

TANZANIA



Draft guidelines for Management and Disposal of empty Cyanide containers

Mining Commission (MC)

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INTERNATIONAL TRAINING PROGRAMME 308

Mine Water & Mine Waste Management



THE CHANGE PROJECT

Gold is one of the most common commodities mined in Tanzania as is evident by the numerous small- and medium-scale gold miners in the country. There are currently more than 10 000 primary mining licenses for metals (mainly gold) and 50 operational medium sized mines. In addition, there are almost 1500 different processing plants using cyanide techniques in their day-to-day work. Previously mercury was regularly utilised in processing of gold, but lately, partly due to the Minamata convention on mercury that was ratified by Tanzania in 2020, cyanide has taken over as the most frequently used processing substance. With the increased use of cyanide, the empty, uncleaned cyanide containers have also grown in numbers creating human health and environment hazards.



Above: Cyanide using VAT leaching plant.

Below: Empty and wrongfully disposed cyanide containers.

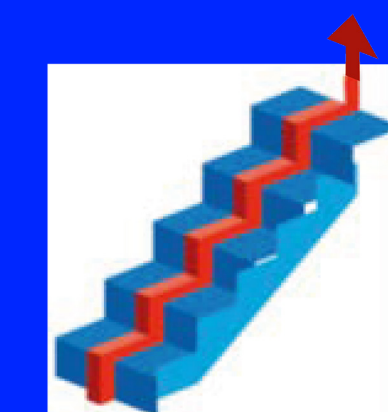
The Mining Commission, MC and NEMC, the National Environment Management Council have mandates to regulate and monitor the mining industry and mining operations as well as oversee environmental issues in Tanzania respectively. The organisations have noticed the increased problem with wrongfully utilised and disposed of cyanide containers, but to date there has not been any guidance on how to manage the containers. Together with the Government Chemist Laboratory Authority, GCLA which has the mandate to coordinate national chemical management programmes, the organisations have set out to support the users in the handling of empty cyanide containers and create awareness of the problems associated with the use of cyanide. This change project and its draft guideline is a first step to improve the situation for the benefit of the environment and humans alike.



SIGNIFICANCE FOR THE PEOPLE AND THE ENVIRONMENT

The ratification of the Minamata convention has led to an increased use of cyanide in the mining industry in Tanzania. In addition, by using cyanide instead of mercury, the miners get a higher recovery rate in their processing of gold. The latter, in particular, can provide the miners with an opportunity for an improved life situation out of poverty.

Both of these factors play roles in the increase in number of empty cyanide containers in Tanzania. However, the drawbacks of the use and the dangers associated by using discarded cyanide containers for water containers, etc. is poorly understood in the communities. Especially among the small-scale miners. Thus, information about how to handle the discarded containers and plastic enclosures and the dangers associated with use of cyanide, must be available together with a guideline on how to go about the handling.



RESULTS AND ACHIEVEMENTS

By collaborating with sister agencies in Tanzania, including the non-programme participating GCLA, and other relevant stakeholders, the project has achieved the goal of writing a draft guideline for management and disposal of cyanide containers and carry out sensitization programmes. This to ultimately decrease pollution and risks to the environment and human health.

Steps on the way have included literature reviews on international standards and how to incorporate them with Tanzanian law, seminars, interviews and consultative meetings with miners and waste handlers as well as a sensitization programme.

The guideline is available at all head quarters of participating organisations.



Draft guidelines for management and disposal of empty cyanide containers.



THE WAY FORWARD

During the stakeholder engagements and site visits a few main points of concerns have been identified.

- Empty cyanide containers remains an environmental concern particularly in small-scale mining.
- Continued accumulation of empty cyanide containers at gold processing facilities.
- Limited knowledge of potential health and environment risk from mismanagement of cyanide among small-scale miners in particular.



Stakeholder engagement meetings during the project.

The team recommends future participants in the Mine water and mine waste management programme to continue the work of this change project. Despite accomplishing much to improve the handling of cyanide containers, there is still a need to continue with sensitization programmes nation wide, create an environment for voluntary compliance of environmental management, register private waste collectors, jointly carry out enforcement and compliance promoting activities and allocate budgets so this can be carried out.

In addition to the above there is a need to ratify the guideline and make it publically available for all relevant parties. If laws and regulations coincide with continued sensitization programmes and enforcement there is a favourable outlook on the handling of cyanide containers in Tanzania and the outcome is expected to be positive for the communities and the environment.

Besides the positive outcome in Tanzania, this project can also serve as a pilot for other countries that currently go through similar transitions from mercury to cyanide in gold processing.