INSPECTION MANUAL
FOR SMALL-SCALE MINES
THE MINISTRY OF ENERGY AND MINERALS
THE UNITED REPUBLIC OF TANZANIA
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Maps in this report are indicative and not to scale.

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Contents

1. Introduction 3
2. Legal framework governing Small Scale Mine 4
3. Scope and objective of inspection manual 6
4. Types of inspection 7
   4.1 Routine inspection 7
   4.2 Inspection based on complaint 7
   4.3 Legal inspection 7
   4.4 Follow-up inspection 7
5. Pre-inspection preparation 8
   5.1 Review background information of facility 8
      5.1.1 Development of inspection plan 8
      5.1.2 Logistic preparation 9
      5.1.3 Inspection procedure 9
   5.2 Which mine to be selected for inspection? 10
   5.3 Team’s composition for inspection 10
   5.4 What inspecting officer must see? 11
   5.5 What to do after inspection 11

Inspection checklist 14
A. General Information 14
B. Compliance Status 14
C. Site Information 15
D. Mining Details 17
E. Organizational Profile 17
F. Worker Health and Welfare 20
G. Occupational Health and Safety 25
H. Environment Management 34
I. Crushing and Benification 38
J. Tailing and Waste Rocks Management 41
K. Corporate Social Responsibility 43
L. Community or People’s Complaint 43

Notices 49
A.1 Letter Format: Notice of Inspection 49
B.1 Letter Format: Advisory Letter 50
C.1 Format Letter: Default/Show-Cause Notice 51
D.1 Format Letter: Suspension Order 53
1. Introduction

The Mining Act, 2010 is the central legislation guiding the mining sector in the United Republic of Tanzania. The Act provides the legal framework for mineral exploration, exploitation and marketing. The Mining Act deals with the granting of various types of mineral concessions (referred to as the ‘mineral rights’), royalties, compensation and resettlement issues, financial bond for mine closure, penalty provisions for mining violations etc.

Under Section 112, the government has notified five regulations to regulate this sector. These include the Mining (Mineral Rights) Regulations, 2010; the Mining (Mineral Trading) Regulations, 2010; the Mining (Mineral Beneficiation) Regulations, 2010; the Mining (Safety, Occupational Health and Environmental Protection) Regulations, 2010; the Mining (Environmental Protection for Small Scale Mining) Regulations, 2010; the Mining Development Agreement Model 2010; and the Mining (Radioactive Minerals) Regulations, 2010.

The Ministry of Energy and Minerals is the nodal agency that regulates the mining sector. To discharge functions under Act and Regulations, the Commissioner for Minerals is appointed by the President of the United Republic of Tanzania. The minister in consultation with the commissioner may appoint a Chief Inspector of Mines, Zonal Mines Officers, Resident Mines Officers, inspectors of mines and other public officers.
2. Legal framework governing Small Scale Mine

In the United Republic of Tanzania, the classification of large-, medium- and small-scale mining is typically based on the amount of investment. According to the Mining Act, 2010, if the investment is less than US $100,000 or its equivalent in Tanzanian shillings, the mine is referred as a small-scale mine and prior to operation, it has to obtain a primary mining licence from the Zonal Mines Officer. The primary mining licence is valid for a period of seven years and may be renewed three months prior to the expiry date of the primary mining licence. The law also stipulates that the renewal of licence is subject to the following:

- The licence is free from default
- The licence is compliant with safety and environment management and so on.

The Mining Act, 2010 empowers the Commissioner to inspect a mine. The Commissioner may, by notice in the Gazette, designate any person to be an Authorized Officer for legal compliance.

The Commissioner or an authorized officer may, at any time, enter any area over which a mineral right has been granted or any premise or working place except dwelling houses for the following purposes:

- Inspecting that area, premise or working place and examining prospecting or mining operations or treatment of minerals being carried out
- Finding out whether or not the provisions of the Act or subsequent Regulations, or the conditions of a mineral right are being complied with
- Finding out whether the mining operations will cause any nuisance
- Giving directions and taking steps to enforce any provision of this Act or the Regulations, or to abate or remove any nuisance
- Taking soil sample or specimen of rock, ores concentrate, tailing or minerals;
- Examining books, accounts, vouchers, documents, maps, drilling logs, or records of any kind
- Obtaining any information that he may deem necessary for the administration

The Act also stipulates that obstruction or hindrance while discharging above-said function to the Commissioner or an authorized officer is an offence and liable for fine not exceeding Tanzanian Shillings (TZS) 25 million or jail for a term not exceeding twelve months or both.

The Mining (Environmental Protection for Small Scale Mining) Regulations, 2010 stipulate that EIA is not applicable for obtaining primary mining licence, but an applicant prior to commencing mining operation shall conduct baseline environmental investigation and social study (i.e. presence of human settlement, identification of burial sites, presence of cultural heritage sites, water vegetation etc). Based on the finding, the applicant has to prepare an Environment Protection Plan (EPP) to mitigate those impacts and shall submit the Plan to the respective zonal mine officers four month prior to grant of the primary mining licence. The said Regulation also stipulates that the licencee shall not knowingly discharge, deposit or emit liquid, solid, gaseous or particulate matter, or noise or vibration from the mine. In the
case of unauthorized discharge, deposit or emission, the licencing authority may direct the licencee to implement a action plan within a stipulated time. Further, the licence holder shall not use cyanide in the leaching process without prior written approval from the Chief Inspector. In case of violation of the aforementioned, the licencee may be considered an offender and liable to pay a fine not exceeding TZS 1 million or a jail for term not exceeding six month or both.

The Mining (Environmental Protection for Small Scale Mining) Regulations, 2010 empower the ‘Authorized Officer’ to enter a small scale mine any time for the purpose of monitoring and assessing effects on environment. In the case of non-compliance of the Environment Protection Plan and other provisions of the said regulations, the holder of the small-scale mine is to take all reasonable action to mitigate those impacts and inform the zonal officer or pay a fine of up to TZS 100,000 for every breach.

According to the Mining (Mineral Beneficiation) Regulation 2010, licence holder with a primary mining licence may perform Mineral Beneficiation like mineral Processing, Smelting and Refinery, under this regulation, licence holder has to take processing or smelting or refinery licence depending on type of beneficiation. The Regulation stipulate, mineral beneficiation holder has to display signboard with his name. It is considered as offence, if holder does not and liable for fine and imprisonment.

Mining (Safety, Occupational Health and Environment Protection), Regulation, 2010 regulate safety, health and environment in all mines and quarry during exploration, evaluation, development, construction and production, and closure and reclamation. The said regulation define the power and duties of the inspector related to compliance assurance like (a) to ascertain the compliance of provisions of said regulation (b) empower to enter any time and inspect and examine the conditions of any mine or any machinery (c) to inquire into conditions of accidents or breach of the regulation.
3. Scope and objective of inspection manual

Inspection is the process of evaluating the compliance status of statutory norms laid down by regulatory authorities or the conditions of the permits and/or licences based on which the project has been given permission for operation.

The inspection manual is specific to small-scale mining except the radioactive minerals and the oil and gas sector, and is aimed at improving the efficacy of the existing inspection process in Tanzania. This manual can be used by the Ministry of Energy and Minerals (MEM) mining inspector for inspection and compliance assurance.

The main objective of inspection manual is to:
• Determine compliance status with regulations, clearance conditions and specific programme requirements
• Verify the accuracy of information submitted by an industry
• Collect evidences to support enforcement actions
• Obtain information that supports the permitting process
• Verify the adequacy of sampling and monitoring work undertaken by the industry
• To advise the government on matters regarding the mineral industry, relating to environment protection, pollution control, health and safety, and restoration and rehabilitation of mined-out areas
• Protect neighbouring community and promote and monitor community-development activities in mining areas

This manual is not fixed and might need to be updated and altered based on periodic reviews. Hence, feedback or suggestions from users for improvement of the manual is welcome and should be directed to the Centre for Science and Environment (see CSE Website: www.cseindia.org).
4. Types of inspection

The regulatory agency depending on requirement and objectives undertake different types of inspection, usually, the inspection procedure can be categorized under five sub-groups, including:
• Routine inspection
• Inspection based on complaint
• Legal inspection
• Inspection for granting or renewal of licence
• Follow-up inspection

4.1 ROUTINE INSPECTION

Routine inspection is a proactive approach meant to guide industries for better compliance of the licence/permit conditions laid down by regulatory authorities. It comprises:
• A review of records
• A review of performance of environmental, health, safety conditions stipulated in the licence and permits conditions
• An evaluation of existing self-regulatory systems following which suggestions can be given for further improvement. These inspections are generally planned in advance.

4.2 INSPECTION BASED ON COMPLAINT

This type of inspection is usually conducted when there are complaints from the neighbourhood or from important stakeholders, such as politicians and local authorities. The specific area of the complaint is the focus of inspection. Evidences are gathered through photographs and collection of air, water or soil samples for analysis.

In the case of neighbourhood complaints, the complainant’s grievance is recorded on the spot. Inspections based on complaint are uninformed/unannounced, like surprise visits. The outcome of such visits is recommendations to implement specific measures for improvement.

4.3 LEGAL INSPECTION

Legal inspection is carried out to grant licence, renew licence to operate or under direction from the government or court. The aim of a legal inspection is to observe compliance to provisions laid down in the Act and Regulation. A review and evaluation of the records of the performance of environmental and social safeguards and mine management practices, including mine safety, is part of the legal inspection protocol.

All the evidences are photographed by the inspecting authority. All the records received from the facilities are to be signed by a competent authority of the facility surveyed.

