



# Environmental & Social Management System

## Non-Mineral Waste Management Plan

## Non-Mineral Waste Management Plan

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## 1 INTRODUCTION

### 1.1 Document Number

This document is the Non-Mineral Waste Management Plan for the Öksüt Gold Project. The document reference number for this Management Plan is OMAS-ESMS-NMW-PLN-001.

### 1.2 Purpose

The purpose of this Management Plan is to:

- define the scope of the Management Plan and set out applicable management interfaces;
- define roles and responsibilities;
- outline the applicable Project Standards relevant to this Management Plan;
- define Project commitments, mitigation measures, operational procedures and guidance relevant to this Management Plan;
- define monitoring and reporting procedures, including Key Performance Indicators;
- define training requirements;
- set out references for supporting materials and information.

### 1.3 Application

The requirements set out in this Management Plan apply to all OMAS activities throughout the lifecycle of the Öksüt Gold Project, including those carried out by contractors.

This Management Plan is based on the OMAS Environmental & Social Management System Framework (OMAS-ESMS-001), which is owned by the OMAS General Manager. Any subsequent changes to the OMAS Environmental & Social Management System (ESMS) Framework may result in the changes to this Management Plan.

### 1.4 Commencement

This Management Plan applies from 1 April 2016.

### 1.5 Authority and Management

The OMAS General Manager approved this Management Plan on 1 March 2016.

This Management Plan is owned by the OMAS Health, Safety, Environment and Training Manager. This Management Plan will be reviewed on a minimum of a six monthly basis during construction and commissioning. During steady state operations, this Management Plan will be reviewed on an annual basis to determine whether any changes or updates are required to the plan unless a more frequent update is required to reflect changing project design or procedures.

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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 MOC procedure set out in the ESMS Framework.

## 2 SCOPE

### 2.1 Scope of this Management Plan

This Management Plan covers all OMAS operations including contractor activities. Implementation by contractors is addressed in the Contractor Management Framework (OMAS-ESMS-CM-PLN-001).

Operating procedures will be developed by OMAS to set out specific instructions for implementation of the requirements of this Management Plan.

#### **Definition of Non-Mineral Waste**

For the purposes of this Plan, non-mineral waste is defined as:

*...including, but not limited to, used oil, antifreeze, greases, batteries, solvents, coolants, spent reagents and paints, tyres, contaminated soils and debris, solid sewage residues, construction debris, and any other waste materials from processing, maintenance and medical facilities, canteens, offices, workshops, laboratories and gardens, including off-specification raw materials (other than ore) used in processes. Non-mineral wastes do not include residues directly derived from the mining or processing of rock and unconsolidated sediments.*

### 2.2 Overlaps with other Management Plans

This Management Plan is part of the overall suite of Management Plans developed for the OMAS Project and as described in the ESMS Framework.

This Management Plan has overlaps and cross-linkages to a number of other Management Plans, including:

- the Hazardous Materials Management Plan (OMAS-ESMS-HM-PLN-001), particularly in relation to the management of hazardous waste materials;
- the Mineral Waste Management Plan (OMAS-ESMS-MW-PLN-001), particularly in relation to the monitoring of potential seepage;
- the Water Resources Management Plan (OMAS-ESMS-WR-PLN-001), particularly in relation to the monitoring of potential on-site and off-site contamination.

## 3 ROLES AND RESPONSIBILITIES

### 3.1 Key Roles and Responsibilities for Management Plan Implementation

Principal roles and responsibilities for the implementation of this plan are outlined below.

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**Table 1: Key Roles and Responsibilities**

