HSE coordinator to communicate policies and requirements to workforce;</li> <li>Mandatory attendance at key training sessions and refresher training as required;</li> <li>Weekly workforce HSE meetings (and special ad hoc briefing sessions)</li> <li>Attendance registers to be maintained and included in reporting to Adriatic</li> </ul>                                                                                                      |
|               | Reporting on performance and targets                                                                                                                                                                                                                               | Monthly reporting on safety and environmental indicators                                                                                                                                                                                                                                                                                                                                                                                                      |
|               | Subcontractor management                                                                                                                                                                                                                                           | Require subcontractors to adhere to the same requirements and monitor their performance                                                                                                                                                                                                                                                                                                                                                                       |
| Environmental | Water use, waste water<br>treatment and storm<br>water management,<br>prevention of impacts to<br>water courses.<br>Biodiversity<br>Soils<br>Energy use, fuel use and<br>emissions<br>Noise levels, light and<br>dust control<br>Waste management and<br>recycling | Adhere to project design principles and engineering designs for<br>mitigation measures, in line with Adriatic's ESIA and ESMP;<br>Compliance with all permit conditions;<br>Monitor and report resource use (water, energy, fuel etc.) and<br>quantities of waste generated.                                                                                                                                                                                  |
|               | Risk assessment,<br>Emergency preparedness<br>and response                                                                                                                                                                                                         | Undertake a project specific risk assessment in collaboration with<br>Adriatic;<br>Develop, staff and implement specific Emergency Preparedness<br>and Response plans relating to contract activities, in collaboration<br>with Adriatic and local emergency services                                                                                                                                                                                         |



| Table 7.1: Checklist of ESG topics to be covered in Adriatic Contracts                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| Торіс                                                                                                                                                                                             | Desired outcome/control objective                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |  |
| Land access and remediation of damage to local infrastructure                                                                                                                                     | Follow Adriatic's ground clearance procedure before work starts<br>in any area.<br>Report and remediate any damage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |
| Local employment and training                                                                                                                                                                     | Contractor to work with Adriatic to identify and recruit local<br>workers to agreed targets. Need to specify pre-employment<br>training programmes (potentially through government agency<br>and/or education institution)<br>Commit to 'localise' the workforce over time if suitably qualified<br>candidates cannot be found at the start of the contract [there<br>could be a time limit on this, e.g. within 4 years, 95% of the<br>workforce should be Bosnian]                                                                                                                                                                                                                                                      |  |  |  |
| Local procurement                                                                                                                                                                                 | Contractor to work with Adriatic to identify options and procure<br>locally according to agreed targets, using pre-qualified providers<br>of goods and services where feasible;<br>Establish a pro-active approach to SME capacity building;<br>Where feasible use pre-qualified providers of goods and services.                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |  |
| Working conditions and<br>labour rights (e.g.<br>working hours,<br>harassment and<br>discrimination, child<br>labour, GBV etc.,<br>conformance with<br>Bosnian employment<br>laws and wage rates) | Adherence to Adriatic policies and national regulations;<br>In particular, workers will be allowed access to Adriatic's worker<br>grievance mechanism and whistleblower procedure as well as any<br>mechanism set up by the contractor.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |
| Community interactions                                                                                                                                                                            | Stakeholder engagement to be led and authorised by Adriatic;<br>Contractor personnel to receive training on stakeholder<br>interactions including key messages;<br>Contribute to community briefings/interactions as requested;<br>Social investment to be undertaken primarily by the Adriatic<br>Foundation but contractor contributions (financial or in kind) are<br>encouraged and will be agreed between the contractor and<br>Adriatic Foundation                                                                                                                                                                                                                                                                  |  |  |  |
| Community health and<br>safety including traffic<br>management/road safety                                                                                                                        | As per Adriatic's ESIA.<br>Adherence to Adriatic policies and management system;<br>Negotiate terms of access to clinics and community health care<br>and ambulance facilities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |
| Security provision                                                                                                                                                                                | Adherence to Adriatic policies and local regulation and adherence to Voluntary Principles on Security and Human Rights                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |
| Cultural heritage and<br>chance finds approach                                                                                                                                                    | Compliance with the Adriatic Chance Finds Procedure.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |  |
| Worker accommodation arrangements                                                                                                                                                                 | As per <u>EBRD/IFC</u> Guidelines                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |  |
| Occupational health and safety                                                                                                                                                                    | Adherence to local OH requirements;<br>Project-specific OHSMP to be provided and implemented.<br>(including accidents/incidents response, recording and reporting<br>procedures);<br>Implementation of a project specific Health and Safety<br>Management System                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |  |
|                                                                                                                                                                                                   | Topic         Land access and         remediation of damage         to local infrastructure         Local employment and         training         Local procurement         Working conditions and         labour rights (e.g.         working hours,         harassment and         discrimination, child         labour, GBV etc.,         conformance with         Bosnian employment         laws and wage rates)         Community interactions         Community interactions         Community health and         safety including traffic         management/road safety         Security provision         Cultural heritage and         chance finds approach         Worker accommodation         arrangements |  |  |  |



