

TÜMAD

MADENCİLİK SANAYİ VE TİCARET A.Ş.



HEALTH AND SAFETY MANAGEMENT PLAN for LAPSEKİ & İVRİNDİ PROJECTS

by TÜMAD Madencilik San. ve Tic. AŞ

Address: Buğday Sokak No:9
Kavaklıdere – Ankara - Türkiye

Tel: +90.312.455.1600
Fax: +90.312.455.1601

info@tumad.com.tr

HEALTH AND SAFETY MANAGEMENT PLAN for LAPSEKİ & İVRİNDİ PROJECTS

Document approval	Signature	Date		
Prepared by: Muhammet Bozkurt Bilge Küçükaytan, IMS & Sustainability Man.			TÜMAD Madencilik Sanayi ve Ticaret AŞ. Address: Buğday Sokak No:9 Kavaklıdere ÇANKAYA ANKARA	
Controlled by: Hayri Öğüt, Consultant				
Approved by Hasan YÜCEL, General Manager			Edition No/Date:	
			Document No: TMD_ISG_PLN.007	Rev 0

This document is updated and controlled, and the documents without control stamp are invalid.

REVISION HISTORY

Article/Paragraph	Revision	Revision Description	Date
-	0	First Issue	

TABLE OF CONTENTS

HEALTH AND SAFETY MANAGEMENT PLAN for LAPSEKİ & İVRİNDİ PROJECTS.....	2
REVISION HISTORY	3
TABLE OF CONTENTS	4
LIST OF TABLES	5
APPENDICES	5
ABBREVIATIONS AND DEFINITIONS	6
1 INTRODUCTION	7
2 PURPOSE	7
3 SCOPE.....	7
3.1 Overlaps with Other Management Plans	7
4 PROJECT STANDARDS	8
4.1 Applicable Turkish National Standards.....	8
4.2 Turkish EIA requirements	8
4.3 Other Commitments to and Requirements of Turkish Government Authorities	8
4.4 Applicable International Standards and Guidelines.....	8
4.5 Applicable TÜMAD Standards, Policies and Procedures	8
5 ROLES AND RESPONSIBILITIES	8
6 IMPLEMENTATION	9
6.1 Occupational Health and Safety Services	9
6.2 Risk Management	11
6.3 Incident and Accident Recording and Investigation	12
6.4 Emergency	12
6.5 Training	12
6.6 Employment Processes	13
6.7 Occupational Health and Safety Committee.....	13
6.8 Employee representative.....	13
6.9 Health and Safety Coordinators.....	14
6.10 Visitors	14
6.11 Control of Health Risks and Occupational Hygiene.....	14
6.12 Safe Work Principles	15
6.13 Occupational Health and Safety Instructions - Procedures.....	15
6.14 Machinery - Installation Related Works and Operations.....	16
6.15 Occupational Health and Safety Control System.....	16
6.16 Health and Safety Objectives and Targets	16
6.17 Performance Monitoring and Monitoring Plan.....	17
6.18 Reporting	17
APPENDIX 1- HEALTH AND SAFETY MONITORING PLAN	18

LIST OF TABLES

Table 1: Roles and Responsibilities	9
Table 2: Health and Safety Monitoring Plan.....	18

APPENDICES

APPENDIX 1 – HEALTH AND SAFETY MONITORING PLAN

ABBREVIATIONS AND DEFINITIONS

Project(s)	: Lapseki and İvrindi Gold and Silver Mine and Processing Projects
TÜMAD	: TÜMAD Madencilik San. ve Tic. A.Ş.
AXAPTA- DMS	: Document Management System
CR	: Community Relations
E	: Environment
EBRD	: European Bank for Reconstruction and Development
EIA	: Environmental Impact Assessment
ESMS	: Environmental and Social Management System
EU	: European Union
GRM	: Grievance Mechanism
HR	: Human Resources
HSD	: Health Safety Document
HSMP	: Health Safety Management Plan
IFC	: International Finance Corporation
IMS	: Integrated Management System
MoEU	: Ministry of Environment and Urbanization
OHS	: Occupational Health and Safety
PDCA	: Plan, Do, Check, Act
PR(s)	: Performance Requirement(s)
R.M.M.	: Review Meeting of Management
SDS	: Safety Data Sheet

1 INTRODUCTION

TÜMAD Madencilik San. ve Tic. A.Ş. (TÜMAD) plans to establish the Lapseki Gold and Silver Mine and Processing Project (the Lapseki Project) within the administrative boundaries of the Şahinli and Kocabaşlar Villages of the Lapseki District in the Province of Çanakkale. The construction phase of the Lapseki Project has been at completion stage and the operation phase will start in October 2017.

TÜMAD plans to establish the İvrindi Gold and Silver Mine and Processing Project (the İvrindi Project) within the administrative boundaries of Değirmenbaşı and Küçükılınca Villages of the İvrindi District of Province of Balıkesir. The İvrindi Project has started with mobilization.

The project is seeking finance and this document is produced as a part of studies conducted to assess the Environmental and Social Impacts of the Project as per the EBRD Performance Requirements (PRs).