Role	Responsibilities
OMAS General Manager	<ul style="list-style-type: none"> <li>Approval of this Plan and resources required for implementation.</li> </ul>
OMAS Health, Safety, Environment and Training Manager	<ul style="list-style-type: none"> <li>Ensuring Project compliance with the Project Standards and other requirements set out in this Plan.</li> <li>Responsible for ownership and overall implementation of this plan and ensuring Principal Contractors implement applicable elements of this plan.</li> </ul>
OMAS Environmental Coordinator	<ul style="list-style-type: none"> <li>Overall responsibility for the implementation of this Management Plan.</li> <li>Provide technical support to OMAS Departmental Managers and Principal Contractors to ensure compliance with the Waste Management Plan and related Procedures.</li> <li>Prepare quarterly and annual environmental reports including details on waste performance.</li> <li>Collate waste inventory data for all disposed and recycled wastes.</li> <li>Ensure Plan is available to all OMAS employees and Principal Contractors.</li> <li>Undertake periodic audits and inspections of OMAS Department and Principal Contractor workplaces against the requirements of this Management Plan and related Procedures.</li> <li>Report all hazards, non-conformances and incidents.</li> </ul>
OMAS Project Manager (Construction) OMAS Mine Operations Manager Principal Contractor Managers	<ul style="list-style-type: none"> <li>Ensure that relevant activities are undertaken in accordance with this Management Plan and related Procedures.</li> <li>Ensure that department personnel are fully trained in waste management practices, particularly when working with hazardous materials.</li> <li>Ensure incident investigations are undertaken and reported.</li> </ul>
Workplace HSE Supervisors / Superintendents	<ul style="list-style-type: none"> <li>Conduct routine work area inspections to ensure relevant activities are in accordance with this Management Plan and related Procedures.</li> <li>Ensure that all waste data is properly recorded and reported.</li> <li>Report all hazards, non-conformances and incidents.</li> </ul>

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### 3.2 Key Interfaces

The OMAS Health, Safety, Environment and Training Manager is accountable for delivering this Management Plan. Key interfaces in the implementation of this Management Plan (i.e. roles with responsibility for inputting to elements of this Management Plan) include:

- OMAS Project Manager, particularly in relation to waste management during construction;
- OMAS Mine Operations Manager, particularly in relation to waste management during operations;
- OMAS Director, Finance and Administration, particularly in relation to the contracting and oversight of waste management contractors.

## 4 PROJECT STANDARDS

Applicable Standards must be complied with for all Project activities (the “Project Standards”). Project Standards comprise:

- applicable Turkish Standards;
- Turkish EIA requirements;
- other commitments to and requirements of Turkish Government authorities;
- applicable international standards and guidelines;
- applicable Centerra and OMAS standards, policies and procedures;
- other industry guidelines with which OMAS has committed to comply.

### 4.1 Applicable Turkish National Standards

*Waste Management Regulation* (Official Gazette 29314, 2 April 2015).

### 4.2 Turkish EIA requirements

Waste management is addressed in the EIA but there are no specific requirements in the EIA and associated permits submitted for the OMAS project that are directly related to non-mineral waste management.

### 4.3 Other Commitments to and Requirements of Turkish Government Authorities

None applicable.

### 4.4 Applicable International Standards and Guidelines

There are no non-mineral waste disposal or treatment facilities at the OMAS site.

The principle of the waste management hierarchy has been adopted by OMAS and all non-mineral waste will be segregated at sources and removed from the site on a periodic basis for disposal by a licenced waste management contractor in a licenced waste management facility.

OMAS will comply with the requirements of EBRD Performance Requirement 3 when implementing its policies.

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### 4.5 General Approach to Waste Management

The intent of this Management Plan is to ensure the effective management of non-mineral waste at OMAS by the minimisation of waste generation and ensuring the safe handling, treatment and disposal of generated wastes. This is achieved through the implementation of the waste management hierarchy:

- waste reduction and avoidance at source;
- waste segregation at point of generation;
- waste recycling;
- waste storage, treatment and disposal to international standards.

Waste reduction and avoidance is primarily achieved through selection of suppliers that provide operational consumables and materials with minimal packaging needs and careful stock management to ensure goods are utilised before their expiry date.

Waste recycling is realised through engagement with the local community and the use of assessed and appropriately licenced recycling Contractors.

Waste treatment and disposal occurs at licenced off-site waste management facilities not under the control of OMAS.

### 4.6 Applicable Centerra and OMAS Standards, Policies and Procedures

Operating Procedures will be developed by OMAS to set out specific instructions to meet the requirements of this Plan.

### 4.7 Summary of Applicable Project Standards

OMAS will comply with the more stringent of national standards and applicable lender standards, with the more stringent standards representing the Project Standards.

## 5 MITIGATION MEASURES AND MANAGEMENT CONTROLS

This Management Plan is also supported by the following Procedures, which provide more details on specific aspects of the day-to-day waste management activities at OMAS:

- General Waste Procedure related to waste collection and transfer management practices at OMAS workplaces.

Other Procedures may be developed, as required, to support this Non-Mineral Waste Management Plan.



