

Safety First

Community Guidelines for the Mine Life Cycle



In 2022, Earthworks, MiningWatch Canada, and London Mining Network, in collaboration with experts, environmental and human rights organizations, and communities affected by mining released 17 guidelines for safer tailings management, called *Safety First: Guidelines for Responsible Mine Tailings Management*. These guidelines have been endorsed by 164 communities, Indigenous Peoples, organizations, academics and scientists from 34 countries.

The goal of Safety First is to empower civil society groups, frontline communities, Indigenous Peoples, labor unions, academic researchers, and NGOs to take a more active role in the enforcement of safer tailings disposal practices, and to highlight the need for transparent regulatory agencies that can operate without undue influence from the mining industry.

The guidelines require operating companies make safety the guiding factor in the design, construction, operation and closure of tailings dams and guarantee zero harm to humans and the environment, and zero tolerance for human fatalities. This booklet outlines how Safety First can be applied over the life cycle of the mine.

SOME GUIDELINES IN SAFETY FIRST ARE APPLICABLE AT ALL STAGES OF THE MINE LIFE CYCLE

Guideline 2 states that communities must be consulted throughout the lifecycle of the mine, starting with exploration through closure and post-closure. **Consent means the right to say no, yes, or to impose conditions.** Communities must be allowed to determine no-go zones where a tailings facility cannot be built. Communities must design the consultation mechanism and decide the time frame, and, if at any point communities

communicate that they do not wish to proceed with consent-related discussions, the company must cease any current and proposed activities.

Guideline 16 requires operating companies to provide access to independent technical experts at all points of the mine life cycle. This can include economic, legal, technical, or medical experts. Independent experts must be chosen by and accountable to the affected community(ies).

1

Exploration

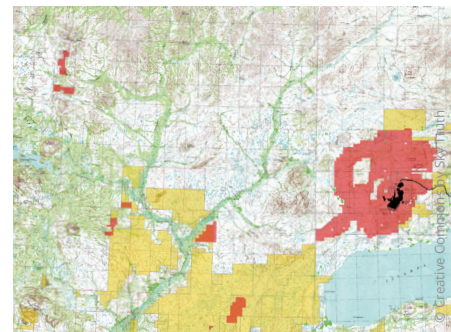
- The safest tailings facility is the one that is not built, so the exploration phase is a good time to raise concerns about mine waste disposal. #1*
- The board of directors must include at least one member with knowledge of tailings facility risks. #17
- The company or regulatory agency must form an Independent Tailings Review Board that will review design, construction, operation, maintenance, closure, and rehabilitation plans. #10
- Culturally relevant grievance mechanisms must be made available to all stakeholders. #13



2

Design and Permitting

- Protecting human lives and the environment must be incorporated into all aspects of design. #1
- An independent third-party must review designs and ensure that safety is the first priority. #1
- Companies must determine the areas that are in the path of a tailings failure through a transparent risk analysis. #2
- A facility must not be built if:
 - Communities or workers would be in the path of a failure; #3
 - Buildings that pose challenges to evacuation are in the path of a failure (ie: prisons, hospitals, schools, assisted-living or elder care facilities); #14
 - It is an upstream dam; #4 and
 - It is a risk to public water supplies, or critical habitats or ecosystems. #3
- Designs must be made available to any interested stakeholder. #15
- Companies must provide an Environmental Social Impact Assessment. #10
- Operating companies must estimate the cost of cleanup, including closure, rehabilitation, monitoring and maintenance. #11
- A tailings facility must be designed using the following guidelines:
 - If there is potential for loss of life, the facility must be designed to withstand the maximum credible flood and earthquake for that area. #5
 - If there is no potential loss of life, it must withstand the 10,000 year flood and earthquake. #5
 - The amount of water in or on tailings must be decreased to reduce the risk and severity of failure and to withstand climate change. #6
- Operating companies must provide a detailed evaluation of the dam foundation, and the physical and chemical properties of the tailings. #8
- Emergency response plans, and all indemnification, remediation and reclamation criteria must be developed together with all potentially impacted communities based on the worst case failure scenario. #14
- Operating companies must have financial assurance that covers the full cost of closure and post-closure plans. #12



* Numbers indicate the corresponding guideline in *Safety First*.