This document is the Health and Safety Management Plan, for the TÜMAD's Lapseki and İvrindi Projects. The Integrated Management System (IMS) document registration number for Health and Safety Management Plan is (TMD_ISG_PLN.007). This management plan sets the requirements for the operation phase of the Lapseki Project and for construction and operation phase of the İvrindi Project and is an integral part of the Environmental and Social Management System (ESMS) implemented by TÜMAD for the two mine projects.

This Management Plan is based on the Project(s) ESMS Framework (TMD_EYS_PLN.004) of TÜMAD, which is owned by the TÜMAD General Manager. Any subsequent changes to the TÜMAD ESMS may result in the changes to this document.

This Management Plan will be reviewed on a minimum of a six monthly basis during construction and commissioning. During operation phase, this Plan will be reviewed on an annual basis to determine whether any changes or updates are required to the Management Framework unless a more frequent update is required to reflect changing project design or ESMS requirements and procedures.

Any requests for changes to this Management Plan must be addressed to the owner of this Management Plan and will be subject to appropriate review and approval processes as outlined in the Management of Change Procedure (TMD_EYS_PRD.006).

2 PURPOSE

The purpose of this Plan is to implement Occupational Health and Safety system to provide safe environment for employees, visitors and humans around, to protect environment, to indicate precaution hierarchy before and after commencement of activities by determining health, safety and environmental risks, which occur/may occur as a result of activities, and to ensure top level Occupational Health and Safety studies and inspections at all workplaces of TÜMAD.

This document is a high level reference document for the management of Health and Safety at TÜMAD sites. Management details will be provided in separate plans and procedures.

3 SCOPE

This Plan covers all activities, employers, sub-employers, employees, visitors and third parties for the whole lifecycles of the Lapseki and İvrindi Projects.

The requirements of all applicable Project(s) Management Plans and Procedures will be applicable to Project(s) contractors. Such requirements will be set out in contracts and contractors will also be obliged to comply directly with these requirements.

3.1 Overlaps with Other Management Plans

As explained in the ESMS Framework, this Management Plan is a part of the general package of Management Plans developed for Lapseki and İvrindi Projects of TÜMAD. All of TÜMAD Policies, Management Plans, Standard Operational Procedures (SOP), Instructions, and Permit requirements will also apply to TÜMAD's contractors. These requirements will be stated in contractor tender packages and in the contracts and contractors will be obliged to fully comply with the Management Plan and Procedures, instructions, and permits, either directly or indirectly.

HEALTH AND SAFETY MANAGEMENT PLAN for LAPSEKİ & İVRİNDİ PROJECTS	Document No TMD_ISG_PLN.007	Rev. 0	Page 7/22
---------------------------------------------------------------------------------	---------------------------------------	------------------	---------------------

This Plan overlaps with the following documents:

- Risk Assessment Tables (TMD_İSG_LST.001)
- Risk Assessment Procedure (TMD_İSG_PRD.002)
- Emergency Action Plans (TMD_LAP_İSG_PLN.002 & TMD_IVR_İSG_PLN.002)
- HSE Training Plan (TMD_İSG_PLN.001)
- Compliance with Legal Legislation Procedures (TMD_CEV_PRD.001)
- Explosives and Hazardous Materials Management Plan (TMD_İSG_PLN.006)
- Labour Management Plan (TMD_İK_PLN.002)
- Cyanide Management Plan (TMD_CEV_PLN.008)
- Spill Clean Up Plan (TMD_CEV_PLN.009)

4 PROJECT STANDARDS

4.1 Applicable Turkish National Standards

- Law No. 6331 on Occupational Health and Safety and its regulations
- Labour Law (No. 4857) and its regulations
- Social Security and General Health Insurance Law (5510)

4.2 Turkish EIA requirements

There are no specific requirements in the EIA apart from the compliance with legal requirements.

4.3 Other Commitments to and Requirements of Turkish Government Authorities

Not applicable.

4.4 Applicable International Standards and Guidelines

European Bank for Reconstruction and Development (EBRD) Performance Requirements PR2: Labour and Working Conditions, proper human resources management, respect for workers' rights, including freedom of association and the right to collective bargaining, and promotion of workers' health are key to the sustainability of an enterprise.

European Union Directive No. 92/104/EEC dated 3/12/1992 and European Union Directive No. 92/91/EEC dated 3/11/1992.

International Financial Corporation (IFC) Social and Environmental Sustainability Performance Standards.

4.5 Applicable TÜMAD Standards, Policies and Procedures

Applicable TÜMAD Policy and Procedures are given in Section 3.1.

5 ROLES AND RESPONSIBILITIES

Primary roles and responsibilities with respect to implementation of Health and Safety Management Plan are given in Table 1.