|         | Table 7.1: Checklist of ESG topics to be covered in Adriatic Contracts |                                                                                                                    |  |  |
|---------|------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|--|--|
|         | Торіс                                                                  | Desired outcome/control objective                                                                                  |  |  |
| a       | Anti-bribery and<br>corruption                                         | Adherence to Adriatic's code of conduct/policies, including<br>induction of all appropriate employees              |  |  |
| ernance | Code of conduct                                                        | Adherence to Adriatic's code of conduct including induction for<br>ALL contractor staff                            |  |  |
| Governa | Interactions with<br>regulatory authorities                            | Coordinate these with Adriatic                                                                                     |  |  |
|         | Legal conformance                                                      | Compliance with all applicable local and national regulations and identified international best practice standards |  |  |

### 7.8 Monitoring and Reporting

#### 7.8.1 Overview of Monitoring

Following the baseline monitoring period, environmental and social monitoring will be undertaken throughout all phases of the Project as follows:

- Construction: Routine monitoring including visual inspections and oversight of contractor activities;
- Operations: monitoring for environmental compliance, and occupational and community health and safety. Routine monitoring of operations and the conduct of personnel through visual inspections and oversight, monitoring of key environmental parameters such as air quality, water quality, noise and biodiversity aspects;
- Social Monitoring: Monitoring of grievances and feedback from project affected persons.
- Employment and Procurement Monitoring: Oversight and monitoring of the implementation of the local procurement and employment strategies.
- Closure and post-closure monitoring: ambient and emissions monitoring during earth works and activities for closure/rehabilitation. Post-closure monitoring of the baseline conditions for contaminants and environmental condition (slope stability, soils, vegetation cover and resilience, water quality).

Monitoring programmes for each environmental discipline are defined in the relative management plans, as listed in Section 7.1, and summarised below.



## 7.8.2 Monitoring Activities

Monitoring for different environmental disciplines will be undertaken at identified discharge points and in select locations away from Project activities, to continue measuring ambient conditions.

