



# ARTISANAL AND SMALL-SCALE MINING (ASM) HANDBOOK

(FOR THE TIN SECTOR)



© 2021 International Tin Association - Artisanal and Small-Scale Mining (ASM) Handbook (for the Tin Sector), V1.0 - **All rights reserved.**

**Please cite this publication as:** ITA (Dec 2021), Artisanal and Small-Scale Mining (ASM) Handbook (for the Tin Sector), V1.0

DISCLAIMER: This document is intended for general informational purposes to support good practice but is not intended to replace it. Information contained in this document should not be relied on, or used to substitute, other competent and professional, legal, health, safety, medical and other advice. Users should in every case seek appropriate advice before undertaking any of the activities referred to in this document. ITA does not accept any liability for any direct, indirect or consequential damage, injury or loss to any person relating to the use (or non-use) of the information contained in this document to the fullest extent permitted by law.

While we have made every attempt to ensure that the information contained in this handbook is accurate and up to date (and has been obtained from reliable sources) International Tin Association does not accept liability for any errors or omissions, or make any guarantees that the information is correct, complete or suitable for any purpose. All information in this handbook is provided in good faith. No part of this document may be reproduced, modified, stored in a retrieval system, transmitted, or distributed in any form by any means including electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the International Tin Association.

**For further information contact: [tc@internationaltin.org](mailto:tc@internationaltin.org)**

# Contents

	<b>About this ASM Handbook</b>	<b>4 - 5</b>
	<b>Tin Code Standards Illustrated in this Handbook</b>	<b>6</b>
	<b>Glossary</b>	<b>7</b>
	<b>Introduction</b>	<b>8</b>
	<b>Compliance and Policies - Standard 8.2</b>	<b>9</b>
	<b>Environment - Standard 8.3</b>	<b>10 - 15</b>
	<b>Health and Safety - Standard 8.4</b>	<b>16 - 19</b>
	<b>Labour - Standard 8.5</b>	<b>20 - 21</b>
	<b>Communities - Standard 8.6</b>	<b>22 - 24</b>
	<b>Human Rights and Conflict - Standard 8.7</b>	<b>25</b>
	<b>Information Sources Reviewed</b>	<b>26</b>

## About this ASM Handbook

**ITA and its members have developed this handbook to aid communication with artisanal and small-scale mine (ASM) operators as a step in our ongoing efforts to improve practices in tin mining at all levels of the supply chain.**

This handbook has been developed to provide explanations on how implementation of simple environmental, social and governance (ESG) measures can benefit artisanal and small-scale miners and their communities. The illustrations are designed to visually show how Tin Code standards are relevant to smaller operators and can support progressive improvement of ASM activities, maximising positive impacts and resolving potential challenges.



The Tin Code has 70 standards grouped into 10 principles covering governance, environment, health and safety, labour and stakeholder management, human rights and other topics relevant to tin mining, processing and smelting which ITA members commit to and report against. The 10 principles are:

<b>Principle 1</b>	Maintain legal compliance and develop sound policies to improve practices.
<b>Principle 2</b>	Seek continual improvement of environmental performance.
<b>Principle 3</b>	Seek continual improvement of health and safety performance.
<b>Principle 4</b>	Seek continual improvement in labour practices.
<b>Principle 5</b>	Engage with stakeholders using a participatory approach.
<b>Principle 6</b>	Manage negative impacts on, and contribute to development of, local communities and indigenous peoples.
<b>Principle 7</b>	Avoid contributing to serious human rights abuses and conflict.
<b>Principle 8</b>	Seek to positively influence practices of suppliers of materials, goods and services.
<b>Principle 9</b>	Encourage the understanding, and safe and appropriate use of tin products.
<b>Principle 10</b>	Work towards reporting against the Tin Code.

Principle 8 of the Tin Code aims to positively influence practices of suppliers of materials, goods and services thereby multiplying the impact of progressive improvement beyond the ITA membership itself. The final target audience of the illustrated handbook is ASM operators working in the field. Outreach to that audience is challenging and expected to be a step-by-step process but one effective means of engagement is believed to be via the commercial supply chain. ITA members engaging with their suppliers and other relevant stakeholders can play an important part in sharing key messages and maximising impact of the handbook's content. Supporting such engagement, demonstrates commitment by ITA and its members to standard 8.1 of the Tin Code.



# Tin Code Standards illustrated in this Handbook

This handbook illustrates standards of Principle 8 of the Tin Code believed to be most practically relevant to ASM production. It provides ideas on how ASM, which is already an important contributor to local livelihoods and economies, can also adopt progressively more sustainable practices to further benefit local communities and the environment.

Tin Code Standards of Principle 8	Relevance to ASM
<b>Standard 8.1</b> Suppliers of ASM produced minerals (General)	 ASM operators do not generally purchase minerals from other ASM producers.
<b>Standard 8.2</b> Compliance and Policies	 Miners who work more formally, avoid illegal payments, and follow laws or policies, will be safer and more successful.
<b>Standard 8.3</b> Environment	 Miners who respect the environment will reduce negative impacts on water, land, soil and air, the health of themselves and their community.
<b>Standard 8.4</b> Health and Safety	 Miners who take simple steps to reduce risks of accidents and protect themselves will be able to continue working safely.
<b>Standard 8.5</b> Labour	 Miners who share opportunities equally for men and women and avoid forcing people or children to work will create a fairer and better educated community.
<b>Standard 8.6</b> Communities	 Miners who respect and support all activities of their community will avoid trouble and help everyone to prosper.
<b>Standard 8.7</b> Human rights and conflict	 Miners who report problems with armed groups, security guards or unfair authorities can be helped to find solutions.
<b>Standard 8.8</b> Suppliers of LSM produced minerals	 ASM operators do not generally purchase minerals from large-scale mine operators.
<b>Standard 8.9</b> Suppliers of Secondary Materials	 ASM operators do not generally purchase secondary materials.
<b>Standard 8.10</b> Suppliers of goods and services	 Miners are at the top of the upstream supply chain and are not expected to ask suppliers to work towards the Tin Code.

# Glossary

**Artisanal or Artisanal and Small-Scale Mining (ASM)** - Formal or informal mining operations with predominantly simplified forms of exploration, extraction, processing, and transportation. ASM is normally low capital intensive and uses high labour-intensive technology.

**ESG** - stands for Environmental, Social, and Governance, where environmental relates to management of the natural world, social are considerations of people and relationships, and governance is overseeing and control and direction for running an organisation.

**International Tin Association (ITA)** – a not-for-profit organisation, representing many of the world's major tin producers.

**ITA member** - entities who are tin producers and abide by the ITA Articles of Association.

**Principles** - 10 overarching environmental, social and governance groupings of standards of the Tin Code.

**Standard** - any of the 70 expectations of the Tin Code which break down principles into specific requirements.

**Tin Code** - 70 *standards* grouped into 10 *principles* covering governance, economic, environmental, health and safety, human rights and social issues relevant to tin mining, processing and smelting that **ITA members** commit to and report against.