Table 1: Roles and Responsibilities

Roles	Responsibility
General Manager	<ul style="list-style-type: none"> Responsible for providing sufficient number of people and pecuniary resources to implement the plan and to minimize and eliminate the risks.
Operation Manager	<ul style="list-style-type: none"> Responsible for minimizing the risks and controlling the site implementations
Head of Health and Safety Department	<ul style="list-style-type: none"> Responsible for performance and implementation of the requirements of this document. Responsible for writing and updating this document.
Occupational Safety Specialist	<ul style="list-style-type: none"> Responsible for controlling the hazards set forth in the risk assessment tables and following the inclusion of the ongoing hazards in the risk assessment tables.
Occupational Safety Site Control	<ul style="list-style-type: none"> Responsible for controlling and reporting the site applications
Other Health Personnel	<ul style="list-style-type: none"> Responsible for fulfilling health requirements and keeping necessary records.
Workplace Physician	<ul style="list-style-type: none"> Responsible for fulfilling his/her duties and responsibilities in accordance with the provisions of the related regulation

6 IMPLEMENTATION

TÜMAD will implement The PDCA (Plan, Do, Control, Act) cycle for the management of health and safety management system elements in line with the OHSAS 18001 standard.

6.1 Occupational Health and Safety Services

According to Occupational Health and Safety Law No.6331, TÜMAD mining activities are classified as very hazardous workplaces. In this content, the following measures will be implemented regarding appointment of the occupational safety specialists and workplace physician,

- TÜMAD will designate workers as occupational safety specialist, occupational physician and other health staff.
- Employing an occupational safety specialist with (A) class certificate in enterprises classified as very hazardous and mentioned in article 8 of Law No.6331 shall be deemed as met on condition that an occupational safety specialist with (B) class certificate is employed in these enterprises until 1/1/2020.
- The weekly working hours of the workplace physicians and occupational specialists will be determined according to the current legal regulations (Regulation on the Duty, Authority, Responsibility and Training of Occupational Specialists and Regulation on the Duty, Authority, Responsibility and Training of Occupational Physicians).
- It is not obligatory to hire other health care staff where there is a full time occupational physician.
- In the case where full time employment of occupational safety specialist and workplace doctor is required due to the determined working hours; employer establishes an occupational health and safety department. Occupational health and safety department should meet the legal requirements as set in the Regulation on Occupational Health and Safety Services.

Occupational safety specialists shall fulfil the roles and responsibilities legally set out in the Regulation on the Duty, Authority, Responsibility and Training of Occupational Specialists including but not limited to the following:

- With respect to works performed and changes to be made at the workplace, to give recommendations to employer in order to ensure that design, situation, maintenance and selection of machinery and other installations, application, planning and organization of the workplace including the materials to be used and selection, provision, use, maintenance, storage and testing of personal protective equipment are conducted according to the occupational health and safety legislation and as well as general rules of occupational health.
- To notify employer, in written, of the precautions required to be taken with regard to occupational health and safety.
- To perform studies to investigate reasons of work accidents and occupational diseases and to take precautions to ensure that these work accidents and occupational diseases will not be repeated, and to give advices to employer in this regard.
- To conduct studies to investigate reasons of incidents, which occur at the workplace and have a potential to damage an employee, equipment or workplace although they do not result in death or injury, and to give recommendation to employer accordingly.
- To participate in risk assessment studies and practices on occupational health and safety, to give advices to employer on health and safety precautions to be taken based on the results of risk assessment studies and to follow up the process.
- To plan working environment inspections and periodical maintenance, control and measurements, which are required to be performed at the workplace as per occupational health and safety legislation, and to control implementation of these plans.
- To participate in studies to prevent accidents, fire or explosion at the workplace, to give advice to employer on these, to follow-up applications; to participate in studies to prepare emergency plans for circumstances such as natural disasters, accidents, fire or explosion, to follow-up and control periodical trainings and practices in this regard and to ensure that emergency plan is obeyed.
- To perform studies to plan for employees' occupational health and safety trainings according to the relevant legislation and submit the plans to the employer's approval, to implement and control these plans.
- To prepare annual assessment report, to which the results of occupational health and safety studies and inspections with regard to workplace are recorded and by collaborating with workplace doctor.
- To organize informative activities for employees and submit these activities to employer for approval and control the implementation.
- To prepare occupational health and safety instructions and work permit procedures to be used at the required areas, to submit these to employer for approval and control the implementation.
- To carry out evaluation on work accidents and occupational diseases together with workplace doctor, to prepare necessary preventive action plans by performing research and investigation studies to ensure that the hazardous incident will not be repeated, and to follow-up the implementation process of these plans.
- In collaboration with workplace doctor, to prepare annual work plan in which occupational health and safety activities of the next year are present,
- To work in collaboration with the occupational health and safety committee, if any, of which he/she is a member,
- To support activities of employee representative and supporting personnel and to be in collaboration with these persons,

Workplace physicians shall fulfil the roles and responsibilities legally set out in the Regulation on the Duty, Authority, Responsibility and Training of Occupational Physicians including but not limited to:

- To inform employees of and get their consents on health inspections, and to sufficiently and accordingly inform them of health risks and medical examinations
- To carry out health inspections of employees including the assessment and prevention of health damaging risks, and within the scope of the occupational health and safety legislation, to perform employees' pre-job medical examinations, which indicate that they are suitable for the job, as well as periodical medical examinations at the specified intervals
- To determine if there is a relationship between absence due to health problems and health hazards to be encountered at the workplace
- To carry out return-to-work-examinations of persons
- To carry out studies to prevent infectious diseases and to perform immunization studies, and to conduct health examinations for infectious diseases