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**Table 2: Key Management Controls**

ID	Applicability/ Activity	Control Description	Responsible Parties	Means of verification
WM01	Waste Hierarchy	<p>The principles of the waste management hierarchy will be considered during implementation of this Waste Management Plan and related Procedures, in the following order of preference.</p> <p>a) Waste avoidance and reduction at source;</p> <p>b) Waste re-use and recycling;</p> <p>c) Waste storage, treatment and/or disposal.</p>	<ul style="list-style-type: none"> <li>• Health, Safety, Environment and Training Manager</li> <li>• Environmental Coordinator</li> <li>• Principal Contractors</li> </ul>	<ul style="list-style-type: none"> <li>• General Waste Procedure</li> <li>• Workplace inspections</li> </ul>
WM02	Waste Classification	<p>All wastes will be classified according to the following criteria and based on internationally accepted regulations, guidelines, definitions and methodologies:</p> <p>a) Mineral waste;</p> <p>b) Non-hazardous waste (including domestic waste and inert waste);</p> <p>c) Hazardous waste (including medical waste);</p> <p>d) Wastewater (refer to Water Management Plan).</p>	<ul style="list-style-type: none"> <li>• Environmental Coordinator</li> <li>• Principal Contractors</li> </ul>	<ul style="list-style-type: none"> <li>• General Waste Procedure</li> <li>• Workplace inspections</li> </ul>
WM03	Waste Segregation and Storage	<p>Wastes will be segregated at source (generation) and will be securely contained and monitored pending further treatment, transportation or disposal.</p>	<ul style="list-style-type: none"> <li>• Environmental Coordinator</li> <li>• Operational Departments</li> </ul>	<ul style="list-style-type: none"> <li>• General Waste Procedure</li> <li>• Workplace inspections</li> </ul>

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ID	Applicability/ Activity	Control Description	Responsible Parties	Means of verification
WM04	Contractor Waste Recycling	Subject to assessment of Contractors (HSE standards, equipment and transportation) and facilities, recyclable wastes may be transferred to facilities operated by licensed recycling Contractors.	<ul style="list-style-type: none"> <li>Environmental Coordinator</li> </ul>	<ul style="list-style-type: none"> <li>General Waste Procedure</li> <li>Recycling facility assessments</li> </ul>
WM05	Off-Site Waste Disposal or Treatment	All wastes will be sent off-site for disposal or treatment for recycling and disposal by licensed waste management Contractors.	<ul style="list-style-type: none"> <li>Principal Contractors</li> <li>Environmental Coordinator</li> </ul>	<ul style="list-style-type: none"> <li>General Waste Procedure</li> <li>Workplace inspections</li> </ul>
WM06	Untreatable Hazardous Wastes	All hazardous wastes for which there is not an engineered and approved treatment or disposal method available will be properly stored on site until a treatment and/or disposal route becomes available.	<ul style="list-style-type: none"> <li>Mine Operations Manager</li> </ul>	<ul style="list-style-type: none"> <li>Hazardous Materials Management Procedure</li> </ul>
WM07	Waste Inventory	An inventory, by location, will be maintained of wastes generated (quantity per year and cumulative total), wastes sent for off-site recycling, wastes subject to hazardous waste treatment, wastes subject to non-hazardous waste disposal and unrecyclable hazardous wastes stored.	<ul style="list-style-type: none"> <li>Environmental Coordinator</li> </ul>	<ul style="list-style-type: none"> <li>Quarterly and Annual Environmental Reports</li> </ul>
WM08	Waste Disposal	The open burning of solid waste (non-hazardous or hazardous) is prohibited.	<ul style="list-style-type: none"> <li>Environmental Coordinator</li> </ul>	<ul style="list-style-type: none"> <li>General Waste Procedure</li> </ul>
WM09	Hazardous Spill Materials	Spill materials and contaminated soils will be classified and managed according to the same criteria as described in WM02.	<ul style="list-style-type: none"> <li>Mine Operations Manager</li> </ul>	<ul style="list-style-type: none"> <li>General Waste Procedure</li> <li>Hazardous Materials Management Plan</li> </ul>

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## 6 IMPLEMENTATION SCHEDULE

### 6.1 Review and Revision of this Management Plan

This Management Plan will be reviewed on a minimum of a six monthly basis during construction and commissioning. During steady state operations, this Management Plan will be reviewed on an annual basis and any necessary revisions made to reflect the changing circumstances or operational needs of OMAS.

Any holder of the plan is to make the OMAS Health, Safety, Environment and Training Manager aware of any errors, omissions or changes as soon as they are aware of them.

