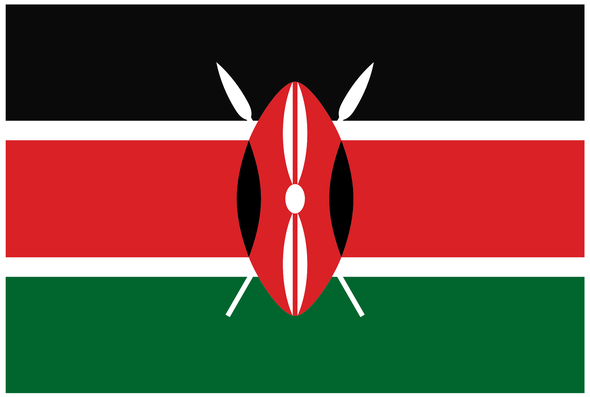
KENYA



TOOLKIT FOR PERMITTING AND INSPECTIONS OF WASTE ROCK DUMPS IN MINING SITES

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INTERNATIONAL TRAINING PROGRAMME 308
Mine Water & Mine Waste Management

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THE CHANGE PROJECT

Lack of a proper guide for inspectors makes environmental inspections and monitoring ineffective; it also limits the mining operator on the environmental thresholds. Therefore, a guideline document becomes important to help both govermental officers and companies to work more efficiently. The toolkit for permitting and inspections of waste rock dumps aims to fill into existing gaps in the mining law. It also seeks to address the technical requirements to look for before, during and after a mining operation.

To work towards this aim, two organisations have worked together to maximize the results. The goal of the National Environment Management Authority (NEMA) and Ministry of Petroleum and Mining is to build a robust guide which will build into the development of the Mine Health, Safety and Environment Regulation under the existing Mining Act. The long term vision is to have a well-informed inspectorate as well as a clearly outlined expectation list from the mine operators which will minimize environmental damage hence ensure sustainable mining.

This kind of work is necessary towards the development of the Mine Health, Safety and Environment Regulation under the Mining Act 2016. It is also important as a provisional guide for inspectors who will need to evaluate the operators' environmental plans and monitor waste rock dump management during and after operations including at licensing stage. The key objective of this toolkit is to inform the inspector of mines on the technical aspects of a waste rock dump to check for any prospective or operational mine. It will also help to minimize the cost of mitigation measures that may arise as a result of insufficient environmental protection plans by the mining operator.

pH-measurements near waste rocks from mining activites.

SIGNIFICANCE FOR THE PEOPLE AND THE ENVIRONMENT

The project impacts directly on the environment and the community living around mine sites. Proper implementation of this guide will lead to reduced acid generation from waste rock dumps; consequently it will improve the quality of the drinking water and eventually improve the health of the plant and animal life hence improving the health of the society.

This project also improves the inspection exercises by informing on the major considerations to be done by the inspector before, during and after inspections. On the side of the investors or operators, it will inform on what preparations to make towards ensuring compliance which favors the environment positively by minimizing and eliminating harm.

The project affects the prospective and active mining operators in that it calls for more action from their side so as to comply to meet the set standards. On the other hand it benefits the society and the environment by ensuring the right measures are taken towards safe dumping of waste rock hence minimizing effects on the plant life and drinking water. The guide informs the inspectorate on what to look for while issuing licenses to prospective miners and during monitoring of the existing mining activities till closure and rehabilitation stages.

RESULTS AND ACHIEVEMENTS

This work has been accomplished through individual desktop study after which ideas were consolidated and tabulated. This was done after a physical meeting and occasional online meetings to deliberate on the progress and pertinent issues concerning the project. Once in a while materials were shared for purposes of extracting relevant ideas and comparing notes. There was also one field visit also with the mentors and another team connected to the training programme ITP308. It also involved seeking information and views from work colleagues and relevant stakeholders.

The product is presented as an inspector's toolkit where parameters to check before, during and after operations are provided; these inform on the plan laid down by the operator to set up a waste rock dump. The design parameters including social, technical and economic considerations to be made are also outlined as per the existing law and literature.

THE WAY FORWARD

This project will be used as an input to the ongoing efforts to formulate the Mine Health, Safety and Environment Regulations by the Ministry of Petroleum and Mining. This will be done by proposing a section on waste rock management in the regulation whose contents will encompass the result or part of this project. The opportunity for the MoPM to participate in drafting the regulations will be used to propose the inputs. In addition, as required by the Kenyan constitution, the avenue of public participation will also be used to suggest inputs from this project.

The document may be made available upon request by the interested operators and third parties including consultants and environmental auditors. The document will be useful for the operators as it will inform them on the expectations by the regulator and will also ensure real time self-monitoring by the operator. To third parties, the document will be necessary for the environmental audits and consultancy advisories. The document may also be published for general public information on the websites of the two organizations (NEMA and MoPM).

Part of the team together with colleagues and mentors.

Waste rock.