HEALTH AND SAFETY MANAGEMENT PLAN for LAPSEKİ & İVRİNDİ PROJECTS	Document No	Rev.	Page
	TMD_ISG_PLN.007	0	10/22

- To ensure necessary tests, laboratory analyses and radiological analyses of employees during health inspection
- To perform studies to plan for employees' occupational health and safety trainings according to the relevant legislation
- To record health inspection studies at the workplace
- to make an assessment on work accidents and occupational diseases by collaborating with occupational safety specialist
- to prepare necessary preventive activity plans by conducting research and investigation studies in order to ensure that hazardous incidents will not be repeated
- to prepare annual plans to include all of these subjects and submit these plans to employer for approval
- to prepare annual assessment report
- Based on the results of health inspection, to propose to perform necessary measurements within the scope of workplace inspections to be conducted in collaboration with occupational health and safety specialist, and to assess measurement results,
- To work in collaboration with the occupational health and safety committee, if any, of which he/she is a member,
- To be in collaboration with the related parties to provide information and training for occupational health and safety subjects,
- To participate in the studies for improvement of the existing applications, such as analysis of work accidents and occupational diseases, programs for improvement of work practices as well as assessment of and testing new technology and hardware in terms of health,
- In accordance with the Regulation on Working Power and Vocational Incapacity Ratio, to work in collaboration with the hospitals, which are authorized to issue health care commission reports for occupational diseases, and to be in collaboration with the relevant departments for rehabilitation of employees, who have had a work accident or caught an occupational disease,
- To participate in the researches to be made on occupational health and safety subject,
- To contribute to occupational safety specialist when preparing occupational health and safety instructions and work permit procedures to be used at the required areas,
- In collaboration with occupational safety specialist, to prepare annual work plan in which occupational health and safety activities of the next year are present,
- To support activities of employee representative and supporting personnel and to be in collaboration with these persons,
- To carry out evaluation on work accidents and occupational diseases together with occupational safety specialist, to prepare necessary preventive action plans by performing research and investigation studies to ensure that the hazardous incident will not be repeated, and to follow-up the implementation process of these plans.
- To report the precautions, which are to be taken regarding occupational health and safety and which pose life-threatening risks and which have been notified to the employer in written but are not handled by the employer within a reasonable period of time to be determined by the occupational safety specialist, to the provincial directorate of labor and employment agency to which the workplace is registered.
- To consult employer to cease works, if the hazard determined at the workplace is critical and unavoidable and if this hazard requires immediate intervention.

6.2 Risk Management

Identification of the hazards is the major component for the risk management of the Projects. Within the scope of the Risk Assessment Procedure (TMD_ISG_PRD.003) risk assessment will be completed for all hazards that may arise from TÜMAD activities and all external hazards that may impact the health and safety of workers, sub-contractors, visitors and the environment. Necessary measures will be defined for all activities to eliminate and control the identified hazards.

HEALTH AND SAFETY MANAGEMENT PLAN for LAPSEKİ & İVRİNDİ PROJECTS	Document No	Rev.	Page
	TMD_ISG_PLN.007	0	11/22

During the whole lifecycle of the Projects, employees will be encouraged to report hazards that they observe. In order to prevent accidents and incidents throughout the mine site, Occupational Safety Hazard Suggestion system will be applied.

6.3 Incident and Accident Recording and Investigation

Any incident including near misses which are not reported might lead to unexpected results in the long term e.g. re-occurrences, physical injuries, legal consequences, financial losses etc. Therefore recording of all incidents and accidents is legally required in the work premises.

TÜMAD will record all incidents and accidents that occur during the whole lifecycle of the Projects and will conduct and investigation to identify the causes and control measures to prevent re-occurrences. Details of the implementation are given the Accident/Incident Loss Report & Investigation Procedure (TMD_İSG_PRD.007).

6.4 Emergency

Emergency Procedures are implemented according to the legislation, which have been previously planned to protect the following factors in case of an emergency.

- Human Life
- Environment
- Assets
- Commercial Liabilities
- Reputation of TÜMAD Operations

The primary objective of the emergency plan is as follows:

- To prevent possible injuries and loss of lives,
- To minimize the damage to and loss of property, equipment and environment,
- To provide a chain of command that will intervene the emergency case on time with a coordinated approach,
- To make available all of the equipment, personnel and other sources that are required to effectively control the emergency case.
- To ensure that all personnel are totally aware of their responsibilities in case of an emergency.

The objective of Emergency Action Plans is to provide personnel of Lapseki - İvrindi Gold Mine with an appropriate regulation and instructions in order to ensure that a potential emergency case can be managed. This is not limited to the incidents at the mine site, but it includes all emergency cases for which help is requested outside of Lapseki - İvrindi.

6.5 Training

TÜMAD will ensure that all employees have appropriate legally required H&S training according to the Regulation on Procedures and Principles of Occupational Health and Safety Training of Employees. Principles on training are detailed in the Training Plan (TMD_İSG_PLN.001).

TÜMAD will implement following principles:

- Annual training plan will be prepared.
- All training will be recorded.
- Workers' representatives will have appropriate training.
- Workers failing to present documents to prove that they have received vocational training on their job might not be employed in jobs classified as hazardous and very hazardous which require vocational training.
- Workers who have had occupational accident or disease shall receive additional training on reasons for the accident or disease, ways to protect themselves and safe working methods. Furthermore; workers who are away from work for any reason for more than six months shall receive refresher training before return to work.