If material changes to operating procedures are required (as identified through the Management of Change Procedure contained within the OMAS ESMS Framework), this Management Plan may also be updated on an “as required” basis.

## 7 MONITORING

### 7.1 Overview of Monitoring Requirements

The monitoring measures that are to be implemented during the operations phase to assess compliance with Project Standards (see *Section 4: Project Standards*) are described in the section.

In the event that monitoring identified non-conformance with Project Standards, these will be investigated and appropriate corrective actions identified (see Component 12 Non-conformance incident and action management of the OMAS ESMS).

### 7.2 Key Performance Indicators

The table below summarises the key performance indicators and associated key monitoring actions that can be used to assess the progress and effectiveness of proposed mitigation strategies.

**Table 3: Key Performance Indicators and monitoring actions**

ID	KPI	Target	Monitoring measure
WM-KPI 01	Number of Reported Waste Incidents & Non-Compliances	Minimise and continued improvement in number of reported non-compliances with this Plan.	Number of reported waste related incidents per year
WM-KPI 02	Volume of Waste Generated and Sent to Off-Site Landfill	Minimise total volume of waste generated and continued improvement.	Monthly volume of non-hazardous waste per person
WM-KPI 02	Percentage of Waste Materials Recycled	Minimise disposal to landfill and continued improvement.	Annual percentage recovery of recyclable materials (e.g. plastic)

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ID	KPI	Target	Monitoring measure
WM-KPI 04	Number of Community Complaints	Minimise and continued improvement in number of waste related community complaints.  Target = zero	Number of reported waste related community complaints per year (as recorded in the Grievance management system).

### 7.3 Key Monitoring Activities

Key monitoring activities will focus on ensuring compliance with the Project Standards (Section 4) using the key performance indicators established in Section 7.2.

**Table 4: Monitoring Measures – Waste Management**

ID	Topic/Aspects	Parameters	Methods	Periodicity	Location	Comments
WMM1	Waste Inventory	Quantity and type of waste per year (including cumulative total)	An inventory, by location, will be maintained of wastes generated, wastes sent for off-site recycling, wastes subject to hazardous waste treatment, wastes subject to non-hazardous waste disposal and unrecyclable hazardous wastes stored.	Quarterly	NA	OMAS Environmental Coordinator
WMM2	Workplace Inspections	n/a	Routine inspections of general housekeeping will be carried out by area HSE superintendents / supervisors.	Routinely	All main workplaces	-
WMM3	Third Party Verification Assessments	n/a	OMAS will periodically audit any third party Contractor and facilities used for	Upon an award of contract and periodically	3 <sup>rd</sup> party waste contractor facilities	-



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			wastes sent off-site for recycling.	thereafter.		
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## **8 TRAINING**

All employees of OMAS and Contractors to OMAS are provided with basic training on health, safety and security, including health awareness training and induction.

### **8.1 Induction Training**

All employees of OMAS and Contractors to OMAS shall be provided with basic training in spill and emergency response as part of general induction training.

### **8.2 Job-Specific Training**

All employees working on OMAS waste management activities shall be subject to routine toolbox training. This will include details on the importance of adequate waste management and the classification and segregation of waste.

Waste haulage contractors will have appropriate training, and transportation will be undertaken in a manner that minimises the potential for inadvertent release of wastes or recyclables en route.

### **8.3 Other Training Requirements**

Additional, specialist training shall be provided to plant operators and key personnel involved in activities which involve the segregation, storage, haulage or treatment of waste.

## **9 AUDIT AND REPORTING**

### **9.1 Auditing**

Daily inspections will be carried out by operational area superintendents / supervisors covering a broad range of operational aspects, including community health safety and security issues as appropriate to activities outside the EIA Permitted Area.

Any incidents identified during these inspections will be reported to the incident management system (Component 10 of the OMAS ESMS).

Conformance will be monitored in accordance with Component 11 of the ESMS (Monitoring and Evaluation).

All incidents and non-conformances will be reported as per the requirements of the OMAS ESMS as described in the ESMS Framework Document.

### **9.2 External Auditing**

Conformance with this plan will be subject to periodic assessment as part of the Centerra audit programme and separately by Project Lenders.

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### 9.3 Record Keeping

Records of audits, inspections and incidents will be managed in accordance with OMAS procedures.

## 10 DOCUMENT CONTROL

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