**United Nations Sustainable Development Goals (SDGs)** - are a collection of 17 interlinked global goals developed by the United Nations and designed to achieve a better future for all. They address the global challenges including poverty, inequality, climate change, environmental degradation, peace and justice.

# Introduction

**The International Tin Association (ITA) and its members are driving change in tin supply chains by supporting and reporting against standards of the Tin Code to progressively deliver positive environmental, social and governance (ESG) performance and development.**

ITA and its members recognise the importance of artisanal and small-scale mining (ASM) to local development and the tin value chain and aim to enable miners to help themselves to progress. Although ASM is frequently presented in a negative light, where care is taken, it can be carried out efficiently, safely, with very low energy expenditure and a low environmental impact. The income created can be many times that available to the local population and ASM can provide a relatively attractive livelihood option with potential to reduce poverty and support development.



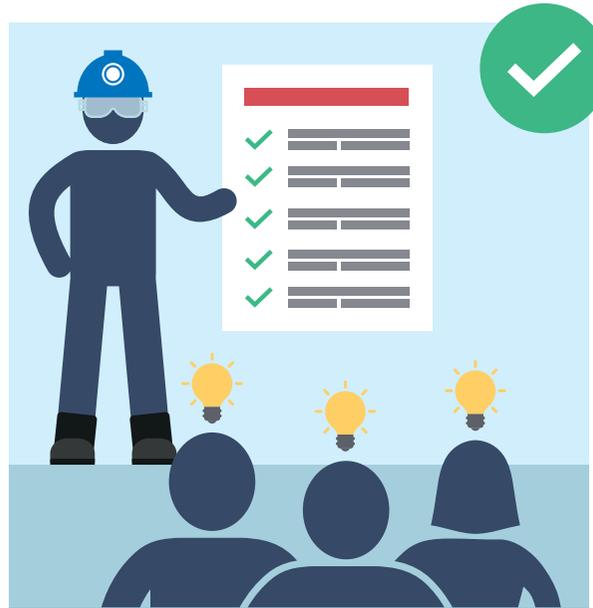
The Tin Code sets achievable step-by-step goals against which progress can be transparently reported for any type and size of operator. ITA members have recognised an opportunity to support and implement a vision of better mining and are working with their supply chain to drive positive transformation. Successful implementation of the Tin Code can assist in addressing global challenges, including poverty, hunger, health, education, gender equality and climate change. These are all at the heart of what is needed to deliver the United Nations Sustainable Development Goals (SDGs).





## Compliance and Policies - Standard 8.2

Miners who work more formally, avoid illegal payments, and follow laws or policies, will be safer and more successful.



**Laws and policies help explain how you can feel safer and work better**

### 1.1 Policies

Companies will develop and publish policies to support legal compliance and improve practices with respect to expectations of the Tin Code.

ASM workers are not expected to develop policies but they may benefit from following laws or policies that exist and can help improve practices.



**Illegal or informal payments create trouble for you or your customers**

### 1.4 Business Integrity

Companies will seek to prevent bribery and corruption.

Miners should refrain from offering or taking bribes or facilitation payments.

PRINCIPLE 8 STANDARDS

## 8.2 Compliance and Policies

Suppliers will be requested to communicate the importance of formalization and potential opportunities to engage in practical projects encouraging formalisation of ASM as appropriate to the production area.

OTHER RELEVANT CODE STANDARDS

DESCRIPTION

OTHER RELEVANT CODE STANDARDS

DESCRIPTION



## Environment - Standard 8.3

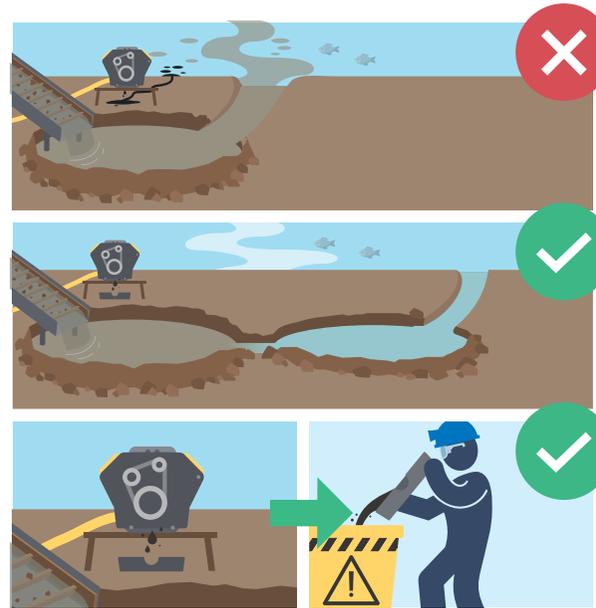
Miners who respect the environment will reduce negative impacts on water, land, soil and air, the health of themselves and their community.

### PRINCIPLE 8 STANDARDS 8.3 Environment

Suppliers will be requested to communicate guidance on managing environmental impacts as well as potential opportunities to engage in practical projects encouraging implementation by ASM as appropriate to the production area.

OTHER RELEVANT CODE STANDARDS

DESCRIPTION



### Keeping water cleaner is better for you and your family's health

#### 2.2 Water Quality

Companies will seek to understand and manage discharges to land in order to minimise negative impacts on water quality.

Miners can keep water cleaner by keeping waste separate and letting dirt settle out before returning water into rivers/streams/lakes.

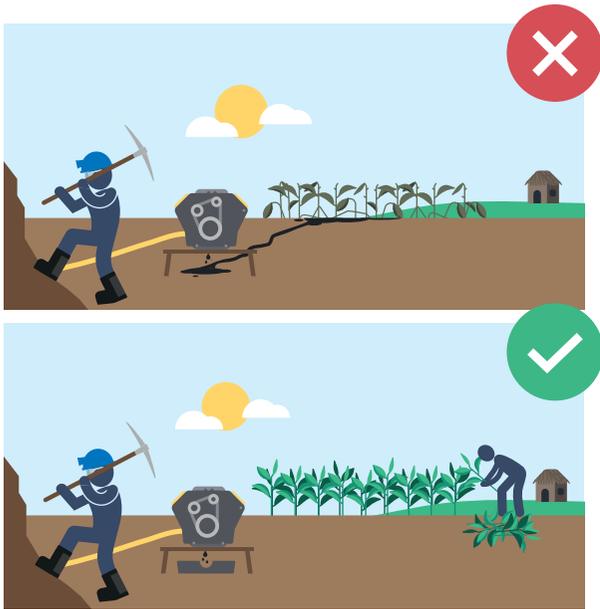


### Re-using mine water leaves more for the community and environment

#### 2.3 Water Consumption and availability

Companies will seek to reduce water consumption in their operations in order to minimise negative impacts on water availability.

Miners can re-use water for mining so that there is enough water for the local community and protect the environment."



## Reducing mine waste and pollution keeps the soil clean and productive

### 2.4 Land and Soil Quality

Companies will seek to understand and manage discharges to land in order to minimise negative impacts on land and soil quality.