HEALTH AND SAFETY MANAGEMENT PLAN for LAPSEKİ & İVRİNDİ PROJECTS	Document No	Rev.	Page
	TMD_İSG_PLN.007	0	12/22

- Workers from outside undertakings and/or enterprises might not start to be employed in jobs classified as hazardous and very hazardous unless they can present documents to prove that they have received appropriate instructions regarding health and safety risks.
- The employer who is the party to temporary employment relationship shall ensure that the worker receives training on health and safety risks.
- Trainings in no circumstances will bring financial burden to workers.
- Training will be refreshed as legally required intervals.

6.6 Employment Processes

Employment process is followed by Human Resources department. According to selection and placement procedures (TMD_IK_PRD.001). After the personnel with the required qualifications has been found, s/he is not allowed to enter into the site before registration and health check processes are completed. The related procedure will be prepared by the Human Resources Department.

Liability of employees according to Law No.6331 are given below and will be explained to employees during training:

- According to the occupational health and safety trainings that employees have taken and instructions of employer, employees should not endanger health and safety of themselves or others who may be affected by their acts or works.
- As per the trainings and instructions given by employer, the liabilities of employees are as follows:
 - To properly use machinery, devices, tools and instruments hazardous substances, transportation equipment and other production tools at the workplace, to use safety equipment thereof in a correct manner and no to remove or change them.
 - To use and protect personal protective equipment that they have been provided with.
 - To immediately inform employer or employee representative when they encounter a serious and imminent danger at the workplace with regard to machinery, device, tools and instruments, plant and buildings and when they realize a deficiency in protective measures.
 - To collaborate with employer and employee representative to eliminate deficiencies and non-compliances with the legislation that are determined at the workplace by inspection authority.
 - To be in collaboration with employer and employee representative to ensure occupational health and safety at his/her working environment

6.7 Occupational Health and Safety Committee

TÜMAD will set up an occupational health and safety committee at workplaces, where a minimum of fifty employees are employed and permanent work is performed for more than six months. TÜMAD will implement the requirements set in the Regulation on Occupational Health and Safety Committees. After commencement of studies and setting up Occupational Health and Safety Committee, Committee will prepare an Internal Regulation.

Committee will be comprised of the following persons and will conduct meetings on a monthly basis:

- Employer or employer representative,
- Occupational safety specialist,
- Workplace physician,
- A person who is responsible for human resources, personnel, social affairs or administrative and financial affairs,
- Civil defence expert, if any
- Foremen, head-worker or workman, if any
- Employer representative or chief representative if there is more than one employer representative at the workplace

6.8 Employee representative

TÜMAD will assign a number of employee representatives in accordance with the following subclauses through an election to be made amongst employees or through appointment if it not possible through election, by considering risks and number of employees at different departments of the workplace and by taking care of balanced distribution:

HEALTH AND SAFETY MANAGEMENT PLAN for LAPSEKİ & İVRİNDİ PROJECTS	Document No	Rev.	Page
	TMD_ISG_PLN.007	0	13/22

Employee representative:

- One representative for workplaces between two and fifty employee.
- Two representatives for workplaces between fifty one and one hundred employees.
- Three representatives for workplaces between one hundred one and five hundred employees.
- Four representatives for workplaces between five hundred one and thousand employees.
- Five representatives for workplaces between one thousand one and two thousand employees.
- Six representatives for workplaces of two thousand one and more employees.

If there is more than one employee representative, a chief representative is elected amongst the other employee representatives.

Employee representatives are entitled to submit proposal to employer and ask employer to take appropriate measures in order to remove source of hazard or to mitigate risks posed by hazards.

Rights of employee representatives or support personnel cannot be restricted as they perform their duties, and employer provide them with necessary means to enable them to exercise their duties.

6.9 Health and Safety Coordinators

Following principles will be implemented according to the 10. and 11. Articles of the “Regulation on Occupational Health and Safety for Construction Works” that came into effect by being issued on the Official Gazette No. 28786 on October 05, 2013 as per the 30. Article of the Law No. 6331 on Occupational Health and Safety,

- Health and Safety Preparation Coordinator worked during project preparation phase,
- One or more Occupational Health and Safety Coordinator from contractors and supplier companies shall work during implementation phase depending on workload and number of employees.
- Implementation Coordinator shall be announced to all employees,
- Following determination, Occupational Health and Safety Coordinators, who will work during implementation, shall be assigned through written notification.
- They shall be trained for their duties, authorities and responsibilities.
- Certificates shall be given to participants at the end of training.
- Weekly meetings shall be held among coordinators.

6.10 Visitors

Visitors of the mine site shall be escorted by a personnel, who has completed the site pre-work training.

Visitors shall enter into the site from the Security Gate Department by using the Visitor Card given to them, and they shall carry this card during their presence at the site in such a way that the card is visible.

TÜMAD personnel shall be responsible to convey the information on the Visitor Brochure to his/her visitor. TÜMAD personnel shall be responsible for any incident and accident, which the visitor may encounter.

