



GUIDELINES FOR MINE WATER AND TAILINGS MANAGEMENT FOR SMALL AND MEDIUM SCALE MINES

Ministry of Minerals
(MoM)

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INTERNATIONAL TRAINING PROGRAMME 308

Mine Water & Mine Waste Management



Sweden
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THE CHANGE PROJECT

Due to the increase of mining activities in Tanzania, there is an increase in environmental pollution emanating from mining activities by medium and small scale mining. The pollution involves soil and water sources contamination, therefore threatening the future sustainability of the environment, health and safety of the local communities.

Therefore the guidelines were developed known as "Guideline on mine water and tailings management for small and medium-scale mines in Tanzania". The project was undertaken by the Ministry of Minerals (MoM), Mining Commission (MC) and National Environmental Management Council (NEMC.). The project aimed to coordinate key stakeholders, inform and behaviour change of small and medium scale miners on how to manage mine water and tailings management. This is relevant to miners not only in understating protection of the environment but also having a clear understanging of the Regulating authorities requirements.

The following methodology were used on the preparation of guidelines:

Desk work

- Prepare work plan
- Review of the available information
- Preliminary preparation of draft guidelines

Communication

- Through group emails, WhatsApp and telephones.
- Distribute guidelines to important stakeholders for comments

Meetings

- MoM and NEMC
- Change project team with management (give brief of change project)

Stakeholder communication

- Site visit to the small and medium scale mines
- Conduct discussion with small and medium scale miners



SIGNIFICANCE FOR THE PEOPLE AND THE ENVIRONMENT

Small scale mines starts as informal mines with poor technology and environmental awareness and may result in challenges that include:

- Pollution of water Resources
- Abandoned mine openings
- Poor management of mining waste
- Mercury Pollution
- Land degradation
- Deforestation

The project outcome will facilitate effective management and control of pollution emanating from processing facilities such as tailings storage facility, VAT leaching plants and elution plants. Through effective management the health effects and environmental deterioration relate with mines will be decreases and facilitate community development.



The change project team members with their mentor Jonnina Karlsson.



RESULTS AND ACHIEVEMENTS

The project was able to develop a guideline on the management of mine water and tailings. The product is still a draft so it has not yet release to the public for uses however you can access through Ministry of Minerals, Mining Commission and National Environmental Management Council Offices. However some of the important stakeholders were given draft guideline for comments. The guideline were distributed via emails and printing hard copies.

The guideline intends to be used by the public after completion of formal procedure in the government.



THE WAY FORWARD

It recommended that Stakeholders' consultation to be continuous process until guidelines are produced and all important stakeholders provide their comments. The guideline has already incorporated in 2019 -2020 financial year plan so it will be finished.

Further, work will have to be done for improvement and review of the draft guidelines.

An awareness campaign regarding the guidelines and why it exists has been suggested, to bring the guideline to the users and help them implement it. This goes along with dissemination of the guidelines to small and medium scale miners.

There is also a need for inclusion of Artisanal miners in the guidelines.

The Consultancy Company and individual people will use the guidelines to offer professional services to the mines. The use of this guideline will minimize the contradiction which can happen between the regulatory and operators which can lead the mine to be fined or closed. It will also facilitate the extension officers in the regulatory authority to make clear decision/ judgement on matters relate with mine water and tailings management.

It is also recommended, for future projects, that the change project intended to be carried in ten months should have limited scope. This was noted with our group which resulted to the change of the scope of the work. It also very important to establish a strong communication and how will you carry out the project i.e. realist time frame for the project.



ITP team visiting the participants at the Ministry of Mines in Dodoma.