Miners can keep land and soil clean by controlling waste and contamination from the mine.

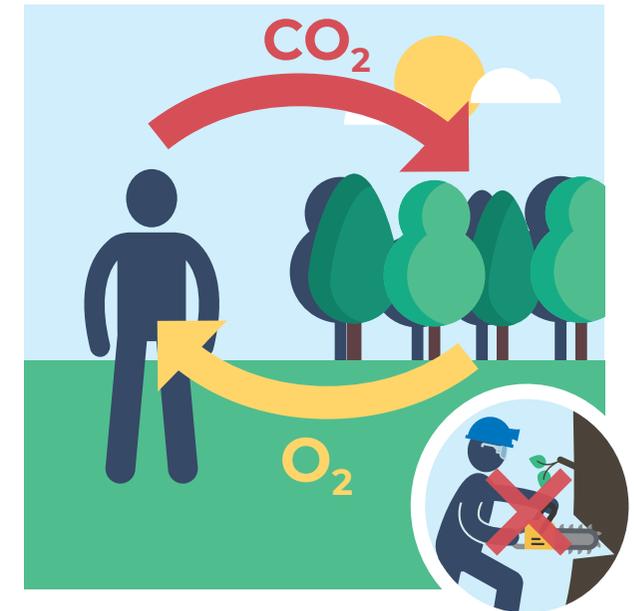


## Keeping the air clean is better for your health

### 2.5 Air quality

Companies will seek to understand and manage discharges to air in order to minimise negative impacts on air quality.

Miners can reduce the amount of smoke and dust generated by mining activities to keep air cleaner.



## Protecting trees helps keep air fresh and reduces occurrence of severe weather

### 2.6 Greenhouse gases

Companies emitting more than 25,000 tonnes of CO<sub>2</sub>-equivalent will seek to understand direct and indirect greenhouse emissions and consider economic reduction initiatives appropriate to the nature and scale of operations.

Miners can help to reduce climate change and clean the air we breathe by protecting the trees that absorb pollution.

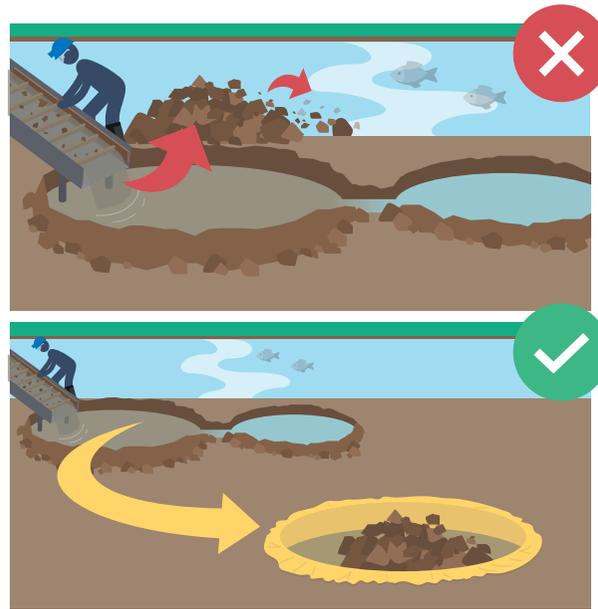


**Maintaining equipment regularly will reduce fuel consumption and lower costs**

### 2.7 Energy Consumption

Companies will seek to identify technically and financially feasible measures for reducing the direct and indirect consumption of energy per unit of production or increasing the share from renewable sources.

Miners can maintain equipment to reduce energy consumption and lower overall costs.



**Keeping waste rock from processing stored safely in one location protects water and soil**

### 2.8 Tailings Management

Companies will store or dispose of tailings in a manner that minimises the risk of impacts to the environment and human health.

Miners can safely store tailings (waste rock from mineral processing) to avoid polluting water or land.

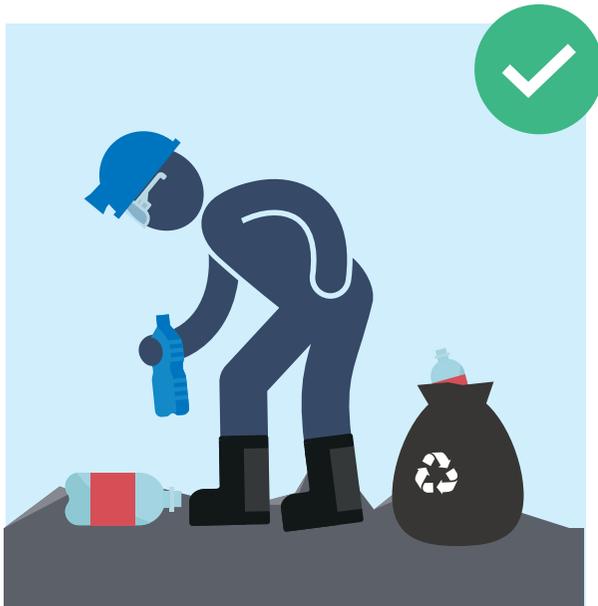


**Collecting dangerous waste carefully for safe disposal protects you and the environment**

### 2.9 Hazardous Waste Management

Wherever possible companies will avoid the generation of hazardous wastes; where this is not possible companies will manage and dispose of wastes in a manner that minimises negative impacts on human health and the environment.

Miners will protect the environment by collecting and disposing of hazardous waste safely.

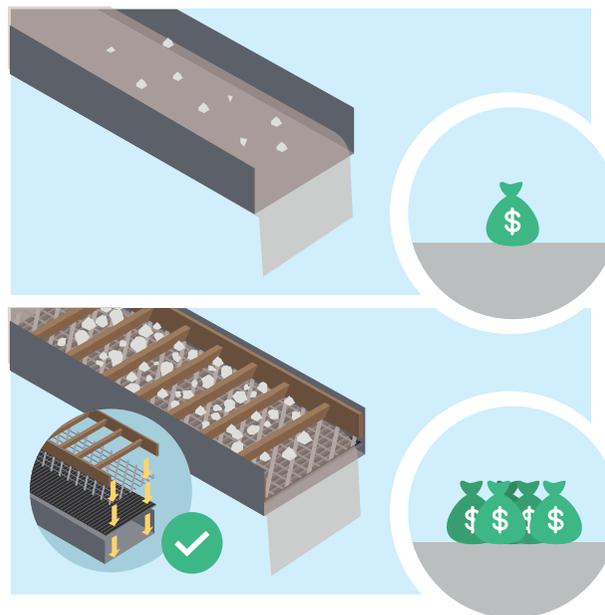


### Collecting, re-using and carefully disposing of rubbish keeps your neighbourhood clean

#### 2.10 Non-hazardous and inert waste management

Wherever possible companies will minimise the production of non-hazardous and inert wastes and consider reuse and recycling options before disposing of them in an appropriate manner.

Miners who collect, re-use and recycle rubbish like plastic, paper and cans, or safely dispose of rubbish, help protect the environment.