Escorting is not always required for the persons, who regularly bring materials to the mine site. These persons, however, shall be wearing Personal Protective Equipment (boots, helmet, goggles) that are provided by the Security Department.

6.11 Control of Health Risks and Occupational Hygiene

Personnel can only start to work after the workplace physician completes examination and expresses his/her positive opinion. Medical examinations will be repeated annually for all workers. Contractors should submit their medical report to TÜMAD which indicates that they are fit for work.

Workers might be exposed to health risks such as dust, noise, vibration etc. according to the workplace conditions. In this respect, TÜMAD will conduct risk assessments and identify the need for personal exposure measurements which would include the following:

- Dust exposure

HEALTH AND SAFETY MANAGEMENT PLAN for LAPSEKİ & İVRİNDİ PROJECTS	Document No	Rev.	Page
	TMD_ISG_PLN.007	0	14/22

- Noise and vibration
- Chemical exposure
- Illumination

Personal exposure measurements shall be made by accredited institutions and will be included in the monitoring plans. TÜMAD will ensure that personal measurements meet the legal standards by taking appropriate engineering and administrative control measures.

6.12 Safe Work Principles

TÜMAD will implement all legal H&S requirements and best practices throughout the lifecycles of the Projects. HSE activities have priority over the other construction site activities. All employees are required to have sufficient information on HSE related Laws and Regulations as well as construction site rules defined by Project Management. All employee studies, behaviours and attitudes should conform to Laws and construction site rules.

Sub-contractor handbook with regard to general rules of mine site will be published and distributed to the personnel. When entering into the mine site, supplier training that explains mine site rules will be provided. Newly hired personnel are not allowed to work at the site unless they take the pre-work HSE training given by safety specialist. Each department is responsible to prepare and implement the procedures and instructions that are related to its job. The personnel, who disobey the procedures and instructions, are reported. In order to prevent accidents and incidents throughout the mine site, Occupational Safety Hazard Suggestion system will be applied. Relevant forms and procedures with regard to all of these applications shall be kept in the AXAPTA system.

All TÜMAD personnel will be provided with suitable personal protective equipment according to the job that they will perform with a submission form. Any contractor personnel who does not have appropriate personal protective equipment will not be allowed to work at Project site.

6.13 Occupational Health and Safety Instructions - Procedures

The following instructions shall be prepared and delivered to all employees.

- Heavy Vehicle Site Entrance Instruction
- Contractor Performance Control Instruction
- Barricading Instruction
- Work Authorization and Permits Instruction
- Power Disabling Instruction
- HSE Committee Working Instruction
- Accident Notification and Casualty Referral Instruction
- Accident Incident and Loss Investigation Team Working Instruction
- Instructions on Diesel Supply with Pumping
- Rod Fire Use and Maintenance Instruction
- Quarterly Tagging System Instruction
- Fire Protection and Fighting Instruction
- Fire Extinguisher Control and Replacement Instruction
- Working Area Controls Procedure
- Communications and Intercommunications Procedure
- HSE Objectives and Targets Procedure
- HSE Corrective and Preventive Activity Procedure
- HSE Training Procedure
- HSE Monitoring and Measurement Procedure

HEALTH AND SAFETY MANAGEMENT PLAN for LAPSEKİ & İVRİNDİ PROJECTS	Document No	Rev.	Page
	TMD_ISG_PLN.007	0	15/22

- Job Safety Analysis Procedure
- Workplace Alcohol and Drugs Procedure
- Record Management Procedure
- Accident Incident and Loss Reporting and Investigation Procedure
- Risk Assessment Procedure
- Field Driver Rules Procedure
- Field Driver Rules and Authorization Procedure

6.14 Machinery - Installation Related Works and Operations

TÜMAD will implement following legal requirements and principles:

- Lifting Equipment and Pressure Containers:

Periodic inspections of Lifting Equipment shall be performed quarterly by Maintenance Planning Department.

Lifting Equipment and Pressure Vessels shall have been tested by Accredited Inspection Companies.

- Lightning Rod Tests:

Lightning Rods at the mine sites shall be tested annually.

- Grounding Tests:

Power Transmission Line Pole grounding measurements shall be performed by TÜMAD İşletmeleri Lapseki and İvrindi Gold Mine Electric Department.

In addition, all equipment at the mine site shall be subject to tagging system quarterly. Any equipment without a tag shall not be allowed for use. Disabling system shall be implemented for the equipment for which maintenance and repair works are being performed. This system shall be provided by using locks and cards. Procedures on performance of these rules shall be prepared and transferred to AXAPTA system.

6.15 Occupational Health and Safety Control System

HSE objectives and targets are determined at the end of HSE meetings. The objectives and targets provide means to improve HSE performance of the enterprise and monitor the activities performed in this regard. When determining HSE objectives and targets, it is attempted to minimize or eliminate hazards, risks, accidents or incidents. The following factors are taken into consideration when determining objectives and targets: Occupational Safety Policy commitments and management system principals, priority level of the Risk, laws, bylaws and regulations required to be implemented, accidents and incidents statistics of the Workplace, magnitudes of hazards and risks posed by Operation activities, Technological, financial and operational conditions as well as business conditions, employee participation and opinions, education levels of employees and level of occupational safety culture.