4.4 FOLLOW-UP INSPECTION

Follow-up inspection is conducted when an enforcement problem, violation, show cause or suspension is issued and a specific condition needs to be complied with. This inspection is mainly conducted to:
• Verify compliance status of outstanding violations
• Authenticate the compliance to revoke or continue the suspension order.
5. Pre-inspection preparation

Pre-inspection preparation itself demands preparation before it can be undertaken. It includes:

- Review of background information about the facility
- Review of the existing regulatory permits/licence
- Compliance records
- Past enforcement history

Details of activities required to be performed in the pre-inspection stage are as follows.

5.1 REVIEW BACKGROUND INFORMATION OF FACILITY

This section deals with general aspects that an inspector per se or a regulator needs to check before going for an inspection. The review includes:

- Location maps of the facility, licence area, type of mine, production details etc.
- Name, title, phone numbers and other contact details of the responsible facility officials
- Copies of existing permit/licence/clearances
- Approved mining plan/scheme
- Statutory returns/notices/report
- Any special entry requirements, if applicable
- Any safety requirements (shoes, gloves, helmet) needed for inspection
- A description of processing operations and wastewater discharges, emissions or hazardous waste generation, applicable if mine has pithead benificiation plant

Industry compliance and enforcement history is a crucial component of inspection. Collecting previous historical data of an industry helps understand the trends of the industry over time.

The inspecting officer should prior to proceeding for inspection study the files related to the mine and examine the following:

- Compliance of advisory issued in last inspection, if any
- Previous violations pointed out, if any
- Non compliance/show-cause notices issued, if any
- Compliance status of outstanding violations, if any
- Outcome of follow-up action, if any
- Compliance of Environment Certificate and Environment Protection Plan (EPP), records, notices and returns, if applicable and aware himself/ herself with all facts, data including any troubles related to mine.
- The inspector must also list down the key areas that need to be given special attention before proceeding on tour.

5.1.1 Development of inspection plan

Once basic information has been reviewed during the pre-inspection stage, an inspection plan should be developed keeping in mind the scope of inspection (see Table 1: Key components of inspection plan).
Table 1: Key components of inspection plan

<table>
<thead>
<tr>
<th>Objective</th>
<th>Task</th>
<th>Procedure</th>
<th>Resource</th>
<th>Schedule</th>
<th>Coordination</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the purpose of the inspection?</td>
<td>• What tasks are to be conducted?</td>
<td>• What procedures are to be used?</td>
<td>• What personnel will be required?</td>
<td>• What will be the time requirements and order of inspection activities?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• What information is to be collected?</td>
<td>• Will the inspection require special procedures?</td>
<td>• What equipment will be required?</td>
<td>• What will be the milestones?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• What records are to be inspected at the time of inspection?</td>
<td></td>
<td></td>
<td></td>
<td>• What coordination with laboratories or other regulatory agencies will be required?</td>
</tr>
</tbody>
</table>

Source: Prepared by Centre for Science and Environment, New Delhi, India

5.1.2 Logistic preparation

Logistic arrangement is an important aspect needed at the beginning of planning the inspection procedure. It includes preparation of the following documents (see Table 2: Plan for logistic preparation).

Table 2: Plan for logistic preparation

<table>
<thead>
<tr>
<th>Credentials of the inspecting authority</th>
<th>Conveyance</th>
<th>Infrastructural support for sampling</th>
</tr>
</thead>
<tbody>
<tr>
<td>The inspecting authority must carry credentials (ID proof and other relevant legal documents) to conduct inspection along with necessary details about the facility to be inspected. An inspection checklist is also required.</td>
<td>The mode of conveyance should also be discussed beforehand to avoid confusion at a later stage. This will ensure travel to and fro from the industrial site.</td>
<td>Infrastructure includes the necessary equipments for sample collection and supporting mode to carry these equipments. Sampling equipments: This depends on the type of samples to be collected (air, water, noise, soil, ground vibration etc.) Tools: Tools include GPS, laptop, cell phone, camera, calculator etc. Vehicles for transportation: Arrangement of transportation is also required to ensure smooth carrying of the collected samples to the destination.</td>
</tr>
</tbody>
</table>

Source: Prepared by Centre for Science and Environment, New Delhi, India

5.1.3 Inspection procedure

The inspection procedure of the preceding five categories—routine inspection, inspection based on complaint, legal inspection, inspection for granting licence /

Table 3: Steps for inspection

<table>
<thead>
<tr>
<th>Step 1: Entry</th>
<th>Entry comprises the interaction between inspector and officials of the respective facility at the gate. The inspector shows his credentials (identity card and legal documents etc.) to seek permission to enter the premises of the factory. If permission is granted, the inspection team registers their names in the visiting register of the company. If possible, a photograph of the register along with signatures is kept for records. If entry is denied, the reason/s for doing so must be recorded by the inspector. Conflict at the gate is to be avoided as far as possible. If special permission is required, such permission shall be obtained in advance, preferably at the planning stage.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 2: Spot review of records</td>
<td>Reviewing records is part of the inspection process. The objective of the reviewing process is to assess the following: Does the facility have valid licence/permit/checking of status of submission of various statutory returns/notices/report? Is all the required information available? Is the information being maintained for the required time period? Does the record review indicate areas needing further investigation?</td>
</tr>
</tbody>
</table>
permits and follow-up inspection—comprises five steps (see Table 3: Steps for inspection):

| Step 3: Conference with relevant officials | • It is crucial to hold a general meeting with the heads of different officials. It is understood that each department is a storehouse of information with respect to its functions and requires time schedule to fix up.  
  • The inspector will use this information to evaluate and validate the data provided by the facility. |
| Step 4: Self-regulatory system | On compliance regulations, intention is an important factor. Some industries implement mine management plan on statutory obligations. Some companies comply with permit/licence conditions beyond statutory obligations, while others are unwilling to follow the regulations. This is reflected in the self-regulatory mechanisms inbuilt in an organizational structure. |
| Step 5: Site visit | No inspection is complete without a site visit by an inspector. The word site visit means on-the-spot inspection and collection of evidences through survey with the aid of photographs, measurement and sampling. The visit also includes interview with the concerned company personnel, the neighbourhood and the complainant, if the inspection is based on complaint. Inspecting officer should collect information in standard format; this would bring uniformity in reporting and help them to reach to logical conclusion. |

Source: Prepared by Centre for Science and Environment, New Delhi, India

5.2 WHICH MINE TO BE SELECTED FOR INSPECTION?

We have attempted to identify the criteria for selecting mines for inspection. Our selection criteria are not exhaustive and criteria can be added.

The following priorities may be considered while selecting mines to be inspected:
• Mine operator violating provisions of Mining Act and Regulations
• Track record of violation/illegal mining
• Follow up of previous violations
• Mines whose licence is expiring
• Mines not inspected for more than two years
• Follow-up of previous violations pointed out
• Inspection is also undertaken under the following situations:
  – Neighbourhood complaint
  – Environmental issues
  – Difficult working conditions
  – Inadequate reclamation
  – Enforcement of provisions pertaining to closing of mines and/ or temporary discontinuance of mining operations relating to submission of returns and notices etc.

5.3 TEAM’S COMPOSITION FOR INSPECTION

Depending on the objective of inspection, inspection of small-scale mines (open-cast and underground) should be carried out by a team of multidisciplinary officers, such as from mining, geology, and environmental safety and health disciplines, to make inspections more successful. In case of reclamation, the complete area must be physically verified on the ground by involving experts with expertise in mine reclamation and restoration.
5.4 WHAT INSPECTING OFFICER MUST SEE?

At the time of inspection, the inspecting officer(s) should inspect the mine with particular emphasis on implementation of conditions put forth in the permit, licence, Environment Certificate and other statutory clearances such as:

• Verification of status of submission of various statutory returns, notices, reports, and validity of licence, permits, certificate
• Physical verification of compliance of violation noticed during previous inspection
• Compliance check of Environment Protection Plan and other conditions
• Verification of health, safety and hygiene status
• Verification of machinery and equipment that poses risk to human life
• Compliance with approved closure plan or reclamation
• Verification of illegal discharge of water or tailing waste or air pollution caused to neighbourhood

5.5 WHAT TO DO AFTER INSPECTION

The inspecting officers should review the remarks of pre-inspection and observations made during the field survey and compare the finding/remarks to take action to rectify the violation. The inspecting team, after thorough analysis of the duly filled questionnaire (see inspection checklist appended to manual), collects evidence, and photographs and categorizes their findings to their logical conclusion. Each inspection has to come to its logical end depending on severity of violation through issue of advisory; default/show-cause notice, penalty and suspension of mining operation, if any.

The violation may be categorized into (a) minor and (b) major violations. Major violations include violations that pose serious risk to workers, immediate neighbour, mines and the environment, including regulatory breach. Some common examples of major and minor violations in mines have been listed in Table 4: Example of some major and minor violation. The list is not exhaustive.