### Mats and riffle grooves can increase mineral recovery and earnings

#### 2.10 Non-hazardous and inert waste management

Wherever possible companies will minimise the production of non-hazardous and inert wastes and consider reuse and recycling options before disposing of them in an appropriate manner.

An efficient sluicing process reduces mineral lost as waste.

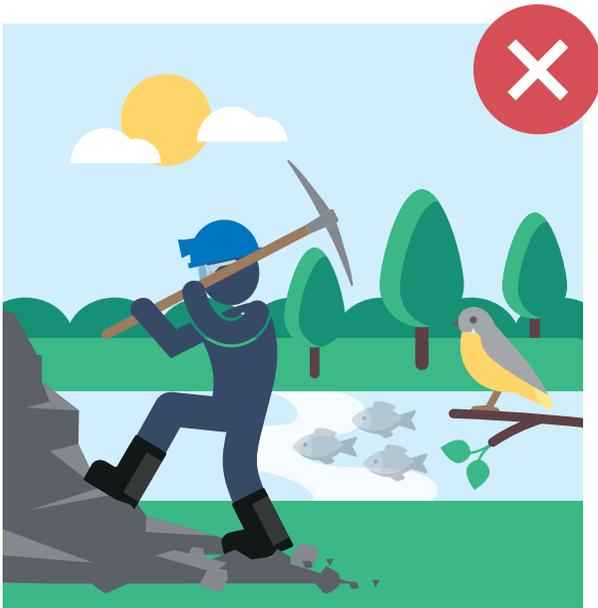


### Using the best available machinery can yield more valuable mineral.

#### 2.10 Non-hazardous and inert waste management

Wherever possible companies will minimise the production of non-hazardous and inert wastes and consider reuse and recycling options before disposing of them in an appropriate manner.

Hand crushing is labour intensive and time consuming.

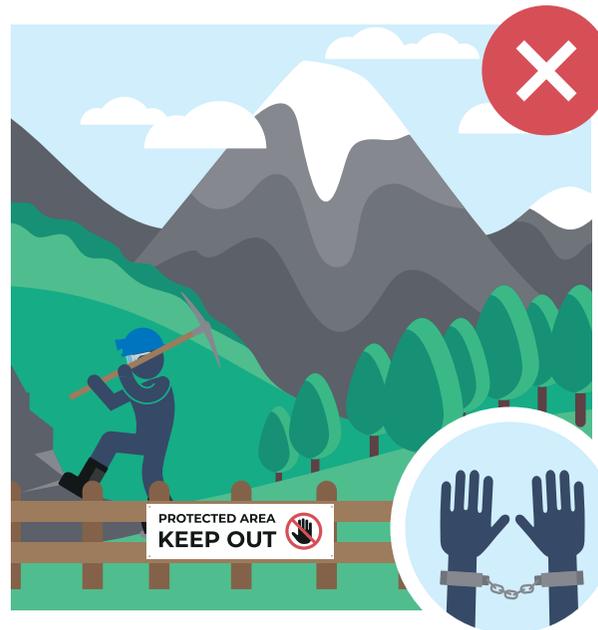


## Considering plants and wildlife will keep the planet healthy

### 2.12 Biodiversity protection

Companies will seek to understand potential impacts on biodiversity and avoid activities that significantly modify or degrade critical natural habitats through an appropriate action plan.

Miners who consider the wildlife and plants around the mine sites help to maintain a strong and healthy planet.

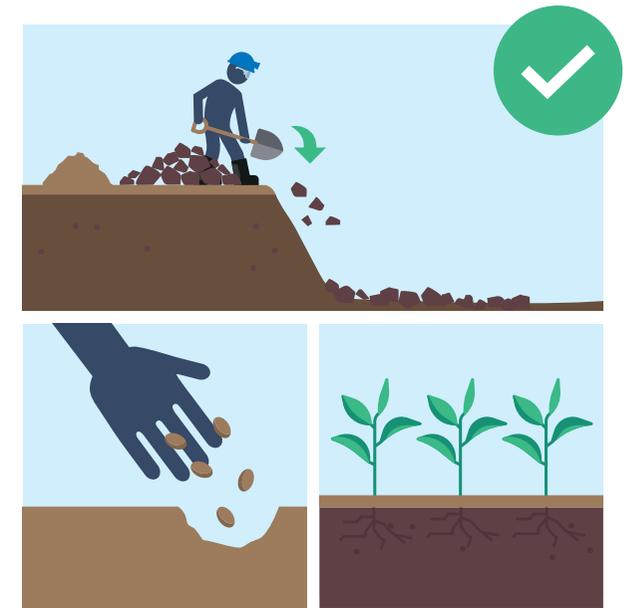


## Mining in special protected areas will cause trouble for you and your customers

### 2.13 Protected areas

Companies will respect legally protected areas in accordance with local laws and will seek to understand and manage potential impacts of operations on adjacent zones.

Miners should respect special legally protected areas for culture or nature and not damage them by mining.



## Saving the best soil from a pit to replace after mining has finished will help plants regrow

### 2.14 Closure and reclamation.

Companies will allocate adequate financial resources to enable implementation of closure and rehabilitation of operations in accordance with local requirements and expectations of key stakeholders.

Miners will be able to use the land after mining has finished by carefully saving and replacing the best topsoil for plants to re-grow.



## Explaining the benefits of protecting the environment encourages everyone to do so

### 2.15 Training

Companies will work towards implementing appropriate and periodic training for employees regarding relevant aspects of this Principle 2 and require onsite contractors to train their workers on aspects relevant to their specific tasks.

Miners can learn from one another about good environmental practices.



## Health and Safety - Standard 8.4

Miners who take simple steps to reduce risks of accidents and protect themselves will be able to continue working safely.

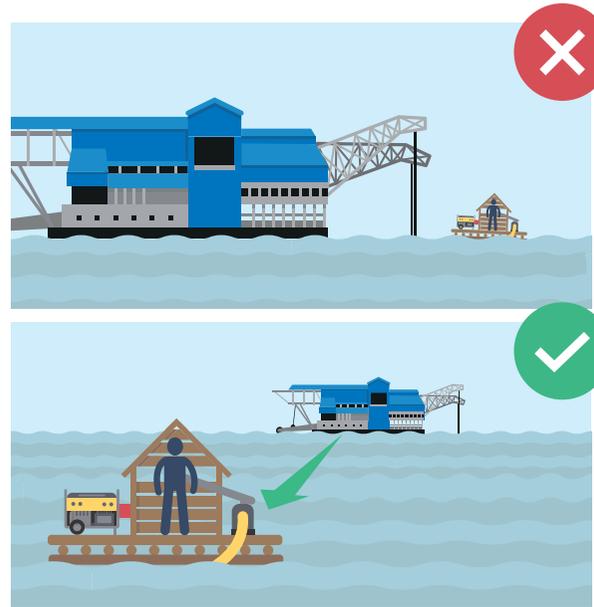
### PRINCIPLE 8 STANDARDS

#### 8.4 Health and Safety

Suppliers will be requested to communicate guidance on managing health and safety impacts as well as potential opportunities to engage in practical projects encouraging implementation by ASM as appropriate to the production area.