|                               | Table 7.2: Summary of Ongoing Monitoring Required                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Environmental                 | Description of required monitoring                                                                                                                                                                                                                                                                                                                                                                                                  |
| Discipline                    |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Soil                          | Visual monitoring of erosion on slopes where tree removal has occurred. Visual monitoring of soil stockpiles for revegetation, erosion and degradation.<br>Monitoring of stored soils for erosion and weed encroachment ahead of reinstatement.<br>5 yearly sampling and assessments of soils in key locations and those that are at increased risk of contamination (including VPP and downhill of the Tailings Storage Facility). |
| Noise                         | 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 relevant locations.                                                                                                                                                   |
| Air Quality and GHG           | Scheduled routine visual inspections during construction and operation to assess the effectiveness of dust suppression activities.<br>Continuous monitoring of NO <sub>x</sub> and SO <sub>x</sub> through Gradko tubes and dust through                                                                                                                                                                                            |
|                               | frisbee gauges and sticky pads. Monitoring locations selected at closest sensitive receptors on haul route and VPP, as well as ambient monitoring in Vares and Borovica. Existing air quality monitoring stations/locations to be utilised where possible.                                                                                                                                                                          |
|                               | Periodic deployment of a mobile air quality monitoring station for particulates (PM10 and PM2.5) quarterly, subject to review of results.                                                                                                                                                                                                                                                                                           |
|                               | Monitoring and recording electricity and fuel use across project sites.                                                                                                                                                                                                                                                                                                                                                             |
| Hydrology and<br>Hydrogeology | Visual monitoring: scheduled regular inspections of machinery and equipment for<br>any leakages. Visual inspections of surface water for sediments or visual changes in<br>quality.                                                                                                                                                                                                                                                 |
|                               | Continuous surface water level and flow and groundwater level monitoring around<br>the site and wider river basin (Borovicki, Vruci Potok, Mala and Bukovica)<br>catchments.                                                                                                                                                                                                                                                        |
|                               | Periodic surface and ground water quality monitoring (monthly and quarterly respectively)_                                                                                                                                                                                                                                                                                                                                          |
|                               | Groundwater level monitoring within the underground mine area, local springs and wells, and seepage monitoring, as per the Water and Waste Water Management Plan.                                                                                                                                                                                                                                                                   |
|                               | Periodic monitoring of springs and wells (levels, flows and quality) utilised by residents of Borovica.                                                                                                                                                                                                                                                                                                                             |
| Diadivaraity                  | Existing monitoring points to be utilised.                                                                                                                                                                                                                                                                                                                                                                                          |
| Biodiversity                  | Monitoring and continuous review of the Biodiversity Action Plan and how this is being implemented across the Life of Mine.                                                                                                                                                                                                                                                                                                         |
|                               | Monitoring of any bare areas and revegetated areas to avoid accidental introduction                                                                                                                                                                                                                                                                                                                                                 |
|                               | of invasive species and annual monitoring for any new growth of Japanese                                                                                                                                                                                                                                                                                                                                                            |
|                               | knotweed, and in rehabilitated areas, monitor revegetation success particularly the                                                                                                                                                                                                                                                                                                                                                 |
|                               | establishment of tree seedlings                                                                                                                                                                                                                                                                                                                                                                                                     |
|                               | New/restored amphibian breeding habitat alongside suitable terrestrial habitat will                                                                                                                                                                                                                                                                                                                                                 |
|                               | be monitored to ensure colonisation is successful and will enable any remedial                                                                                                                                                                                                                                                                                                                                                      |
|                               | actions to be undertaken to ensure a positive outcome. An ecological clerk of works                                                                                                                                                                                                                                                                                                                                                 |
|                               | will be present during construction to oversee this aspect, as well as all other land                                                                                                                                                                                                                                                                                                                                               |



| nmary of Ongoing Monitoring Required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| required monitoring                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| construction activities, as detailed in the Biodiversity Action Plan.<br>ing of river restoration and pond creation schemes will ensure<br>ing mitigation is successful.<br>oring of water quality in rivers housing populations of White clawed<br>onitoring on haul route during construction and periodically during<br>il period. Monitoring should be undertaken at potential mammal<br>as well as at as well as Sajnovicki Kamen and Grcki Kamen.<br>ing of habitats and flora adjacent to haul route for signs of dust<br>any associated damage.<br>habitat quality in areas designated for offset and biodiversity net gain<br>eadow).                                                                                                                                                                                                                                                                                                                                                                     |
| ocial indicators annually, including:<br>employment statistics for the Project and contractors. This should<br>t the number of employees from Vares Municipality, Zenica-Doboj<br>n and from BiH.<br>workforce statistics;<br>mentation of the local procurement strategy through procurement of<br>and services and number of local companies engaged and pre-<br>ed to act as Adriatic suppliers;<br>al socioeconomic parameters including livelihood, income, cost of<br>food security, access to services, infrastructure conditions,<br>graphic trends and changes for all key communities;<br>ies and effectiveness of the Adriatic Foundation;<br>ies of the municipal council and how and with what level of<br>veness tax and royalty money may have been spent and levels of<br>satisfaction with such projects;<br>and social indicators (in collaboration with the Vares Health Clinic<br>driatic Metals Clinic); and<br>tion indicators (pupils enrolled, pass rates, further education<br>tunities). |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |



## 7.8.3 Reporting

#### 7.8.3.1 Incident Reporting

An incident is defined as any event that impacts, or potentially impacts, on the environment, community, or health, safety and security of employees or community members, or any activity that results in regulatory non-compliance, in breach of company policies, standards or commitments.

The following events will constitute an incident:

- Community incidents and grievances;
- Accidental spills of chemicals or fuel outside of bunded or dedicated areas;
- Fires within operation areas;
- Injury or near miss hazards;
- Environmental incidents or activities prohibited as per permitting requirements, including:
  - Noise emissions;
  - Air Quality;
  - Biodiversity unauthorised vegetation clearance, injury or impact to fauna species identified in Chapter 4.5 Biodiversity baseline;
  - Waste management and Waters and groundwaters.

Incident reporting will be managed in accordance with the ESMS and SEP. Incidents will be logged, assessed and reported to the ESG Committee. All incidents will be publicly disclosed, in accordance with the Stakeholder Engagement Plan and Emergency Preparedness and Response Procedure (See Section 7.10).