Table 4: Example of some major and minor violations

<table>
<thead>
<tr>
<th>Major violation/default</th>
<th>Minor violation/default</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mine operating without licence/permit/certificate</td>
<td>Irregular submissions of returns and notices/audit report</td>
</tr>
<tr>
<td>Mine operating without a qualified and experienced mine manager.</td>
<td>Production figure does not match excavation</td>
</tr>
<tr>
<td>Rescue teams are in place but unable to deal with emergency situations</td>
<td>Inadequate recordkeeping</td>
</tr>
<tr>
<td>Licence holder does not provide PPE or hazardous operations likely to cause accident</td>
<td>Permit systems are in place, but documentation is poor</td>
</tr>
<tr>
<td>Poses serious risk to workers</td>
<td>Irregular submission of fitness certificate of equipment and machineries mandated under law</td>
</tr>
<tr>
<td>Fitness certificate of equipment and machineries mandated under law are not maintained</td>
<td>Irregular monitoring of environmental parameters related air, water and noise</td>
</tr>
<tr>
<td>Use of cyanide without permission or not using retort in case gold is recovered by using mercury.</td>
<td>Air pollution control measures are in place, but operation and maintenance are not adequate</td>
</tr>
<tr>
<td>Unauthorized discharge and emissions</td>
<td>Water treatment system are in place, but operation and maintenance are not adequate</td>
</tr>
<tr>
<td>Risk of contamination</td>
<td>Water conservation measures are in place but O&amp;M not adequate</td>
</tr>
<tr>
<td>Subsidence happened but the area has not been fenced or notice board was not put in place.</td>
<td>Inadequate house keeping</td>
</tr>
</tbody>
</table>
The inspector should record significant observations and debrief the officer in charge about the mines inspected including any spot guidance given to the licence holder.

The inspector should record significant observations and debrief the officer in charge about the mines inspected and give spot guidance, including compliance of different notices, to the licence holder or mine officials.

A clean typed letter or an electronic mail clearly indicating lists of violations and extent of non-compliance under the Mining Act and various Regulations should be compiled soon after the return from inspection tour. Depending on the level of violation, an advisory or default letter can be issued giving a specific time period for rectifying the violation and depending on its magnitude, a penalty or suspension order may also be issued. If the reply of the licensee is unsatisfactory or where there is no reply even after expiry of the stipulated time period from the date of issue of violation letter, a show-cause notice should be issued to the licensee allowing further time to rectify their violation with the approval of officer in charge. If even after repeated reminders and sufficient time to rectify the situation, the licensee has not responded, depending on the seriousness of the violation, a suspension order may be issued.

Several provisions in the Mining Act provide grounds for suspension/cancellation of mineral rights or mining licence. Under the following conditions the licence holder may get the licence suspended or cancelled:

- Failure to comply with the requirement of the Act and Regulations
- Failure to comply with a condition of the licence
- Failure to comply with an exercise of rights given under the licence

However, the licencing authority shall not suspend or cancel a licence unless the licence holder:

- Has been served a default notice specifying the ground for cancellation
- Failed to act within 30 days or stipulated time from the date of issue of default letter by the issuing authority.

Although not exhaustive, an attempt has been made to create a decision tree to help the inspector to take appropriate decision based on the existing regulations (See Figure 1: Inspection decision tree).

| Licence holder commence development of new working in mining area without backfilling and re-vegetation or fencing the abandoned previous working | Hygiene and cleanliness are not adequate in canteen, toilets, restrooms |
| Affecting the local surrounding (neighbourhood) | Personal Protective Equipment (PPE) not appropriate |
| Poor compliance status of Environment Protection Plan | Workers are not aware of standard operating procedure |
| Previous violations pointed out but its compliance is not fulfilled | Default notices issued but not complied |

Source: Prepared by Centre for Science and Environment, New Delhi, India
**Box 1: Guiding notes to help take appropriate decision**

Severity of the situation may be defined by keeping in mind the following points:

- Permit/clearances
- Risk of contamination to air, water, land etc.
- Risk to the health and safety of workers
- Risk to the health and safety of the neighbourhood community.
# INSPECTION CHECKLIST

## a) GENERAL INFORMATION

<table>
<thead>
<tr>
<th>Name of the mine</th>
<th>Licence no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of the licence holder</td>
<td>Year of starting operation</td>
</tr>
<tr>
<td>Mine location and address (Inspector should use GPS system to mark the physical verification of latitude and longitude of mining licence area as per licence agreement)</td>
<td></td>
</tr>
<tr>
<td>Type of area (tick mark)</td>
<td>Rural</td>
</tr>
<tr>
<td>Terrain characteristic (tick mark)</td>
<td>Flat land</td>
</tr>
<tr>
<td>Mine manager/other appointee Contact address/mob./phone no./email address</td>
<td></td>
</tr>
<tr>
<td>Inspection date and time</td>
<td>Last inspection conducted</td>
</tr>
<tr>
<td>Name of inspecting officer and ID number</td>
<td>Reasons for inspection</td>
</tr>
<tr>
<td>Licence status (active/inactive)</td>
<td>Total licence area (in hectare/sq. km)</td>
</tr>
<tr>
<td>Mineral</td>
<td>Associated minerals, if any</td>
</tr>
<tr>
<td>Expected life of mine</td>
<td>Mineral beneficiation (yes/no), explain beneficiation</td>
</tr>
</tbody>
</table>

## b) COMPLIANCE STATUS

<table>
<thead>
<tr>
<th>Status of violation</th>
<th>Comment/status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous violations pointed out, if any (to be completed in office by inspecting officer prior to inspection but verified at the time of inspection)</td>
<td></td>
</tr>
<tr>
<td>Default/show-cause notices issued, if any (to be completed in office by inspecting officer prior to inspection but verified at the time of inspection)</td>
<td></td>
</tr>
<tr>
<td>Compliance status of outstanding violations, if any (to be completed in office by inspecting officer prior to inspection but verified at the time of inspection)</td>
<td></td>
</tr>
<tr>
<td>Compliance status of Environment Protection Plan (physical verification of compliance status at the time of inspection)</td>
<td></td>
</tr>
<tr>
<td>Aspect /condition/matter</td>
<td>Criteria (Mine Regulations Act, Standards)</td>
</tr>
<tr>
<td>-------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>Status of licence boundaries (Act stipulates demarcation of mining areas and has to be kept updated with mining operation)</td>
<td></td>
</tr>
<tr>
<td>Production records (schedule 2)</td>
<td></td>
</tr>
<tr>
<td>Payment of annual rents (royalty payments/dead rents etc.)</td>
<td></td>
</tr>
<tr>
<td>Submission of reports/permits</td>
<td></td>
</tr>
<tr>
<td>Recordkeeping (register of accidents/disputes and complaints/ amount paid in wages to persons engaged)</td>
<td></td>
</tr>
<tr>
<td>Other statutory payments made, if any specify</td>
<td></td>
</tr>
</tbody>
</table>

**Verification method:**

a. Prior to inspection, inform mine operator to keep all record ready at time of inspection
b. Interview with mine officials/Spot checking

c) **SITE INFORMATION**

1. Is there a mine nearby? If there is, fill Table 5: List of nearby mines.

**Table 5: List of nearby mines**

<table>
<thead>
<tr>
<th>Name of the mine</th>
<th>Mineral present</th>
<th>Type of mine (large/medium/small)</th>
<th>Distance from the mine boundary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Do any important installation come under the mineral rights area? If they do, provide information in **Table 6: Important installations**.

**Table 6: Important installations**

<table>
<thead>
<tr>
<th>Type of important installations</th>
<th>Distance from mine boundary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Guiding note for inspection:**

The act stipulates to maintain a certain distance from some important installations as specified below, where the holder of the mineral rights cannot exercise his right under a license:
• 100 metres away from a building, reservoir or a land owned by the government
• Any reserved area protected under the Antiquities Ac.
• 100 metres from any military establishments
• Any national park, forest reserve area, game area, range development area or Ngorogoro Conservation area
• 100 metres from a petroleum-drilling area
• Any area used for public purpose

3. Is there a waterbody/river/lake/stream close to mining licence area? If there is, provide the following information

Table 6: Water source near mines

<table>
<thead>
<tr>
<th>Distance of Riverbank and its distance from site</th>
<th>Other waterbodies (lakes, ponds and other water sources and their distances. Specify.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mine licence area</td>
<td></td>
</tr>
<tr>
<td>Ancillary facilities, if any</td>
<td></td>
</tr>
</tbody>
</table>

Guiding notes for inspection:

• The runoff from the mine, tailing area, degraded catchment leads to increased sedimentation and pollution of a river or water body. Overburden or waste rocks or tailing waste from mines run into water bodies and causes choking.
• Regulation stipulate to maintain distance from water body like (a) Licence holder shall ensure that pit latrine are constructed at least 100 meter from water source other than washing or settling pond (b) Licence holder shall ensure washing or settling pond are constructed 50 meter away from river or stream or any water sources (c) Unauthorised discharge is the violation and failure to comply may considered as breach of regulation

4. Are any human settlement/agriculture land outside the mine licence and adjoining areas?

Yes [ ] No [ ]

If the answer is yes, are any complaints registered with the mine owner related to air, water, noise pollution or illegal discharge of tailing material/waste/subsidence?

Yes [ ] No [ ]

If the answer is yes, the inspector must refer and fill Section (l): ‘Community and People’s Complaint’ of the inspection manual
d) **MINING DETAILS**

**Table 7: Method of mining operations**

<table>
<thead>
<tr>
<th>S. no.</th>
<th>Type</th>
<th>Please tick</th>
<th>Mining method</th>
<th>Please tick</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Open cast</td>
<td></td>
<td>Manual/semi-mechanized/mechanized</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Underground</td>
<td></td>
<td>Manual/semi-mechanized/mechanized</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Both</td>
<td></td>
<td>Manual/semi-mechanized/mechanized</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Others (specify)</td>
<td></td>
<td>Specify</td>
<td></td>
</tr>
</tbody>
</table>

1. Number of mining shifts: ........................................

2. **In case of underground mines, collect the following information**

   - Current depth of mine in metres (m) 
   - Number of level developed
   - Mode of entry (shaft/adit/incline)

3. Characteristic of hanging and foot wall

   **Remarks** *(related to joints/faults/folds/other geological disturbances/strength of the rock):*

4. **In case of open-cast mines, collect the following information**

   - Current depth of mine in metre (m)
   - Number of benches developed
   - Angle of repose of the waste rock

   Comments by inspector if any:

**e) ORGANISATIONAL PROFILE**

1. Total number of employees

2. Total number of competent person
Table 8: Employees details

<table>
<thead>
<tr>
<th>Workers</th>
<th>Male</th>
<th>Female</th>
<th>Total number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subcontractor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Verification method**: Registration, payment record, spot check

**Guiding Note for inspection**: The regulation stipulates the manager to maintain an employee register, which records the name, duties assigned, commencement and termination of service for each employee.