3

Construction and Operation

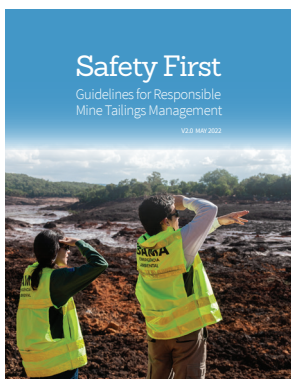
- All information regarding the safety and stability of tailings facilities must be made publicly available. #15
- The annual probability of failure must be periodically calculated and made publicly available in both technical and plain language documents. #7
- Water management infrastructure must be constructed so that the tailings pond will not reach the dam crest even during extreme flooding to prevent the tailings pond from overflowing. #7
- Annual Dam Safety Reviews must be made publicly available. #10
- Emergency and evacuation drills for catastrophic failures must be held on an annual basis. #14
- Existing upstream facilities must be closed. #4
- When existing facilities are too close to communities to ensure a safe evacuation, operating companies must negotiate with communities to close the tailings facility, including offering a voluntary resettlement package. #3
- Tailings facilities must have monitoring systems to identify and mitigate risk including an annual safety monitoring report. #9
- Financial assurance must be reviewed at least every 3 years or when there are changes to the facility. #12
- Operating companies must have public liability insurance to cover damages from sudden, accidental or gradual pollutant releases. Insurance estimates must be updated annually. #12
- All information regarding the safety and stability of tailings facilities must be made publicly available. #15



4

Closure and Rehabilitation

- Operating companies must not be allowed to declare bankruptcy or sell to junior companies to avoid proper closure. #11
- Cleanup must be self-funded from financial resources and ensure sufficient funding in perpetuity. #11
- Operating companies cannot self-bond. #12
- Public liability insurance must remain in effect. #12



Safety First, Guidelines for Responsible Mine Tailings Management V2.0 has been updated in 2022, and covers 17 guidelines for safer tailings management

MiningWatch Canada • miningwatch.ca/safety-first
Earthworks • earthworks.org/safety-first
London Mining Network



- 1 Make safety the guiding principle with zero tolerance for human fatalities in design, construction, operation, and closure
- 2 Consent of affected communities
- 3 Ban new tailings facilities where inhabited areas are in the path of a tailings dam failure
- 4 Ban upstream dams at new mines, and safely close existing upstream facilities
- 5 Any potential loss of life is an extreme event and design must respond accordingly
- 6 Mandate the use of Best Available Technologies, in particular for filtered tailings
- 7 Implement rigorous controls for safety
- 8 Ensure a detailed evaluation of the dam foundation and the tailings properties
- 9 Appropriate monitoring systems must be in place to identify, disclose, and mitigate risks
- 10 Ensure the independence of reviewers to promote safety
- 11 Towards safer closure with no credible failure modes
- 12 Address financial risks, including securities for site closure and proper insurances for accidental spills
- 13 Grievance procedures and whistleblower protection
- 14 Emergency preparedness and response
- 15 Information regarding mine safety must be made publicly available
- 16 Ensure access to independent technical assistance
- 17 Accountability for risk, minimizing the consequences of failure, preventing failure, and the consequences of failure must primarily rest with the board of directors

If Failure Occurs

- The date, location, amount of tailings released, and impacts on surrounding areas must immediately be made public following a failure. #15
- The operating company is responsible for saving lives, providing humanitarian aid, and supporting first responders, and local and national governments during and after a failure. #14
- The operating company is responsible for the entirety of the costs of indemnification, remediation, and reclamation for a failure, including any additional damages incurred during remediation and reclamation efforts. #14



The Canadian Press / Jonathan Hayward

Reach out

What can you do if the guidelines are not followed?

- Talk to other people in your community and organize a campaign
- Document what you see
- Organize a protest
- Talk to a public interest lawyer
- File a complaint with regulators
- Talk to a local human rights commission
- Contact the press
- Ask technical experts or academics for help
- Send a letter to investors
- Reach out to organizations that can support you:
 - London Mining Network
 - MiningWatch Canada
 - Earthworks



DOWNLOAD THE FULL GUIDE
Safety First
 Guidelines for Responsible Mine Tailings Management

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