

# TAILINGS FACILITIES AND WASTE MANAGEMENT

## **OUR MANAGEMENT APPROACH**

We manage mineral waste by designing, building, operating, maintaining, and closing tailings storage facilities and waste stockpiles in a safe manner that reduces risks to the environment and communities. Our Tailings Management Framework sets clear accountabilities and responsibilities, and supports safe and efficient planning, implementation, monitoring, and review of critical facilities. Corporate and site-specific tailings management systems and associated processes incorporate the actions necessary to verify that all critical facilities have quality designs, sound dam safety practices, comprehensive risk management, and effective emergency response and preparedness systems, and that we continue to work towards meeting or exceeding current best practices and industry standards. We also follow local regulations and best practices to manage, measure and monitor the generation and disposal of industrial and domestic non-mineral waste, and we adopt site-level operational procedures to reduce waste and lessen impacts on the environment and communities.

#### **Policies**

• Environmental Policy

#### Standards and Guidelines

- The Tailings, Water Dam, and Heap Leach
   Facilities Corporate Standard incorporates
   best practices recommended by the Mining
   Association of Canada (MAC)'s Tailings
   Management Guidelines, the MAC Towards
   Sustainable Mining (TSM) Tailings Management
   Protocol, and the Canadian Dam Association
   (CDA) Dam Safety Guidelines. It includes clear
   accountabilities and a well-defined Tailings
   Management Framework for the planning,
   implementation, monitoring, and review of
   critical facilities.
- Corporate Environmental Incident Management Standard contributes to highlighting actions to improve waste management.

### Plans, Programs, and Initiatives

- Site-specific tailings management systems, aligned with the MAC Tailings Management
   Framework, guide the approach for each site to incorporate and manage the Operational,
   Maintenance and Surveillance (OMS) activities, comply with regulatory requirements, and meet the CDA Dam Safety Guidelines.
- OMS manuals serve as a critical component in meeting performance objectives and managing

- potential risks. OMS manuals are updated and reviewed annually to reflect any changes to the facility conditions. OMS manuals follow the guidance provided by the MAC.
- Best practices are followed during construction of our tailings and heap leach facilities and accepted quality assurance and quality control (QA/QC) procedures are also followed to verify construction activities are meeting design and construction specifications set by the design engineer for the facility. QA/QC activities typically require completion of field verification and inspections of the works, taking samples of construction materials and performing laboratory testing.
- Predictive modelling is conducted prior to operations and through closure to identify the potential for long-term acid drainage and metal leaching from mine workings, tailings, waste rock, and heap leach facilities.
- Site-specific emergency response plans (ERP)
  help minimize consequences of a tailings
  storage facility spill or failure. Plans are aligned
  with facility risk assessments and linked to the
  Corporate Crisis and Communications Plan.
  ERPs involve all levels of the organization, as
  well as local community stakeholders. ERPs

- are developed to prepare our employees and communities to deal with unlikely worst-case scenarios.
- ERPs involve four main steps: (i) documentation preparation, which includes completion of a dam breach and inundation studies, and development of communication plans and a downstream survey; (ii) stakeholder mapping and internal training, where employees are trained on risk prevention and what to do in the event that an incident takes place; (iii) external training on the procedures required if an emergency were to occur; and (iv) simulation process involving community participation and local government bodies.
- Drills and emergency simulations are conducted regularly to train our employees on emergency procedures; help local authorities and emergency response services understand their roles in the event of emergency; and so that communities feel confident in the level of planning that has been done to keep their people and communities safe.
- The Engineer of Record (EoR) forum convenes EoRs on as needed bases to discuss specific technical matters and share best practices.

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