3. Is there any seasonal fluctuation in the number of workers?

| Yes | No |

If yes, which season

4. Is the mine operator employing child labour?

| Yes | No |

**Note**: The regulation stipulates that the licence holder shall not employ children below 18 year of age

**Verification method**: Inspector must check register/spot checking and interview with the worker to verify child labour employment in mine

If the answer is yes, Inspector must write down the deficiency and accordingly an advisory/show cause/default/suspension can be issued

**Remarks**:

3. Do workers have insurance?

| Yes | No |

**Verification method**: Inspector should check the following: (a) insurance register (b) talk to workers; inspector should keep evidence as a sample of proof
If the answer is yes, the inspector should give a brief description of the insurance scheme:

**Covered under insurance:**

4. Is there any provision for maternity leave for women?

| Yes | No |

**Verification method** check record/register/interview with women employees

**Guiding note for inspection:** The employment and labour act states that female workers are entitled to at least twelve weeks (84 days) of fully paid maternity leave or 100 consecutive days (in case of multiple births) within a leave cycle of 36 months.

If the answer is no, the inspector should write down the deficiency and mention in the inspection report for correctness/non-compliance

**Remarks:**

**Table 9: Salaries/payments**

<table>
<thead>
<tr>
<th>Category</th>
<th>Daily wage</th>
<th>Monthly salary</th>
<th>No. of shifts in a day</th>
<th>Working hours</th>
<th>Overtime compensation (Y/N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee</td>
<td>Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subcontractor</td>
<td>Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Guiding note for inspection:** The act states that all workers are entitled to be compensated for overtime. The night working hours are defined in the Act as work between 20:00 hours to 06:00 hours. Workers will be compensated if they work on public holidays.
f) WORKER HEALTH AND WELFARE

Health and infrastructure

1. Is the mine operator conducting periodic health checkups of the workers?

   Yes [ ]   No [ ]

   Verification method: Checking register and records, interview with worker/management/take relevant documents as a proof.

2. If the answer is yes, what are the tests conducted and periodicity?

   Table 10: Test types and periodicity

<table>
<thead>
<tr>
<th>S. no.</th>
<th>Types of tests</th>
<th>Periodicity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   Guiding note for Inspection:

   Occupational diseases are caused due to air pollution, constant exposure to noise and vibration, heat and humidity (mainly in underground mines). The principal airborne hazards include particulate matter, naturally occurring gases, engine exhaust and some chemical vapours. The Free crystalline silica is the most dangerous airborne dust that miners and quarry-workers face. It can cause silicosis, a typical pneumoconiosis that develops insidiously after years of exposure. The high level of exposure can cause acute or accelerated silicosis within months with significant impairment or even death within a few years. In coal mining, constant exposure to coal dust causes coal workers’ pneumoconiosis (CWP) which in turn produces illness like chronic bronchitis and emphysema. The risk CWP is high in case of high carbon content such as anthracite. Similarly, in asbestos minor, asbestosis (lung cancer) and mesothelioma are the main diseases likely to arise from asbestos exposure. In addition to respiratory disorders, miners also face diseases such as severe dyspnea (shortness of breath), and eye afflictions such as cataract, conjunctivitis, corneal ulcers, glaucoma and squint trachoma.

   Periodic medical examinations are an important activity for miners. To ensure safety and health of workers, it becomes important for the employer to conduct periodical health checkups. In India, it is mandatory for the employer to conduct initial and periodical health checkups of workers, including tests like vision, hearing, respiratory, blood pressure, etc.

   If the answer is no,

   The inspector should take a note and accordingly an advisory/showcause/default/suspension can be issued depending on severity of situation

Remarks:

Infrastructure (health)

3. Is there infrastructure to cater to the emergencies (hospital, dispensaries, ambulance service, etc.)

Yes [ ] No [ ]

If the answer is yes, the inspector should verify it physically and list down the infrastructure available

Inspector’s remarks on infrastructure:

If the answer is no, Is there any alternative option such as many small mine operators have collaboration with nearby hospitals to cater to such situations?

Alternative options ____________________________________________.

Note: If the answer is no, Inspector should take a note and accordingly a notice/ corrective action / penalty/suspension can be issued depending on severity of situation.

Adequacy of alternative option and inspector’s remarks:

First-aid kit in a mining area

1. Are first-aid supplies and services available at strategic areas?

Yes [ ] No [ ]

Note: Strategic areas means places like mine office, mine area, crusher, beneficiation plant

If Yes, Inspector should provide narrative on sufficiency of First Aid?

Narrative, refer guiding note:
Guiding notes for inspection:
- Is there a responsible person for first aid? Check he/she undergone specific training or practicing certificates
- Is location of first aid equipment marked?
- Are workers aware about first aid?
- Check availability of accident register
- Check types of medicines and adequacy in first aid-kit
- Do workers enter types and severity of injuries in accident register?
- Availability of Responsible person or workers trained enough to use first aid

Is the first-aid service adequate? If not, the inspector should take a note and accordingly a advisory/ show-cause/ default can be issued for taking corrective action

HIV/AIDS

1. Are mine workers aware about HIV/AIDS?

Yes [ ]  No [ ]

If they are, does the mine operator conduct awareness programmes through training/information brochures/poster/banner etc.?

Yes [ ]  No [ ]

If the answer is yes, the inspector should verify this (see Guiding note for inspection; also take photograph as a proof).

Remarks:

Guiding notes for inspections:
- Interview with mine worker
- Information brochures available
- Condoms accessible on site
- Check training register to understand number of workers trained its frequency, gender etc.

Health and hygiene of workers

1. Are there separate toilets for men and women?

Yes [ ]  No [ ]

Note 1: Generally, separate toilets need to be provided in workplaces where
there are both male and female employees. Hence, the mine operator must construct sufficient latrine and urinal, which should be conveniently situated and accessible to workers at all times while they are at mine.

If the answer is yes, is the number of toilets versus workers adequate?

Yes [ ] No [ ]

**Verification method:** Take the opinion of the workers

If the answer is no, the inspector must take a note and ensure that number of toilets versus workers is adequate.

**Remarks:**

---

**Guiding notes for inspection:**

The regulation states that toilets:

- May be provided in underground mine/portable toilet on the surface; must be placed in a good ventilated area
- Must be maintained in a good hygienic condition and all the waste material removed regularly
- Should be equipped with an adequate sanitary facility and provide privacy

2. Is a sweeper employed to clean and ensure hygiene?

Yes [ ] No [ ]

**Note:** Sweepers should be employed whose primary duty is to keep clean all latrines, urinals and washing places clean.

If the answer is no, the inspector must take a note and discuss with mine operator to rectify this

**Remarks:**

---

3. Is there lunch room/canteen for workers? **Verification method:** General observation

Yes [ ] No [ ]

If yes,
Inspector must give a note on adequacy of the lunch room:

**Remarks** (inspector must look into the guiding note below before giving the remark):

---

**Guiding note for inspection:**
The regulation prescribes for a lunch room, if the number of worker exceeds seven. The regulation provides the lunch room to be endowed with:
- Proper lights and ventilation
- Entrance should not be provided through a toilet
- Availability of seating facility and tables
- Place should be away from any chemical processing area, and must be free from contaminants.

4. Are there separate facilities for washing and shower and changing rooms for male and female employees?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

If the answer is yes,

Are they adequate in capacity, housekeeping and cleanliness? **Verification method:** physical verification and interview

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

Inspector must provide a note on the adequacy of the facility:

**Remarks** (Inspector must provide remarks by referring to the note provided below):

---

**Guiding notes for inspection:**

As given under the regulation-
- Separate male and female enclosed accommodation that is sufficiently lighted, ventilated and in a clean and sanitary condition should be provided
- The inspector must ensure provisions in place
- The inspector should verify changing rooms for workers
- Consumable items, such as soap and need to be restocked regularly. Any broken or damaged infrastructure and fittings (such as plumbing, and lighting) needs to be repaired promptly.

10. Is there a separate resting place for the workers?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>
**Guiding notes for inspection:**
The Regulation stipulates provision of a waiting room or bays in underground and a resting place on surface.

The inspector must provide a note on the adequacy of the resting facility:

**Remarks** (Inspector must provide remarks by referring to the note provided below):

---

**Guiding notes for inspection:**
The Regulation stipulates the following provisions in a resting/waiting room:

- Waiting room or bays in underground and a resting place on surface
- Area should be conveniently located and ventilated
- Sufficient lighting and necessary facilities such as drinking water
- The area should be maintained in hygienic condition and should be sufficient with regard to the number of employees

---

**g) OCCUPATIONAL HEALTH AND SAFETY**

1. Is there a designated person to ensure health, safety and environment in the mine?

Yes [ ] No [ ]

If the answer is yes, is the person competent enough to do the job?

Yes [ ] No [ ]

**Verification:** Interview/ any experience certificate regarding health, safety and environment.

If the answer is no, then how company ensures environment, safety and health aspects in mine

**Remarks:**

---

**Note:** If the inspector is not satisfied, it should be noted and a notice should be issued to the mine operator to institute this system.