6.16 Health and Safety Objectives and Targets

When determining the method to be followed to achieve the objectives and targets and the performance during the process, HSE Monitoring and Measurement Procedures (TMD_İSG_PRD.014), HSE Legal Requirements List (TMD_İSG_LST.001), HSE Objective and Targets (TMD_İSG_PRD.006) Table will be used. This will be presented at R.M.M. meetings. Results will be announced to employees through bulletin boards.

Reasons of unachieved targets are evaluated and administered accordingly. These information are used as inputs when determining the objectives and targets of the next year.

Each department manager is responsible to announce the objectives and targets to his/her department. OHSE prepares and follows the HSE Objectives and Targets Table to determine next year's activities, responsibilities and source requirements in order to comply with the occupational safety policy and relatedly to achieve occupational safety objectives and targets.

HSE management performance is evaluated every six months. If necessary, management program activities and terms are revised. Completed performances are marked by OHSE in "HSE Objectives and Targets Table". "P" Planned and "C" Completed activities are followed. The activities, whose completed performances are marked, are updated in the electronic environment monthly. If the activity, target and deadline change and/or if there are addition to these items, then "HSE Objectives and Targets Table" is revised. OHSE submits it to Operations Manager by for approval and

HEALTH AND SAFETY MANAGEMENT PLAN for LAPSEKİ & İVRİNDİ PROJECTS	Document No	Rev.	Page
	TMD_ISG_PLN.007	0	16/22

then it is transferred to electronic environment. Originals of “HSE Objectives and Targets Table” are kept as occupational safety records at OHS Department for 2 years under the responsibility of Occupational Safety Data Entry Officer. Originals of HSE Objectives and Targets shall be destroyed at the end of this period in such a way that a minute shall be taken by Occupational Safety Data Entry Officer in order to ensure that these documents cannot be used again.

Occupational Safety Department follows corrective and preventive activities by using Accident/Incident Loss Report, Hazard and Job Safety Proposal Form (TMD_EYS_FRM.004) and Working Area Control Form (TMD_ISG_FRM.009) and makes notification in the electronic environment by recording them into the Data-Base or TÜMAD/HSE Portal system that are used in the electronic environment at the Occupational Safety Department. Occupational safety performance is determined based on these statistics and reporting process that are performed by using the data obtained as a result of these follow-ups and communications in electronic environment.

OHSE prepares a report on Occupational Safety Performance, which is supported by these activities and data, and presents the said report during review meetings of management.

6.17 Performance Monitoring and Monitoring Plan

TÜMAD will prepare an annual monitoring plan to identify the health and safety elements to be followed including the timelines and the responsible people. This plan shall be reviewed and updated annually and if there is any changes in the Project components, processes, legal requirements, location changes etc.

Monitoring the legal compliance of the Project components will be done over Official Gazette and/or mevzuat.gov.tr. In case of identifying any new requirement which would impact the implementations in the Project, TÜMAD will identify necessary measures to comply with all legal requirements.

6.18 Reporting

Evidences of the implementation of the mitigation actions/measures and related results are collected through inspection and auditing activities will be reported in line with the Internal Audit Procedure (TMD_KAL_PRD.001).

Compliance assessments will be reported on a six monthly basis.

APPENDIX 1- HEALTH AND SAFETY MONITORING PLAN

Table 2: Health and Safety Monitoring Plan

No	Monitoring Field	Monitoring Method	Frequency/Timeline	Purpose	Responsibility
HSM-01	HSE Policy	H&S Policy	Annually	The validity and efficiency of the warranted and signed HSE Policy by field management related to the obligations that should be followed.	IMS and Sustainability Manager OHS Department General Directorate
HSM-02	HSE Targets	HSE Objective and Targets Table	Annually	Setting out measurable targets to monitor the compliance with the legal requirements and TÜMAD Policy and commitments.	IMS and Sustainability Manager OHS Department General Directorate
HSM-03	Compliance with HSE Targets	Monthly H&S reports (HSE statistics) 6 monthly performance reports	Monthly 6 monthly	H&S Targets to be tracked by monthly and annually performance reports.	OHS Department
HSM-04	Compliance with legal requirements	HSE Legal Requirements List	Project beginning Weekly	Identifying any new requirement which would impact the implementations in the Project, TÜMAD to identify necessary measures to comply with all legal requirements.	OHS Department
HSM-05	Identification of H&S issues	Accident/Incident Loss Report, Hazard and Job Safety Proposal Form and Working Area Control Form	Continuously	The noncompliance and actions to prevent reoccurrences to be recorded	OHS Department