OTHER RELEVANT CODE STANDARDS

DESCRIPTION



**Staying away from large mining dredges keeps you safer so you can keep working**

### 3.2 Safe working practices

Companies will maintain safe and healthy working conditions by implementing measures that minimise and seek to eliminate workplace fatalities, injuries and occupational diseases amongst employers, contractors and visitors.

Miners who stay further from large mining dredges will stay safer and will be able to work for longer.



**Wearing protective equipment and avoiding dangerous situations reduces injuries so you can keep working**

### 3.2 Safe working practices

Companies will maintain safe and healthy working conditions by implementing measures that minimise and seek to eliminate workplace fatalities, injuries and occupational diseases amongst employers, contractors and visitors.

Miners who wear personal protective equipment are less likely to get injured and can work for longer.

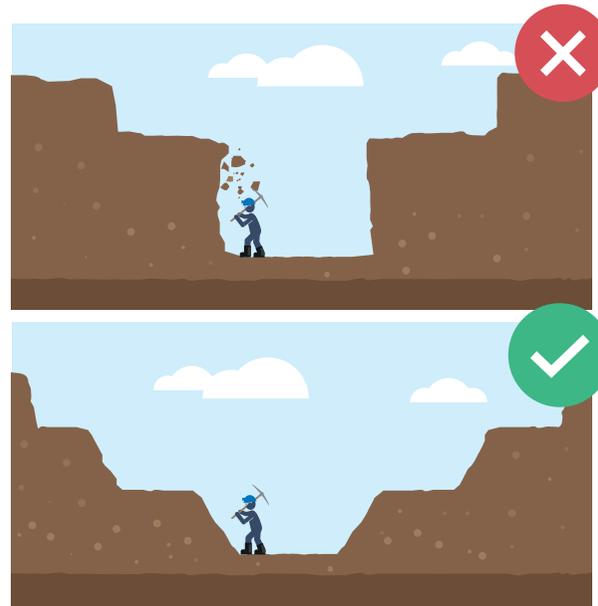


**Mine pits with less steep sides reduce the risk of landslides**

### 3.2 Safe working practices

Companies will maintain safe and healthy working conditions by implementing measures that minimise and seek to eliminate workplace fatalities, injuries and occupational diseases amongst employers, contractors and visitors.

Open pit mining - landslides occur due to steep sides.



**In deep mine pits several benches with less steep sides reduces the risk of rock-falls**

### 3.2 Safe working practices

Companies will maintain safe and healthy working conditions by implementing measures that minimise and seek to eliminate workplace fatalities, injuries and occupational diseases amongst employers, contractors and visitors.

Open pit mining - rock-falls occur due to steep sides.

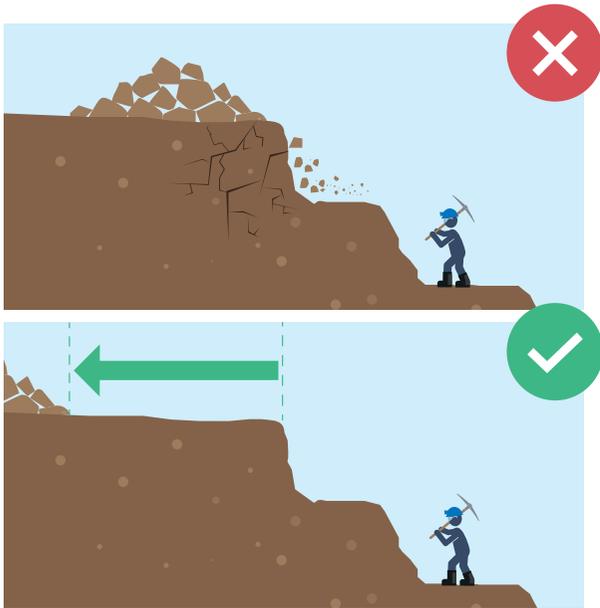


**Supporting overhead rock while undercutting reduces the risk of rock-fall and collapse**

### 3.2 Safe working practices

Companies will maintain safe and healthy working conditions by implementing measures that minimise and seek to eliminate workplace fatalities, injuries and occupational diseases amongst employers, contractors and visitors.

Open pit and underground mining - undercutting soft or broken rock, lead to collapse.

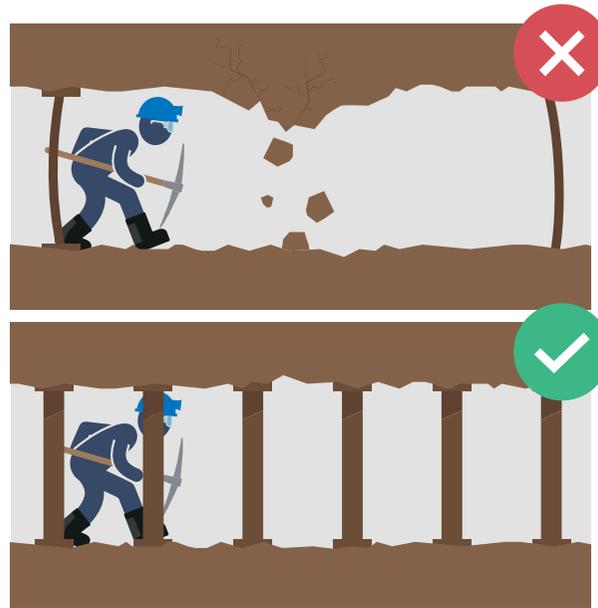


**Piling waste rock 10 metres from the pit reduces the risk of pit collapse**

### 3.2 Safe working practices

Companies will maintain safe and healthy working conditions by implementing measures that minimise and seek to eliminate workplace fatalities, injuries and occupational diseases amongst employers, contractors and visitors.

Open pit mining – overburden cause pit walls to collapse.

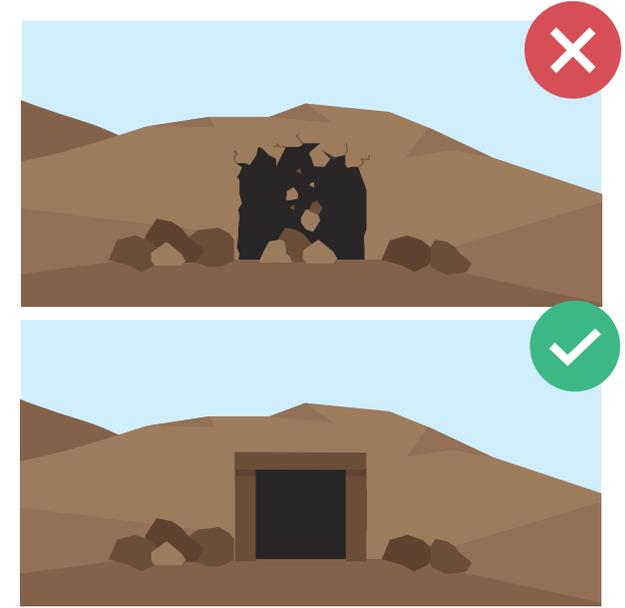


**Using strong and frequent supports for tunnels reduces the risk of collapse**

### 3.2 Safe working practices

Companies will maintain safe and healthy working conditions by implementing measures that minimise and seek to eliminate workplace fatalities, injuries and occupational diseases amongst employers, contractors and visitors.