**Accident facts and figures**

2. Does the licence holder maintain accident register?

Yes [ ] No [ ]

If the answer is yes,

Inspector should fill table for accident details
Table 11: Accident details

<table>
<thead>
<tr>
<th>Type of accident</th>
<th>Number/year</th>
<th>Reason for accidents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-fatal</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Verification method:** Checking register (accident/injury register will help inspector to understand types of injury and frequency), records such as police FIR, insurance claim, interview with worker/management. Inspector should take photograph and collect documents as a proof.

**Guiding note for inspection:**
The act and the subsequent regulation stipulate that the license holder must maintain an accident register and all the particulars of the accident must be recorded in it. The register needs to be made available at the time of inspection and if found non-compliant with the legal provisions, inspector shall investigate the accident.

Overall remarks of inspector on accident register

In case of deviation, the inspector should take a note and accordingly an advisory/ show-cause/ default can be issued depending on severity of situation.

**Remarks:**

---

**Work permit**

3. Is there a system for obtaining work permits?

Yes [ ] No [ ]

If the answer is yes, randomly check work permits for mechanical and electrical installations and fill Table 12: work permit for mechanical and electrical installations.
Table 12: Work permit for mechanical and electrical installations

<table>
<thead>
<tr>
<th>Mechanical and electrical installations</th>
<th>Issued by (name and designation)</th>
<th>Issuing department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working in confined spaces</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gate pass/entry pass/tagging to go in the mine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working on low-tension system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working on high-tension system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working in toxic and hazardous environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others (specify)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If not satisfied, inspector should take a note and accordingly a advisory/show-cause/default/suspension letter can be issued depending on severity of situation.

Remarks:

Table 13: Permit/approval for instruments and accessories

<table>
<thead>
<tr>
<th>S. no.</th>
<th>List of instruments/accessories to be tested and verified</th>
<th>Date of last calibration/inspection/maintenance</th>
<th>Approval</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Yes/no</td>
<td>Date</td>
</tr>
<tr>
<td>1</td>
<td>Gas detector</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Mine rescue system</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Utility (water system, electrical system, air pressure system, etc)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Ventilator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Others (specify)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Verification method: At the time of inspection, the inspector must verify the records/certificates/permissions of instruments and accessories

Guiding note for inspection:
The regulation stipulates:
• Provision of a competent engineer who shall be in charge of a plant/machinery, whose power exceeds 50 Hp
• All the machinery be used are suitably designed, maintained in a safe and serviceable condition and regularly tested and examined for defect.
• All the locomotives should have an efficient means of communication between the driver and the brakes-man.
• Belt conveyor if used should have fencing around the moving parts and must have a device which cuts off the power supply automatically in case of any ambiguous working situation.

The regulation also stipulates that it is the duty of the manager to ensure safety in places like generating stations, winding engine rooms, main substations and pump stations etc. A notice should be prominently display:
• That unauthorized persons are prohibited from entry
• Directions in case of fire
• Directions for treatment of persons suffering from electric shock.

Health and safety management

4. While filing this section, the inspector must visit different sections and, based on observation, fill Table 14: Safety status. The inspector should also comment on action points which need to be adhered to.

<table>
<thead>
<tr>
<th>Table 14: Safety status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>(a) Person movement control</td>
</tr>
<tr>
<td>• Appropriate signs</td>
</tr>
<tr>
<td>• Secure fences and locked gates/doors</td>
</tr>
<tr>
<td>• Presence of security and security checkpoint</td>
</tr>
<tr>
<td>• Visitors record maintained</td>
</tr>
<tr>
<td>Verification method: General observation/ checking visitor record</td>
</tr>
<tr>
<td>(b) Underground safety (if applicable)</td>
</tr>
<tr>
<td>• Measure to protect from rock fall</td>
</tr>
<tr>
<td>• Adequate tunnel supports e.g. timber support, stulls, etc.</td>
</tr>
<tr>
<td>• Safe underground entrance</td>
</tr>
<tr>
<td>• Trenching around shaft area</td>
</tr>
<tr>
<td>• At least two exits available</td>
</tr>
<tr>
<td>• Tunnel entry/exit controlled (e.g. tagging system)</td>
</tr>
<tr>
<td>• Adequate ventilation (forced or natural)</td>
</tr>
</tbody>
</table>
### Adequate underground lighting

- Lamp room provided at the surface

**Guiding note:** *Regulation stipulates for a lamp room on surface if there is any working below ground.*

### Adequate hoisting system

**Guiding notes for inspection:** *Rope rupture is a common problem in hoisting. Check the following:*

- Frequency of rope changing
- Condition of the rope
- Is the rope correct for the job?

It is advisable to calculate the rope’s Factor of Safety (FOS) using an empirical formula.

### Adequate warning signs posted

- Shaft entrance fenced
- Appropriate PPE usage enforced
- Monitoring of gases underground (oxygen level/methane etc)

**Verification method:** General observation/visiting each sections/interacting with workers

### Open-pit safety

- Adequate pit wall slope angle
- No pit wall undercutting
- Pit entry/exit controlled
- Dumper movement regulated
- (speed control), if applicable
- Adequate warning signs posted
- Appropriate PPE usage enforced
(d) **BLASTING SAFETY**

Standard operational procedures in place

- Explosive handling procedure
- Charging procedure
- Evacuation procedure
- Firing procedure
- Monitoring procedure

**CERTIFIED BLASTER (check licence/certificate)**

*Inspector should check the procedure and witness one cycle of blasting to verify the compliance of the procedure, and interact with workers on standard operating procedures*

**Remark:**

**NOTE:** Regulation stipulates mine manager to appoint a competent person having a blaster certificate to look after blasting.

<table>
<thead>
<tr>
<th>Daily consumption (kg)</th>
<th>Type of explosive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Validity of explosive permit (tick): Valid/expired. If valid, validity period: _____________

If valid, is the operator using explosive as per the permit?

Yes [ ] No [ ]

If permit is expired then inspector should take a note and accordingly a notice/corrective action/penalty/suspension can be issued

**Remarks:**

Are they maintaining a designated explosive storage area?

Yes [ ] No [ ]

**Note:** Regulation stipulates to provide a permitted storage area for explosive and accessories.

If the answer is yes, the inspector must verify whether area is secure and follows all conditions as laid down in the permit.

**Remarks by inspector:**
**Personal protective equipment (PPE)**

While filing this section, inspector must visit different sections and based on observation/spot checking/interview with workers/physical verification of PPE, inspector should fill this, inspector should also comment on action points which need to be adhered.

**Table 15: Personal protective equipments**

<table>
<thead>
<tr>
<th>Item</th>
<th>Comments/action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(a) Head protection</strong></td>
<td></td>
</tr>
<tr>
<td>- Helmet</td>
<td>Yes</td>
</tr>
<tr>
<td>(hard hats provided)</td>
<td></td>
</tr>
<tr>
<td>- Is it correct for task?</td>
<td></td>
</tr>
<tr>
<td>- Are workers wear it?</td>
<td></td>
</tr>
<tr>
<td><strong>Verification method:</strong> Spot checking, checking store record, purchase receipt</td>
<td></td>
</tr>
<tr>
<td><strong>(b) Leg protection</strong></td>
<td></td>
</tr>
<tr>
<td>- Boots</td>
<td>Yes</td>
</tr>
<tr>
<td>- Is it correct for the task?</td>
<td></td>
</tr>
<tr>
<td>- Are workers wear them?</td>
<td></td>
</tr>
<tr>
<td><strong>Verification method:</strong> Spot checking, interview with workers, checking store records, purchase receipt</td>
<td></td>
</tr>
<tr>
<td><strong>(c) Eye, face, ear protection</strong></td>
<td></td>
</tr>
<tr>
<td>- Safety glass, ear plug, mask</td>
<td>Yes</td>
</tr>
<tr>
<td>- Is it correct for the task?</td>
<td></td>
</tr>
<tr>
<td>- Are the workers wear it?</td>
<td></td>
</tr>
<tr>
<td><strong>Verification method:</strong> Spot checking, interview with workers, checking store records and purchase receipt</td>
<td></td>
</tr>
<tr>
<td><strong>(d) Other PPE (specify e.g. fall guards)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Verification method:</strong> Spot checking, interview with worker, checking store records, purchase receipt</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Mine Inspection Manual, Rwanda Natural Resources Authority (RNRA) Geology and Mines Department (GMD)

**Guiding note for inspection:** The regulation demands workers to have an adequate head wear, foot wear etc., and if in an underground mine, an operable lamp of approved type to be provided by the manager.
Firefighting system

1. What initiatives are undertaken for firefighting?

List the initiatives:

2. Are the firefighting initiatives adequate?

Yes ☐ No ☐

3. Overall remarks of inspector on existing firefighting system (refer to Guiding notes for inspection)

Remarks:

Before filling this section the inspector must physically verify vulnerable areas

In mines, areas vulnerable to fire include:

• Generator
• Transformer area
• Explosive storage area
• Oil storage
• Shaft entry
• Mine office
• Kitchen

Guiding notes for inspection:

• Installation of the fire extinguishers at vulnerable areas like generator, transformer area, oil storage area etc.
• Equipments vulnerable to fire and electrical short circuit must be provided with fire extinguishers
• Appropriateness of the fire extinguishers can be checked
  ◊ Based on the type of fire: Class A, B, C, D, E, and F. Are they valid or expired?
• SOP availability and training of the workers for using fire extinguishers (level of awareness about the SOP)
• Demarcation and signboard around vulnerable areas
• Periodic mock-drills and response of the workers and whether documented or not

Emergency response management

1. Is there a proper SOP for Emergency Response Management? Verification:

Check Standard Operating Procedure (SOP) documents.

