

# LIBERIA



## Development of Guidelines for Monitoring and Management of Tailings and Tailing Storage Facilities

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## INTERNATIONAL TRAINING PROGRAMME 308

Mine Water & Mine Waste Management



Sweden  
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## THE CHANGE PROJECT

Liberia is a mineral-rich country with natural resources such as iron, gold and diamonds. Mining in the country is on the rise and the financial benefits is shown by the fact that Iron Ore is the most important exported product in Liberia (27%, 2022) and in 2023 mining overall stands for USD 665 million of the Liberian economy.

Despite the positive financial aspects of mining, mining is not an uncomplicated industry and it is inherently an unsustainable one. Challenges include problems such as pollution of the environment, illegal mining and smuggling of products. When it comes to some of the most notable mining related incidents in Liberia, they include failures of tailings storage facilities (TSFs). Several dam failures have occurred at separate mine sites, mining different commodities, since 2017 causing fatalities and disruption to the local environment. This in turn creates conflicts between mining companies and the affected communities.

The increasing number of TSF failures and their aftermaths, have highlighted the need for an improved governance of the mining sector, and the waste management in particular. The absence of current regulations regarding tailings makes it difficult for the enforcing government entities, the Liberian Environmental Protection Agency and the Ministry of Mines and Energy to legally pursue large-scale mining companies and demand they comply with national regulations and international standards of the management of tailings. Therefore, participants in the international training programme on Mine water and mine waste management, ITP 308, have focused on preparing a Guideline and regulation for monitoring and management of tailings and tailings storage facilities taking into consideration effective and sustainable practices.

There have been two groups prior to group 9 that has worked on the same draft and the short-term goal of group 9 has been to finalise the development of the sector-level guideline, while the long-term goal has been to get the document accepted and validated.



Old TSF at  
Bea Mining  
Company in  
Liberia.



## SIGNIFICANCE FOR THE PEOPLE AND THE ENVIRONMENT

Though the change project is focused on the governing authorities and the larger Class A mining companies, the ultimate goal is to improve and diminish the impact poorly managed tailings have on the communities and the environment.

During recent years, TSF dam failures in Liberia have resulted in fatalities as well as groundwater and surface water pollution. This has negatively affected nearby communities, local ecosystems, aquatic species and the surrounding environment.

To have a robust legal framework for Class A mining companies to work within, and for governing entities to lean on in case of e.g. dam failures and for monitoring reasons, is something that will positively impact all stakeholders in the mining sector.



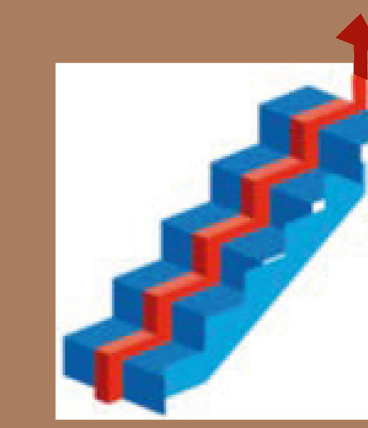
Water sampling at  
an old MMG gold  
mine TSF in search  
of cyanide pollution.

The intention is for communities affected by mining to be a relevant stakeholder and involved in the preparation of the Guideline. By involving government authorities, experts, mining companies and communities, there will be a better and broader understanding of the challenges with mine waste management and affected communities will be more included in the process.



Land degradation and water pollution as the result of unregulated mining in Liberia.

The aim with the new regulatory document is for the environment to be free from pollution by mining activities and, thus, limit the negative impacts mining has on communities and the environment



## RESULTS AND ACHIEVEMENTS

The group has continued the work of the two previous groups and managed to deliver a document that will serve as national regulations for management of TSFs in Liberia once review and validation process is complete. By continuing stakeholder engagements with a broad range of involved parties, the group has managed to keep the process transparent and inclusive. Field visits have ensured that the theoretical studies have been well anchored in Liberian mining reality.

Another positive outcome is that the work on the document has enhanced the technical capacity of the staff at the involved organisations and will continue to build capacity among those who will monitor and work with Class A mining going forward.

The resulting document will create change within the organisations by regularly monitoring tailings facilities and reporting to regulators. The Environmental Impact Assessments (EIA) will check the environmental effects of mining activities and Emergency Plans will be ready for potential dam failures.

The impact of the work the groups have carried out on the Liberian mining industry, the environment and communities cannot be overstated.



## THE WAY FORWARD

The draft Guideline has been worked on by three ITP 308 participating groups from the Ministry of Mines and Energy and the Environmental Protection Agency. The progress has been significant during the three groups' work, but there is still work to be done for the Guideline to be accepted as a regulatory tool for tailings and TSF monitoring. Nonetheless, and in the meantime, the two organisations have achieved a document created in collaboration with mining companies, experts and local communities that can be utilised when dealing with designing, construction and monitoring of tailings storage facilities in the country.

The organisations have taken steps to continue to work on the document after the ITP 308 Mine water and mine waste management has concluded in 2025. As the guideline is a prerequisite for the Liberian government to govern the mining industry properly for the benefit of the environment and humans alike, it is the hope that the document will be accepted after the ongoing reviews and in the near future.