Poor or improper support can lead to tunnels collapsing.

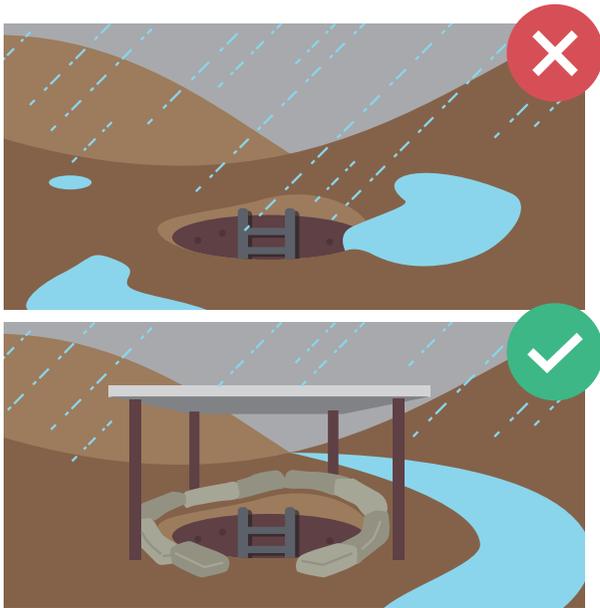


**Building a strong mine entrance support reduces the risk of collapse**

### 3.2 Safe working practices

Companies will maintain safe and healthy working conditions by implementing measures that minimise and seek to eliminate workplace fatalities, injuries and occupational diseases amongst employers, contractors and visitors.

Poorly supported mine shaft entrance can collapse.



### Covering the mine entrance and keeping water away reduces the risk of flooding

#### 3.2 Safe working practices

Companies will maintain safe and healthy working conditions by implementing measures that minimise and seek to eliminate workplace fatalities, injuries and occupational diseases amongst employers, contractors and visitors.

Poorly constructed pits and unprotected entrances can lead to flooding.

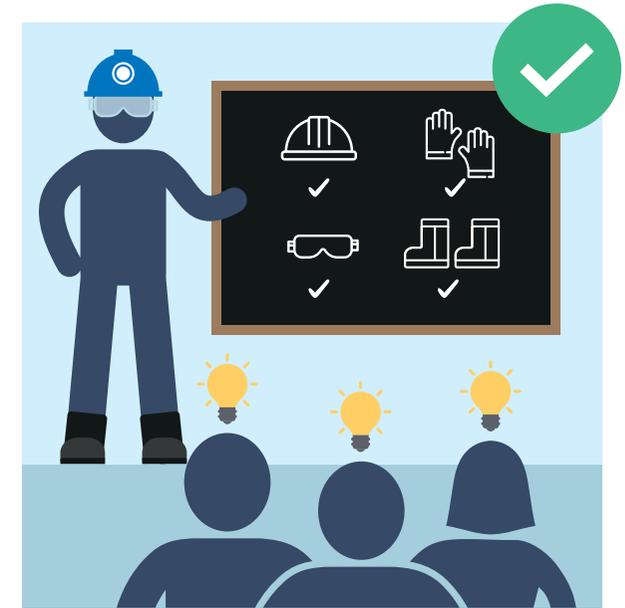


### Learning from accidents prevent them happening again

#### 3.4 Incident follow-up

Following a reportable health and safety incident, companies will define and implement corrective actions in a timely fashion and monitor the effectiveness of such actions.

Understanding why accidents have happened will help miners learn and prevent them happening again.



### Explaining the benefits of working safely encourages everyone to do so

#### 3.5 Training

Companies will provide appropriate and periodic training for employees regarding relevant aspects of this Principle 3, require onsite contractors to train their workers on aspects relevant to their specific tasks and work areas and provide appropriate briefings to visitors to company facilities.

Miners are encouraged to learn from one another about safe mining practices.



## Labour - Standard 8.5

Miners who share opportunities equally for men and women and avoid forcing people or children to work will create a fairer and better educated community.

### PRINCIPLE 8 STANDARDS

#### 8.5 Labour

Suppliers will be requested to communicate guidance to raise awareness regarding concerns over forced or compulsory labour and the worst forms of child labour as well as potential opportunities to engage in practical projects encouraging implementation by ASM as appropriate to the production area.

OTHER RELEVANT CODE STANDARDS

DESCRIPTION

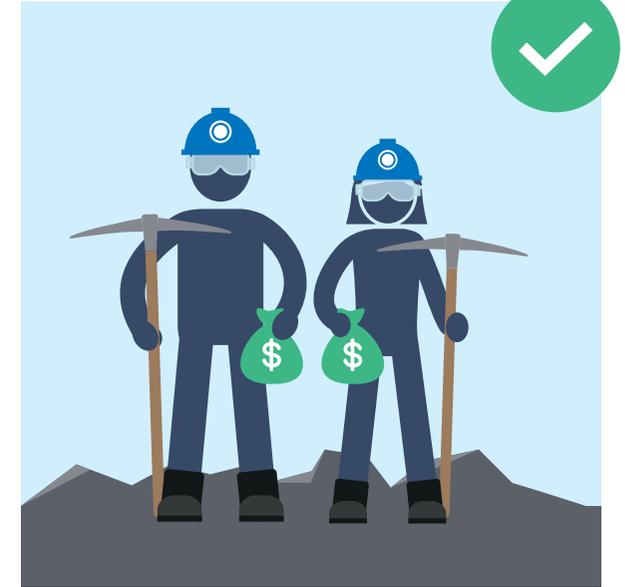


**Let all miners enjoy the same opportunities as you**

#### 4.2 Discrimination

Companies will not make employment decisions based on gender, race, nationality, ethnic, social and indigenous origin, religion or belief, disability, age or sexual orientation unless clearly necessary due to inherent characteristics of the job.

Miners should treat all people fairly and equally.

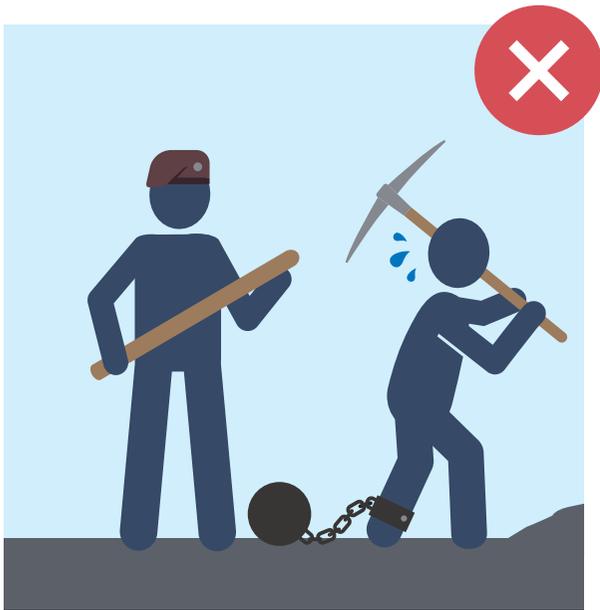


**Women and men who do the same work should earn the same**

#### 4.3 Remuneration

Companies will ensure workers receive fair remuneration for standard and overtime hours worked that meets or exceeds the local legal minimum plus any applicable statutory benefits and provide equal pay for work or equal value.