Yes ☐ No ☐
Are they adequate?

Yes [ ] No [ ]

2. Inspector must provide the remark on the adequacy of the Emergency response management-

Remarks (refer to Guiding notes for inspection below before giving the remark)

Guiding notes for inspection:
- Type of emergency conditions identified
- Roles and responsibilities of person defined clearly
- Proper communication channel—proper listing of the contacts and details of the person to be contacted
- Conveyance system—Ambulance, cabs, stretchers provided. Etc.
- Special response plan in case of natural disasters and awareness and training of the workers for the same.
- Siren/alarm system indicating state of emergency
- Signage board for ‘do’s and don’ts’
- Awareness among workers about the SOP in case of emergency
- Awareness among workers about emergencies.

Rescue team

3. Is a rescue team in place?

Yes [ ] No [ ]

Guiding notes for inspection: The inspector should check the composition of the team and also review the documented procedure for rescue operations. The inspector should also check the equipment for rescue and also record previous rescue operation, if any

4. Are they adequate?

Yes [ ] No [ ]

If the answer is yes, the inspector should provide narrative on adequacy

Narrative:

Guiding note for inspection:

The regulation stipulates to maintain a mine rescue team if the numbers of employees is greater than 10. It also stipulates the provision of two rescue teams if the number of employees exceeds 50. The number of members of the team must be six, one of whom is a team leader and the other an assistant and one of whom remains at the fresh air base and coordinates.
The regulation also defines the qualification, duties and responsibilities of the members of the mine rescue team as provided under:

- **Member must poses a valid mine rescue certificate and must be trained by a trainer as stipulated in the law.**
- **Trainer must be a competent person and must record the training in a suitable log book.**

5. Overall remarks of the inspector on existing rescue management. If inspector is not satisfied with existing rescue management, it should be noted an advisory/default/show-cause should be issued for corrective action.

**Remarks:**

<table>
<thead>
<tr>
<th>h) ENVIRONMENT MANAGEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water management</strong></td>
</tr>
<tr>
<td>1. What is the source of water? _______________________________</td>
</tr>
<tr>
<td>2. What is the average daily consumption?____________________</td>
</tr>
<tr>
<td>m$^3$/day</td>
</tr>
<tr>
<td>3. Water permit’s validity (valid/expired) _____________________</td>
</tr>
<tr>
<td>4. What are initiatives taken for controlling water pollution and water conservation?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Initiatives for controlling water pollution:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiatives for controlling water conservation:</td>
</tr>
</tbody>
</table>

**Guiding notes for inspection:**
The Regulation stipulates a distance be maintained from the waterbody such that: (a) Licence holder shall ensure that pit latrines are constructed at least 100 metres from water source other than washing or settling pond (b) Licence holder shall ensure washing or settling ponds are constructed 50 metres away from river or stream or any water sources (c) Unauthorized discharge is the violation and failure to comply may considered as breach of regulation(d) setting pond in case of mineral washing (e) designated storage for tailing. Other good practices for controlling water pollution and its conservation are –

- Trenches around training storage to check runoff
- Use of mine seepage water for mining operation
- Construction of rainwater harvesting/check dam
- Awareness and training on water conservation
Are initiatives adequate?

Yes [ ]  No [ ]

If the answer is yes, the inspector should provide narrative

<table>
<thead>
<tr>
<th>Narrative:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

If the answer is no, it should be noted and an advisory/show-cause/default should be issued to the mine operator for unauthorised discharge and for instituting a process for water conservation.

<table>
<thead>
<tr>
<th>Remarks:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

**Mine dewatering**

1. What is the quantity of mine dewatering per day _____________ (m³/day)

2. What system is in place for dewatering?

   Electric pump [ ]  Diesel pump [ ]

3. Where is the pump installed? **Verification: General observation**

   Underground [ ]  On surface [ ]

**NOTE:** _It is unadvisable to keep the pump inside in case of underground mines._

4. What they do with mine dewatering?

<table>
<thead>
<tr>
<th>Narrative:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

**Guiding notes for inspection:**

_In India, the abstraction of ground water by mine dewatering when mining operation intersects the water table. The usage of dewatered water may be permitted subject to the quality of the water. It can be used for agriculture, dust suppression and artificial recharge._
Air pollution management

1. What initiatives are taken for air pollution control?

Initiatives:

Guiding note for inspection:
- Use water sprinkler (mobile and fixed)
- Check initiatives for air pollution control during drilling, loading, transportation and stockpile
- Speed limit on vehicles transporting ore and waste
- Installation of wind break
- Plantation on waste rock storage area
- Use of PPE (mask)

2. Are initiatives adequate?

Yes [ ] No [ ]

If the answer is yes,

Inspector should provide narrative

Narrative:

If the answer is no, it should be noted and an advisory/show-cause/default should be issued for corrective action for air pollution management.

Remarks:

Respirable dust (applicable for open and underground mine)

Occupational exposure to respirable crystalline silica is very common in the mining sector. The magnitude of impact depends on the silica content in ore/waste. Respirable crystalline silica is defined based on size of the particle (particle having diameters less than 10 microns). Silica refers to the chemical compound silicon dioxide (SiO₂), which occurs in a crystalline or non-crystalline (amorphous) form. Crystalline silica may occur in more than one form: alpha quartz, beta quartz, tridymite and cristobalite. The alpha form of quartz is the most common in nature, because of its abundance, it is referred as quartz. It is one of common components of rocks; hence, workers are exposed to quartz dust during rock cutting, drilling, crushing, and during transportation.
The continuous exposure to respirable crystalline silica leads to development of silicosis, lung cancer, and pulmonary tuberculosis.

According to the International Agency for Research on Cancer (IARC), respirable crystalline silica is a human carcinogen, which can be detected by an abnormal chest X-ray. It is also seen that worker may develop one of three types of silicosis. Depending on the concentrations of respirable crystalline silica (a) **Chronic silicosis**, usually occurs after 10 or more years of exposure (b) **Accelerated silicosis** develops five to 10 years after the first exposure (c) **Acute silicosis**, whose symptoms within a period of a few weeks to five years after initial exposure

1. Do they monitor ambient air quality?
   
   Yes [ ]  No [ ]

   If the answer is yes:

   **In-house monitoring station** [ ]  **By external consultant** [ ]

   *If the answer is yes, the inspector should check the latest monitoring report and keep a copy as a proof for reporting.*

   **Mine reclamation**

   1. Does the mine holder start the reclamation?
      
      Yes [ ]  No [ ]

      If the answer is yes, the inspector should provide a narrative on mine reclamation.

      **Initiatives:**

      - The Regulation stipulates that the mine holder shall not initiate new developments without reclaiming the existing pits.
      - The reclaimed land has to be ensured about its productivity or restoration to a state that was prior to mining.
      - Reclaimed area should be engineered by a competent person for stability. For long-term stability, re-vegetation should be done.
      - Waste dumps shall be reclaimed to ensure stability, water quality etc.
      - Water courses need to be restored to their original drainage pattern with the quality of water ensured for long term.
      - Pit walls constructed for over-burden dumps, unless impractical, must be vegetated so to gain stability and prevent run-off.

   2. Is there any abandoned working in the mine area?
      
      Yes [ ]  No [ ]
Inspector must give a note on the abandoned working area.

**Remark** (Inspector must check the Guiding note for inspection before giving the remark):

**Guiding note for inspection:**
The Regulation stipulates for the following:
- Signage board, specifying the entry restriction
- Sealed by a concrete wall or a wooden strip restricting the entry of any material
- Depth, condition and type of abandoned working

3. What are the safeguards taken by the licence holder to manage mine subsidence?

**Remark** (Inspector must check the Guiding note for inspection before giving the remark):

**Guiding note for inspection:**
The regulation stipulates that the area be fenced securely with a notice board clearly indicating the area to be kept at the place where mining operation has caused subsidence or cavities on the surface.

Are initiatives adequate?

Yes [ ] No [ ]

If inspector is not satisfied with the existing safeguard measures, an advisory/show cause/default can be issued.

1) **CRUSHING AND BENEFICIATION**

**Crushing**

1. Capacity of the crusher

2. Type and number of crusher

3. Type of unloading in crusher hopper

   Mechanized [ ] Manual [ ] Semi-manual [ ]

4. What are the initiatives taken for air and noise pollution control (fugitive and point source)?

**Initiatives:**
5. Are initiatives adequate?

Yes [ ] No [ ]

If the answer is yes, the inspector should provide a narrative on adequacy on initiatives.

Narrative:

Guiding notes for inspection:

- Appropriate dust suppression measures like bag filter or water sprinkler
- Workers using PPE like ear plug and mask at the time of visit or check the stock or discuss with the worker
- Nose baffles or enclosure

Separation and recovery (applicable for gold mine)

1. What is the method used for separation and recovery?

Mercury [ ] Cyanide [ ] Other [ ]

Applicable, if mercury is used,

2. Is there SOP for mercury usage, handling and its management? Verification: Check SOP documents

Yes [ ] No [ ]

3. What are the initiatives taken for environmental protection and worker safety?

Initiatives:

Guiding notes for inspection:

Regulation mandate to use Retort while separating gold from mercury amalgam

- Awareness among worker about SOP
- Awareness among worker regarding the health issues related to mercury handling
- Designated storage area
- Workers using PPE like gloves mask and boot at the time of visit or check the stock or discuss with the worker
- Signage board for ‘do’s and don’ts’
- First-aid box at the working site
- Talk to the workers about mercury contamination and any health issues in the past they have faced
Are the initiatives adequate?