No	Monitoring Field	Monitoring Method	Frequency/Timeline	Purpose	Responsibility
HSM-06	Machine and Equipment Maintenance Controls	Machinery & Equipment Periodic Maintenance Plan Tracking Schedule	In time frames stated by the manufacturing company, by national or international standards	The maintenance and the repairs of Machinery & Equipment should be done by authorized persons only within time frames and with methods stated by the manufacturing company and/or in cases of lack of national standards according to the ones mentioned in international standards for Machinery and Equipment.	Maintenance Department Planning
HSM-07	Periodic Checks of Machinery & Equipment	Machinery & Equipment Periodic Maintenance Plan Tracking Schedule	In time frames stated in the Regulation on Safety and Health Conditions in Usage of Work Equipment	Periodic checks by accredited organizations or by the Ministry according to Safety and Health Conditions Regulatory of Work Equipment.	Maintenance Department Planning Accredited institutions
HSM-08	Emergency Action Plan	Emergency Action Plan	Annually When required	To control the efficiency of the existing plan, update it where necessary considering the previous drills, changes in the Project etc.	OHS Department Contractors
HSM-09	Emergency Response Drill	Post Drill Report	Annually	To control the efficiency of the existing plan, to control whether emergency response team is ready for a real crisis situation. Observing the needs for any changes in the Emergency Action Plan.	OHS Department Contractors
HSM-10	Risk Assessments	Risk Assessment Documents	Before the work starts Annually When required	Conducting risk assessment for any activity conducted by TÜMAD and ensuring that all control measures are taken to eliminate/reduce risk to acceptable levels. To ensure all Contractors have appropriate risk assessment	OHS Department Contractors Section chiefs, engineers
HSM-11	Occupational H&S measurements: • Dust exposure	Lighting, Noise, Dust, and Vibration Record and Assessment Forms	Frequency and timeline to be decided according to the risk assessments	To ensure personal exposures meet the legal standards. Ensuring necessary measures are taken including engineering and administrative measures.	OHS Department Contractors

No	Monitoring Field	Monitoring Method	Frequency/Timeline	Purpose	Responsibility
	<ul style="list-style-type: none"> Noise and vibration Chemical exposure Illumination 		during whole life cycle of the Projects		accredited institutions
HSM-12	Regular H&S site inspections	Inspection Reports	Weekly	Reviews of field safety provisions and of application & rules. Constitutes an entry to HSE Targets	OHS Department Workplace Physician
HSM-13	Personal Protection Equipment	PPE submission forms	Before work starts	All TÜMAD personnel will be provided with suitable personal protective equipment according to the job that they will perform with a submission form. Any contractor personnel who does not have appropriate personal protective equipment will not be allowed to work at Project site.	OHS Department
HSM-14	Health Surveillance	Medical reports	Before work starts Annually When additional examination required	To ensure all workers including Contractors are fit for work. To monitor the worker's health in the long term.	Workplace physician
HSM-15	Legal H&S Training	Training Certificates	Before work starts Annually Refreshed when required legally	Ensure that anyone who works at TÜMAD site have appropriate legal H&S training	OHS Department Workplace physician Contractors
HSM-16	Vocational legal training	Training Certificates	Before work starts	Vocational legal training provided by institutions approved by the ministry	OHS Department Accredited Institutions

No	Monitoring Field	Monitoring Method	Frequency/Timeline	Purpose	Responsibility
HSM-17	H&S TŪMAD Induction training	Training Certificates	Before work starts	All employees to receive TŪMAD induction training to learn about the Project based details including policy, commitments, requirements, emergency response requirements etc.	OHS Department
HSM-18	First Aid Training	Training Certificates	Before work starts	As per First Aid Regulation, adequate number of employees to obtain First Aid Training delivered by institutions approved by the ministry	OHS Department accredited institutions
HSM-19	Emergency Response Team members training	Training Certificates	Before work starts	Appointed personnel to be trained as legally required as per Emergency Action Plan.	OHS Department accredited institutions
HSM-20	H&S technical training (confined space, working at height etc.)	Training Certificates	Before work starts	Personnel to obtain work based training.	OHS Department accredited institutions
HSM-21	Following Training needs	Annual Training Plan	Annually	To identify the training needs and plan for the year	OHS Department
HSM 22	Reporting accidents/incidents	Accident/Incident Reports Loss	Continuously	Legal requirement To identify the causes of the accidents, necessary control measures to prevent reoccurrences.	OHS Department
HSM-23	Chemicals Management	SDS forms, Chemicals database Chemical storage area check lists	Before any chemical enters the site Weekly monitoring of the chemical storage areas	To know the amount and type of chemical available on site To prevent any chemical incidents by regular monitoring	OHS Department Contractors
HSM-24	Vehicle inspections	Daily check will be performed in security before entering the site	Continuously	To ensure that any vehicle entering the site have appropriate documents	Security

No	Monitoring Field	Monitoring Method	Frequency/Timeline	Purpose	Responsibility
HSM-25	Speed limits	GPS vehicle tracking system	Continuously	All time, speed limits will be monitored using GPS vehicle tracking system which will be installed on all TÜMAD vehicle. Drivers found speeding will be subjected to disciplinary penalty as stated in Disciplinary Procedures	OHS Team and Administrative affairs
HSM-26	Occupational H&S Committee	Committee meeting records	Monthly	TÜMAD will set up an occupational health and safety committee at workplaces, where a minimum of fifty employees are employed.	Appointed TÜMAD and contractor employees
HSM-27	Grievances regarding H&S	Grievance records	Continuously	To ensure any grievances form workers, Contractors, community members are recorded and actions are taken to close out the grievances.	OHS Department Community Relations Department