Miners should pay men and women the same for the same work.

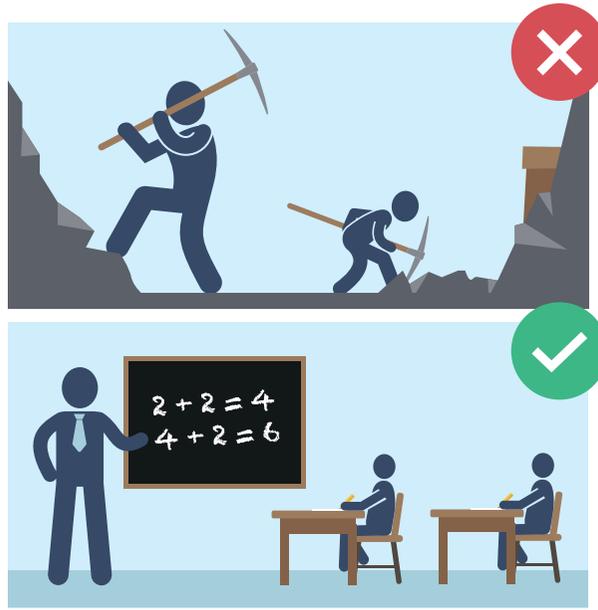


**Being forced to work is illegal, tell someone who can help you**

#### 4.4 Forced labour

Companies will not use or support slavery, servitude, forced or compulsory labour.

Miners should be free to mine voluntarily and not be forced under threat of violence or penalty.

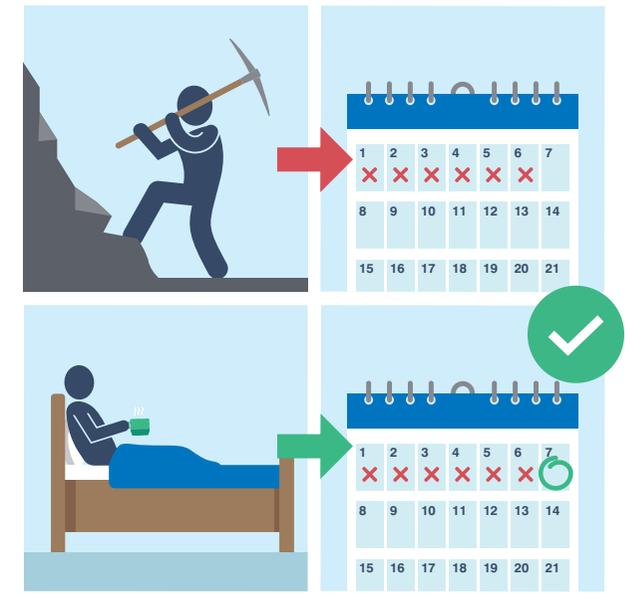


**Mining damages children's health, sending them to school leads to a better future**

#### 4.5 Child labour – worst forms

Companies will not engage in the worst forms of child labour as defined by Article 3 of ILO Convention No.182 including that which is likely to harm the health, safety or morals of children.

Miners should not allow children to work on a mine site as this is likely to harm their health, safety and development.



**By not working every day you will be less tired and able to work better and more safely**

#### 4.7 Working hours

Companies will comply with local laws and ensure that workers undertake overtime on a voluntary basis and have at least one day of rest for every 7-day period or as prescribed by local laws (whichever is higher).

Miners are encouraged to take at least one day of rest in every seven-day period.



## Communities - Standard 8.6

Miners who respect and support all activities of their community will avoid trouble and help everyone to prosper.

PRINCIPLE 8 STANDARDS

### 8.6 Communities

Suppliers will be requested to communicate guidance on negotiating with local communities and indigenous peoples regarding access to land.

OTHER RELEVANT CODE STANDARDS

DESCRIPTION

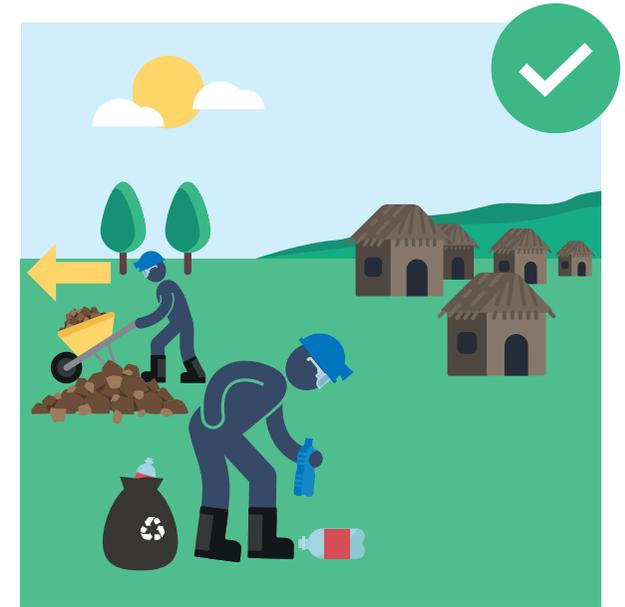


### Discussing with your community helps to resolve problems or disputes

#### 5.3 Grievance Mechanism

Companies will establish an appropriate grievance mechanism to receive and facilitate resolution of concerns raised by individuals, workers, communities or civil society organisations regarding company activities.

Miners and communities can discuss and work together to resolve issues better.

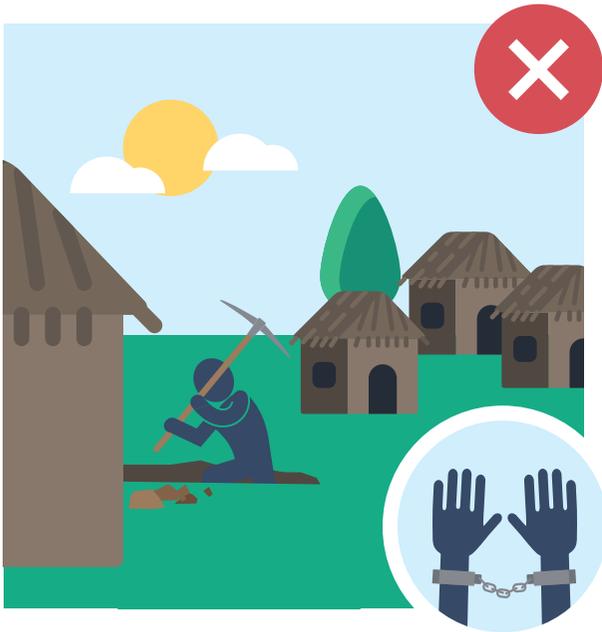


### Considering effects of mining on the community keeps everyone safe and healthy

#### 6.2 Community Health & Safety

Companies will seek to implement practical and reasonable measures with the goal of eliminating potential negative health and safety impacts on local communities.