Yes [ ] No [ ]

Inspector should provide a narrative on adequacy of initiatives.

Narrative:

Note: If not satisfied, inspector should take a note and accordingly an advisory/show-cause/default/suspension letter can be issued depending on severity.

Applicable if cyanide is used

1. Daily consumption of cyanide (kg) [ ]

2. Status of permit (valid/expired) [ ]

Note: If permit is expired inspector should take a note and accordingly an advisory/show-cause/default/suspension letter can be issued depending on severity.

3. Is there SOP for cyanide usage, handling and management? Verification method: Check SOP documents

Yes [ ] No [ ]

4. What are the initiatives taken for environmental protection and worker safety?

Initiatives:

Guiding note for inspector:

- Awareness among worker about SOP
- Is the storage area away from human settlement and waterbody?
- Awareness among worker induction training regarding (a) Characteristics of cyanide (b) Storage, handling and usage (c) Effects of cyanide (d) Specific first-aid requirement (e) Relevant and appropriate PPEs (f) CN codes (g) CN colour code (h) The site emergency plan
- Check training and awareness register or spot checking with workers on training and awareness
- Designated storage/dosing/mixing area for cyanide, which is locked/fenced/restricted entry/all entrances are kept locked when not attended
- Is working plan for rainy season available with operator?
- Presence of drainage system for catching runoff water around CN usage areas and catchment pond in place.
Bulk liquid cyanide container has a liquid level gauge which is clearly visible to the operators.
- Containment dyke around Cyanide storage, if gravity is used
- Waste/Tailing area shall be barricaded
- Pipe leaking at time of visit
- Colour coding of pipes throughout the plant for cyanide use
- Availability of emergency kit for treatment of cyanide poisoning (check kit has sufficient material, are it sufficient to handle emergency)
- Safety showers and eyewashes are installed and fully working in chemical delivery, storage, addition and mixing areas
- Proper disposal mechanism of used CN bags
- Workers using PPE like gloves mask and boot at the time of visit or check the stock or discuss with the worker
- Signage board for ‘do’s and don’ts’
- Talk to the workers about cyanide contamination and any health issues in the past they have faced
- Maintain register of accident due to cyanide poisoning

Are initiatives adequate?

Yes [ ] No [ ]

Inspector should provide a narrative on adequacy of initiatives.

Narrative:

If inspector is not satisfied, inspector should take a note and accordingly an advisory/show-cause/default/suspension letter can be issued depending on severity.

j) TAILING AND WASTE ROCKS MANAGEMENT

Guideline note for inspector for storage of tailing and waste rock or mine spoil or waste, etc.

- Every mine operator should take measures so that the overburden or waste rock, rejects and fines generated during mining operations or tailings, slimes and fines produced during sizing, sorting and beneficiation or metallurgical operations shall be stored in separate dumps
- The dumps should be correctly protected to avoid escape of material in harmful quantities which may cause degradation of environment such as water pollution
- The site for dumps, tailings or slimes should be identified as far as possible on impervious ground to ensure minimum leaching effects due to rainfall.
- Wherever possible, the waste rock, overburden etc. should be back-filled into excavated area or mined out area in order to restore land to its
original use as far as possible. The fines, rejects or tailings, beneficiation or metallurgical plants should be safely disposed in particularly designed tailings pond so that it could not be allowed to escape and cause land degradation or damage to agricultural field, pollution of surface water bodies and groundwater or cause floods.

1. What the mine operator do with the wastes?

**TABLE 16: WASTE MANAGEMENT**

<table>
<thead>
<tr>
<th>Type of waste</th>
<th>Quantity (tonne/month)</th>
<th>Designated storage (Yes/No)</th>
<th>Usage (sold/reclaimed or other usage specify)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tailing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waste rock</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Is the storage area away from human settlement and waterbody?

Yes [ ] No [ ]

3. Initiatives taken for environmental protection

**Guiding notes for inspection:**

The regulation stipulates that the tailing impoundment design must be approved by the chief inspector. A written permission has to be taken from the inspector for discharging tailing into the dam. There should be an operating manual for the tailing system and must be circulated with the responsible person.

Some other measures can be taken to safeguard the environment, like –

- Safe distance from agriculture, water body and human settlement
- RCC pavement/HDPE liner around cyanide leaching area to prevent groundwater contamination
- Designated tailing storage area
- Trenches around storage area for containment
- Precaution during rainy season (cover the dump with plastic/tarpaulin sheet)
- In case of tailing pond, inspector should check following
  a) designated storage area
  b) liner material to prevent ground water contamination
  c) monitoring well
  d) fenced or restricted entry
  e) monitoring of inlet concentration of cyanide (before entering tailing pond) and overflow of tailing pond
  f) disposal mechanism overflow from tailing pond (recycle/reuse/after treatment discharge in water body)
2. Are initiatives adequate?

Yes ☐ No ☐

Inspector should provide a narrative on adequacy of initiatives.

Remarks:

**NOTE**: If not satisfied, inspector should take a note and accordingly an advisory/show-cause/default/suspension letter can be issued depending on severity.

**k) CORPORATE SOCIAL RESPONSIBILITY**

1. Does the company have done CSR activity in their neighbourhood (current financial year)

Yes ☐ No ☐

If the answer is yes,

List the CSR activities and expenditure on CSR on current financial year.

<table>
<thead>
<tr>
<th>CSR activity</th>
<th>Total expenditure on CSR</th>
</tr>
</thead>
</table>

*Verification method*: through interviews/spot check

**l) COMMUNITY OR PEOPLE COMPLAINT**

Applicable for water pollution

1. Is complaint against the mine owner related to water pollution or unauthorized discharge of wastewater?

Yes ☐ No ☐

If yes,

The inspector should visit the site and interact with people and find out

How long

Frequency
Location

How many people affected

Inspector should list complains *(Verification method: through interviews/spot checks)*

Remarks:

Are their claims genuine?

Yes [ ] No [ ]

*Note: Spot checking at site would help inspector’s to understand ground reality, to understand the genuineness, inspector should collect water sample for physical and chemical characterization.*

Is affected people had registered complain against mine owner?

Yes [ ] No [ ]

If the answer is yes,

Where

Were any action taken?

Yes [ ] No [ ]

If yes, what actions

**Actions:**

Inspector must write down the deficiency observed at the site, accordingly an advisory/default/show-cause/suspension letter should be issued for corrective action.
Remark:

Applicable for air pollution

2. Is the complaint against the mine owner related to air pollution?

Yes [ ] No [ ]

If the answer is yes,

Inspector should visit the site and interact with people and find out

How long [ ]

Frequency [ ]

Location [ ]

How many people affected [ ]

Inspector should list down complains (Verification method: through interviews/spot checks)

Remark:

Are they genuine?

Yes [ ] No [ ]

Note: To gauge the genuineness of the complaint, the inspector should conduct air quality monitoring in collaboration with NEMC and at the same time conduct spot checking at the site to understand the cause of air pollution and the ground reality.

Have affected people registered the complaint against the mine owner?

Yes [ ] No [ ]

If yes,

Where [ ]

Was any action taken?

Yes [ ] No [ ]
If the answer is yes, what actions?

**Actions:**

The inspector must write down the deficiency observed at the site and accordingly an advisory/default/show-cause/suspension letter should be issued for corrective action.

**Remark:**

3. Are complaints regarding illegal dumping of waste (mine spoil) or polluted wastewater or tailing waste on private or government land?

| Yes | No |

*Verification method:* interviews/spot checks/take photograph for evidence

If the answer is yes, the inspector should visit the site and interact with people and find out

| How long |
| Frequency |
| Location |
| How many people affected |
| No people affected |
| How much land impacted |

Inspector should list down complains

**Remarks:**

*Verification method:* through interviews/spot checks
Are they genuine?

Yes ☐ No ☐

Is affected people had registered complain against mine owner?

Yes ☐ No ☐

If the answer is yes,

Where: ____________________________

Were any action taken?

Yes ☐ No ☐

If the answer is yes, what actions?

**Actions:** ____________________________

The inspector must write down the deficiency observed at the site and accordingly an advisory/default/show-cause/suspension letter should be issued for corrective action.

**Remarks:** ____________________________

4. Are their complaints against the mine owner related to *subsidence*?

Yes ☐ No ☐

If yes,

List down complains *(Verification method: through interviews/spot checks)*

**Remarks:** ____________________________

**Guiding note for inspection:**

*The Regulation stipulates that if a case of subsidence has been reported earlier,*
the area is to be fenced and a conspicuous notice board defining the extent of the subsidence to be put in that area.

Are they genuine?
Yes ☐ No ☐

Is affected people had registered complaint against the mine owner?
Yes ☐ No ☐

If the answer is yes,
Where: 

Were any action taken?
Yes ☐ No ☐

If yes, what actions

**Actions:**

The inspector must write down the deficiency observed at the site and accordingly an advisory/default/show-cause/suspension letter should be issued for corrective action.

**Remarks:**
NOTICES

A.1 LETTER FORMAT — NOTICE OF INSPECTION

LETTER FORMAT—NOTICE OF INSPECTION
Government of Tanzania
MEM
Office of the Zonal Mining Officer

File no. Dated:

To:
Name of license holder/nominated owner/authorized person of mine with designation: __________________________________________________________

Name of licensee (company, firm, association or individual): ________________

Address: _______________________________________________________________
_______________________________________________________________________

Subject: _______________________________ (name of mine) with the license number _____________ and a total area (in ha) _______________ registered in the name of _______________ and located at _________________.