### 7.8.3.2 Environmental and Social Reporting

Quarterly Environmental Social Governance reports will be produced alongside the stakeholder engagement reports. Quarterly reporting will summarise activities that have been undertaken and any incidents that have occurred. The reports are provided to the ESG Committee and Board members.

Reporting to lenders or shareholders on ESG related aspects will be required. The schedule for this reporting will be determined as part of any deal process.

Annual ESG reporting will be undertaken by Adriatic in line with the GRI requirements and will be informed by an annual materiality assessment. This will include a section dedicated to ESG performance in the Annual Report to shareholders and, in line with the evolving scale of the Company's social and environmental impacts and stakeholder expectations, a dedicated Sustainability Report . As part of this Adriatic will report the following:

- Greenhouse Gas Emissions;
- Metrics such as water use/unit of product, energy use/unit of product;



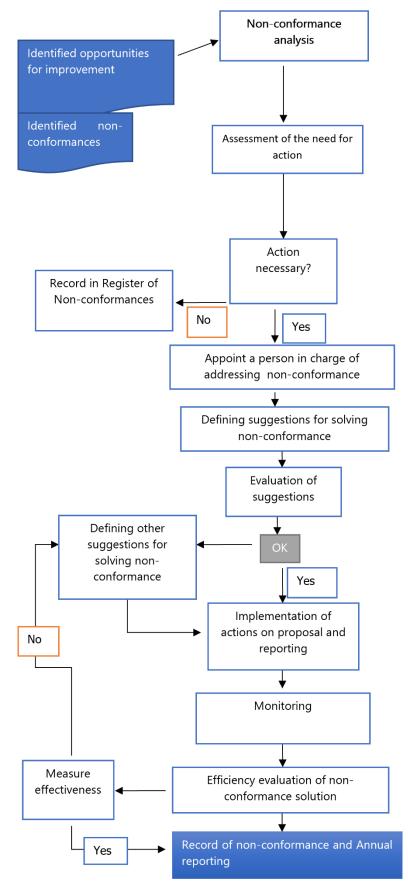
- Lost Time Injury Frequency Rate;
- Incidents of environmental non-compliance;
- Biodiversity management activities
- Details of the workforce, including both direct employees and those engaged on-site by contractors, reflecting both levels of local recruitment and local purchasing and the gender make-up of the project workforce and related management cadre;
- Environmental and Social Performance against Key Performance Indicators (KPIs) including comparisons with previous reporting periods;
- Payments to national, regional and municipal government agencies in BiH;
- Community Grievances;
- Ongoing Stakeholder Engagement Activities (including with governmental agencies; employee representative groups; and the Public Liaison Committee); and
- Community social investment.

Reporting will commence during the next annual reporting period, expected at the end of the 2021/2022 financial year.

#### 7.8.4 Non-conformances

Should monitoring activities show a non-conformance Adriatic Metals will undertake a review process. This process determines the source, pathway and impact of the non-conformance and the process is described in Figure 7.3.









# 7.8.5 Management of Change

Adriatic Metals will keep the ESMS under constant review. Detailed review will be undertaken no less than annually, when the Project is nearing the proceeding phase, when material changes to the Project design or activities are required, when an incident occurs or when a community grievance is received.

Management of change (MOC) is a systematic approach to organizational changes with the aim of ensuring the continued environmental, social and safety performance of the project throughout the process. These systematic processes ensures that the change is dealt with in a proactive fashion. While this section focuses on MOC related to the ESIA and ESMS, the company MOC process will ensure that Environmental, Social and Governance implications of significant changes are considered alongside technical, financial, safety and workforce aspects, and given appropriate weightings.

Changes in the Project may occur due to future project developments, for example the ESIA is being undertaken prior to detailed design stage. Adaptive changes may also occur during Project commissioning and operations. The Management of Change process will be initiated when a significant change (as defined above) to either project design elements or ways of working, other than those defined in the Feasibility Study, ESIA, national permits and detailed design, is identified. This might be things like a change in project footprint or road routing, or the use of a new chemical in significant quantities in the process plant. The Process for dealing with Project changes and uncertainty should recognise levels of change/ uncertainty as outlined below.