Miners are encouraged to work with local communities to reduce negative impacts on wider health and safety.

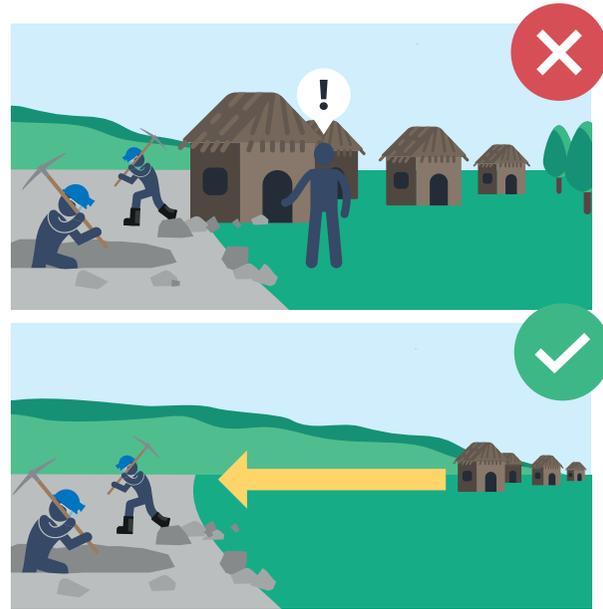


**Mining where people use land for other activities will cause problems for you**

**6.5 Land rights, use and access**

Companies will seek to anticipate and avoid or minimise adverse impacts on land rights, land use and access to land and compensate for any significant residual impacts.

Miners should keep within official designated areas to avoid impacting others who may ask for compensation.



**Mining where people live will cause problems for you**

**6.6 Physical displacement (resettlement)**

Companies will seek to avoid or minimise involuntary resettlement and take appropriate measures to mitigate adverse impacts on displaced persons.

Miners should keep within official designated areas and avoid mining close to people's homes.



**Working together and buying local goods helps your community grow**

**6.8 Local economic development**

Companies will seek to contribute to the economic development of local communities and indigenous peoples.

Miners who work together as a group and buy local products help to support the local economy.



### Fairly sharing natural resources with local people helps everyone carry out their own activities

#### 6.9 Natural resource use and availability

Companies will seek to minimise negative impacts on access to and availability of natural resources by local communities and indigenous peoples.

Miners can work with local people to consider who needs access to natural resources and how they can be shared best.



### Value your local history by protecting important cultural sites

#### 6.10 Cultural heritage protection

Companies will anticipate and wherever possible avoid adverse impacts on cultural heritage; when avoidance is not possible, companies will minimise, mitigate and/or compensate for such impacts.

Miners should understand the particular importance of local sites so mining does not damage cultural heritage



## Human Rights and Conflict - Standard 8.7

Miners who report problems with armed groups, security guards or unfair authorities can be helped to find solutions.

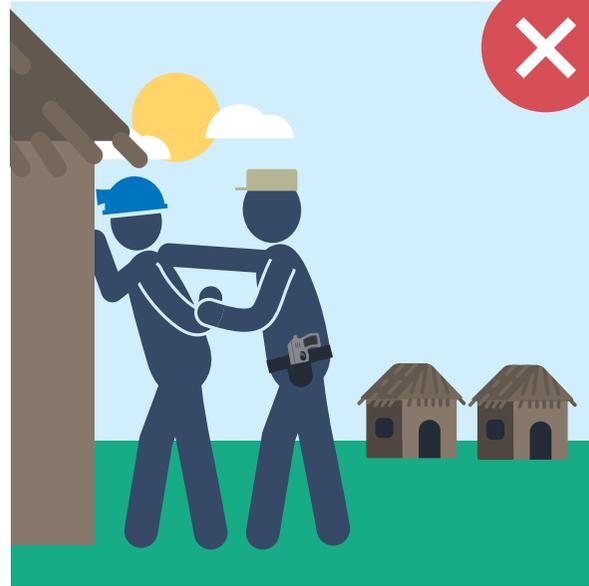
PRINCIPLE 8 STANDARDS

### 8.7 Human rights and conflict

Suppliers will be requested to communicate guidance to raise awareness regarding concerns over serious human rights abuses and conflict as well as potential opportunities to engage in practical projects encouraging implementation by ASM to the appropriate to the production area.

OTHER RELEVANT CODE STANDARDS

DESCRIPTION



**If you are treated unfairly by security, tell someone who can help you**

#### 7.2 Use of private or state security personnel

Companies using direct or contracted workers to provide security will be guided by the Voluntary Principles on Security and Human Rights and by applicable local law.

Miners can report any mistreatment by private or state personnel so they can obtain help.



**If you are being abused, or armed people are involved in mining, tell someone who can help you**

#### 7.3 Responsible Sourcing

Companies will evaluate potential risks when sourcing materials and seek to avoid purchases that may support conflict or human rights abuses according to international expectations and laws.

Miners can report human rights abuses (like torture or sexual violence) or illegal involvement of armed groups in mining or trading so they can obtain help.

# Information Sources Reviewed

**Green Horizons Environmental Consultants Limited** - is an independent consulting firm, specialising in environmental, social and governance issues in the mining sector. The company has undertaken extensive field-based and desktop research on artisanal and small-scale mining, including issues relating to technical and logistical challenges and the optimisation of mining and processing methods. Green Horizons assisted with reviewing the document during its development, supplied feedback on the images, and commented on what may be feasible for ASM miners to achieve on the ground.

A range of existing publications were reviewed in the preparation of this handbook, of particular note are:

1. **Estelle Levin Limited (ELL) and Sudca Development Consultants (Sudca)**. (2016). *Gold Technical Training Manual*. Ministry of Mines, Petroleum and Natural Gas (MOMPNG) of the Government of Ethiopia
2. **Ministry of Energy and Mineral Development**, Dept. of Geological Survey and Mining. (2007). *Small Scale Mining Handbook – A Guidebook for Improving the Performance of Artisanal and Small-scale Mining in Uganda*. New Vision Printing and Publishing Co. Ltd, Kampala, Uganda





#### **UK Head Office**

International Tin Association Ltd  
Unit 3, Curo Park, Frogmore, St. Albans,  
Hertfordshire, AL2 2DD, UK

T: +44 (0) 1727 875 544

F: +44 (0) 1727 871 341

Email: [info@internationaltin.org](mailto:info@internationaltin.org)

#### **China Office**

Rm 1501, Office Tower 1, Henderson Centre  
18 Jianguomennei Street, Dongcheng District  
Beijing 100005 China

T: +86-10-6808-0915 / +86-10-8833-3688

F: +86-10-6808-0975

Email: [itachina@internationaltin.org](mailto:itachina@internationaltin.org)