Mr/Mrs,
By virtue of the powers conferred on me under section 20 sub section (2) and Regulations enacted under Section 112 of the Mining Act,2010, I propose to inspect your above said mine on dated __________________. The type and scope of inspection are provided below. It is therefore requested to remain present on (dated ________________) at your mine office during inspection.

Type of Inspection: _____________________________________________________

Scope: _________________________________________________________________
_______________________________________________________________________

The following records/documents should be made available at the mine office for examination during inspection.

A copy of permit and licenses obtained under various acts and regulation
Compliance of Environmental Protection Plan
Production details
Register of accidents
Periodical monitoring data of environmental parameters
_______________________________________________________________________

Please ensure the presence of manager, mining engineer & geologist appointed under Regulations enacted under Section 112 of the Mining Act, 2010.

Yours faithfully

Name of inspecting officer ________________________________________
Designation   ________________________________________
B.1 LETTER FORMAT: ADVISORY LETTER

LETTER FORMAT: ADVISORY LETTER

Government of Tanzania  
MEM  
Office of the Zonal Mining Officer

File n. Mine code Dated:

To,

Name of license holder /nominated owner/authorized person of mine with designation______________________________
Name of Licensee (company, firm, association or individual) ________________________
Address for communication_____________________________________________________

Sub: Gaps identified for improvement of mining operation, beneficiation and environment enacted under Section 112 of the Mining Act, 2010, name of mine __________________ over an extent of ____________ (area in ha), (address of mine) ____________________________________________________________________

Mr/Mrs,

The following gaps are identified consequent to inspection of your above mine on (date of inspection____________) by undersigned in presence of the mine officials Mr/Mrs________________________________________(Designation)

Advisory for compliance

…………………………………………
…………………………………………
…………………………………………

02. You are hereby advised to comply with the above shortcoming immediately and intimate its compliance zonal office within ________________ days from the date of issue of this letter for taking further necessary action at our end towards improvement.

Yours faithfully,

(Name of inspecting officer)  
Designation

Copy forwarded to:
1. The Commissioner MEM  
2. Assistant Commissioner for Minerals, Zone__________________
C.1 FORMAT LETTER: DEFAULT/SHOW-CAUSE NOTICE

FORMAT LETTER: DEFAULT/SHOW-CAUSE NOTICE
Government of Tanzania
MEM
Office of the Zonal Mining Officer

File no.: Mine code: Dated:

To,

Name of license holder/nominated owner/authorized person of mine with designation____________________________________________________________

Name of licensee (company, firm, association or individual)______________________

Address for communication________________________________________________

Sub: Violation of provisions of the regulations enacted under Section 112 of the Mining Act, 2010, name of mine __________________ over an extent of (area in ha) ____________ha, (address of mine)____________________________

Mr/Mrs,

The following provisions of the Regulations, 2010, enacted under Section112 of the Mining Act, 2010 were observed to be violated in your above mine during the inspection on (date of inspection) __________________ by the undersigned in the presence of the mine officials Mr/Mrs __________________ , Designation (___________________________________)

The information mentioned in following table is at a glance and no executives may be added or deleted as per requirement.

<table>
<thead>
<tr>
<th>Regulations</th>
<th>Regulation no.</th>
<th>Nature of violation/default observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Mining (Environmental Protection for Small Scale Mining) Regulations, 2010</td>
<td>17</td>
<td>It was observed that at the time of visit employees were not provided with PPE subsequently it was also observed that person handling cyanide was not using PPE</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>It was observed at the time of visit untreated wastewater from the mine was discharged in neighbourhood agricultural land and it was not meeting the desired standard stipulated under regulation 6(1) (b)</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>It was observed that cyanide leaching was carried out without approval of Chief inspector of Mines.</td>
</tr>
<tr>
<td>6. The Mining (Safety Occupational Health and Environment Protection) Regulations, 2010</td>
<td>6(3)(b)</td>
<td>It was observed that the licence holder has been informed by the commissioner for appointment of another person as manager of the mine within one month, consequence to examination of certificate of appointment of manager who has not sufficient knowledge, experience and ability to manage the mine, but no such appointment has been made after the expiry of the stipulated period, and as such first mentioned appointment become void and no effect.</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Drinking water conforms to standard of Ministry of Health is not supplied to the worker.</td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>It was noticed that hoist man and cage attendant who required breathing apparatus is not trained in its proper use.</td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>It was noticed that retort used for gold-mercury amalgamation is not sealed tightly to avoid leakage of mercury vapour.</td>
<td></td>
</tr>
<tr>
<td>127</td>
<td>It was noticed that waste timber and other combustible matter are piled in underground workings needed to be removed to the surface.</td>
<td></td>
</tr>
<tr>
<td>148</td>
<td>It was observed that register of accidents is not maintained.</td>
<td></td>
</tr>
<tr>
<td>178(2)</td>
<td>An annual report on the operation and maintenance of tailings disposal system has not been provided to the Chief Inspector.</td>
<td></td>
</tr>
<tr>
<td>179(2)</td>
<td>A reservoir or pond declared inoperative by the inspector is not disposed of in accordance with its license.</td>
<td></td>
</tr>
<tr>
<td>201</td>
<td>It was observed that waste dumps have not been reclaimed to ensure (a) Long term stability, (b) Water quality released from waste rock dumps to the receiving environment is not meeting the standard specified in to the regulations.</td>
<td></td>
</tr>
<tr>
<td>206(4)</td>
<td>The mine closure plan has not been reviewed and updated by the licencsee since last five years as required by the Chief Inspector.</td>
<td></td>
</tr>
</tbody>
</table>

In this connection, it is brought to your notice that the above violations/defaults constitute an offence punishable under regulations enacted under section112 of the Mining Act, 2010

You are here by noticed /advised to rectify the above defaults immediately and intimate the position to this office within ___________ days from the date of issue of this letter.

Yours faithfully

(Name of inspecting officer)
Designation

Copy forwarded to:
1. The Commissioner MEM
2. Assistant Commissioner for Minerals, Zone ___________
D.1 FORMAT LETTER: SUSPENSION ORDER

**FORMAT LETTER: SUSPENSION ORDER**

Registered/Speed Post

Government of Tanzania
MEM
Office of the Zonal Mining Officer

File no. | Mine code | Dated:
---|---|---

To,
Name of license holder/nominated owner/authorized person of the mine with designation ________________________________

Name of licensee (company, firm, association of individual) ______________________

Address for communication ______________________________________________________

**Sub: Order of suspension of mining operations under Regulations enacted under section112 of The Mining Act, 2010, Name of Mine ______________________ over an extent of (area in ha) ___________________ha, address of mine ______________________________________________________

Mr/Mrs,

Please refer to the inspection of your above mentioned mine carried out by (name of inspecting officer _________________________), on (date of inspection) __________________ accompanied by (name of mine officials) ______________________________________________________

On examination of this office records, it is observed that the following provisions of the Regulation 3: Schedules—Environmental Protection Plan of the Mining (Environmental Protection for Small Scale Mining) Regulations, 2010, read with Section 44(d) of the Mining Act, 2010 were found defaulted in your above mine during the inspection:

<table>
<thead>
<tr>
<th>Section 44(d)</th>
<th>1) It was observed that mining operation were carried out at (place) latitude and longitude other than approved in the mining/development plan.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulation 3: Schedules—Environmental Protection Plan, 7 and 8</td>
<td>2) Cyanide leaching was carried out for gold recovery from the waste dump but the proposed measures as stipulated in the EPP not followed endanger to nearby habitat causing endanger to the life of the people.</td>
</tr>
</tbody>
</table>

In this connection, it was brought to your notice that the above defaults constitute an offence punishable under regulation 9 of the Mining (Environmental Protection for Small Scale Mining) Regulations, 2010 enacted under Section112 of the Mining Act, 2010 read with Section 44(d), 63 (1) and (2).

In this regard, default notice was communicated to you vide this office letter of even number dated (date of show-cause letter ______________________ )
However, it has been found that you have not rectified the defaults even after stipulated days from the issue of default notice dated ( ___________ ) / or the reply against the default cum show cause notice was received on dated ______________. It was duly examined/considered and not found suitable for compliance of Regulation 3: Schedules—Environmental Protection Plan 7 and 8 of the Mining (Environmental Protection for Small Scale Mining) Regulations, 2010, enacted under Section112 of the Mining Act, 2010, read with Section 44(d), 63 (1) and (2).

I am of the opinion that the non-compliance of the Regulation 3: Schedules—Environmental Protection Plan, 7 and 8 of the Mining (Environmental Protection for Small Scale Mining) Regulations, 2010, read with Section 44 (d), 63 (1) and (2), defeats the very purpose of the programme of mining operation and the Environmental Protection Plan. Therefore, by virtue of the powers conferred upon me under section 63 (3) of The Mining Act, 2010, I hereby order suspension of Mineral right including mining operations in (Name of mine) _______ in (LC no) ____________ over (extent of area in ha) ____________ ha, (address of mine) ________

with immediate effect.

06. This order shall remain in force until revoked in writing. After compliance of the provisions of the Regulation 3: Schedules—Environmental Protection Plan,7 and 8 of the Mining (Environmental Protection for Small Scale Mining) Regulations, 2010, read with section 44 (d) of the Mining Act, 2010, you may appeal to the Minister against suspension Order.

An immediate acknowledgement of this order is requested

Yours faithfully

(Name of inspecting officer)
Designation

Copy forwarded to:
1. The Commissioner, MEM
2. Assistant Commissioner for Minerals, Zone ____________