- Minor Significance Level One, where the change or uncertainty is largely deemed to be immaterial to the ESIA findings and national permit conditions and does not affect the Project's ability to meet social performance requirements outlined in the ESMS. This level of change may require additional but limited environmental or social study or survey actions.
- Moderate Significance Level two, where the change or uncertainty is thought to be material to the EIA findings, but is within the boundaries of the defined Project base-case covered by this ESIA. This level may require minor changes to the ESMS and additional surveys or environmental and social assessments.
- High Significance Level three, where a future significant change or uncertainty leads to a departure from the base-case scenario, or a key aspect of it. An addendum to the ESIA, or a new ESIA and formal submission and approval process is required.

This process will ensure the Project is able to adapt to changes whilst meeting the relevant environmental and social performance requirements.



## 7.9 ESMS Operational Budget

In development of the Financial Model as part of the Definitive Feasibility Study (DFS), a budget for the implementation of the ESMS was developed. The capital expenditure and operational budget allows for the implementation of environmental mitigations, the monitoring and reporting programme as well as any activities that will be required for environmental management purposes across the life of the mine.

### 7.10 Emergency Preparedness and Response

An Emergency Preparedness and Response Plan (EPRP) has been developed for the Vares Project. The plan describes the Emergency Preparedness and Response Process which will be implemented and supported by specific Response Plans during the construction, commissioning and operational phases of the Vares Project. The 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 Project.

A risk assessment for the Project was undertaken as part of the engineering studies, this will be reviewed during the detailed design phase, and then annually, or when any material changes to the Project Design or activities are made. The EPRP has been developed based on the existing risk assessment and will be updated with each iteration of the assessment. Currently, the EPRP covers the following types of emergency:

- an incident resulting in fatality;
- an incident resulting in major injuries;
- fire, bushfire and/or explosion;
- weather/climate;
- hazardous chemical/oil spill on water or land;
- rescue from height/depth or confined space;
- vehicle/equipment accident;
- Significant developments with management of the Tailings Storage Facility;
- Air quality monitoring;
- building evacuation;
- earthquake;
- haul road or public road; and
- river/watercourse incident.

The EPRP is triggered when an incident (i.e., accident, fire, spill, personal injury, etc.) occurs that is beyond the control of the personnel currently at the scene. Implementation of this plan is intended to mitigate or protect Project personnel, contractors, assets and the surrounding communities from injury; prevent contamination of surrounding surface and ground waters with hazardous materials; prevent damage to the environment and in particular fauna and flora; provide fire-fighting procedures and describe other emergency response procedures that may be required at the site.



Specific emergency response procedures are detailed in the EPRP. General measures include the following:

- Immediate reporting of the incident to the Emergency Response Control Room;
- Deployment of Emergency Response Team and Emergency Management Team;
- Determination of the emergency response level (Incident, emergency or crisis);
- Detecting incidents and raising the alarm;
- Evacuating personnel to predetermined points of safety and provision of emergency first aid treatment;
- Systematic and safe shut-down of operations during incidents;
- Designation of a central incident control location for major incidents;
- Containment / control of hazardous materials / situations;
- Search and rescue;
- The removal and/or protection of vital equipment, materials and documents;
- All clear and re-entry procedure;
- Contacts with the authorities, the media and, as appropriate, with the local community (e.g. provision of counselling or other support for any casualties and their families);
- Fire prevention; and
- Medical emergencies.

An inspection and audit program will be developed by Adriatic Metals and contractors to ensure that emergency preparedness and response procedures are being followed. Regular EPRP monitoring and reporting will be undertaken via the monthly EHS Report that will be prepared and submitted to the General Manager. Reporting will include:

- A summary of activities undertaken during the reporting period;
- Any deviations or non-compliances to the EPRP;
- Planned activities during the next reporting period; and
- Any other issues of concern.

Adriatic Metals will implement a community awareness programme to ensure that nearby communities are prepared for emergencies that may occur, through an Awareness and Preparedness for Emergencies at local Level (APELL) process (UNEP 2001), or similar. Through the Coordinator for Social Management and/or the Environmental and Social Manager, information will be provided to local communities and authorities on Adriatic Metal's strategy for emergency preparedness and response through the provision of information particularly in the areas of:

- Transport accidents;
- Natural disasters;
- Health and wellbeing; and
- Road safety and traffic awareness.



The APELL process is defined in the Emergency Preparedness and Response Plan and details a ten-step communication tool for external communications. This strategy is in place to manage incidents that have the potential to affect proximate stakeholders, including other industrial activity such as logging companies.



**APPENDIX 7.1: Non-Conformance Flow Chart** 



