Regulators' Capacity Fund

Natural Resources
Canada (NRCan)

1 August 2022 – 31
March 2022

$634,000

Exploring the Use of Technology to Streamline Exploration to Production for Mining

As mining projects move from exploration to production, they are subject to regulatory review to ensure they are in the best interest of Canadians. The regulatory review process for a mining project may include consultation with multiple levels of government, indigenous communities, and other stakeholders in order to be transparent and mitigate societal, economic, and environmental concerns while allowing development of resources in a sustainable manner.

The mining industry faces significant barriers and bottlenecks in the regulatory review processes that require communication with and approvals from a broad range of authorities. Processes that are difficult to navigate pose a risk to the overall success of the mining industry because of their ability to potentially slow research and production, drain administrative resources, and block industry competitiveness.

To address the barriers in the review processes, NRCan proposed a two-phase project. During Phase 1 of the project, the project team mapped the decision process, researched applicable digital tools, and engaged stakeholders. During Phase 2, pilot projects were undertaken based upon the learnings of Phase 1. The pilot projects tested include: the Acid rock drainage and metal leaching (ARD/ML) database, Regulatory Navigation Tool (RNT), and Digital Streamlining Solutions Working Group (DSSWG).

Information gained from the pilot of the ARD/ML database helps further development in a database that will give access to historical data and allow reviewers to make more robust decisions sooner. Similarly, testing the RNT furthers the development of a tool that provides permitting guidance that was developed based on industry wants and needs. Through the DSSWG, a roadmap was prepared to promote a collaborative approach to administering the various application processes for mining projects, including improved data sharing and interaction amongst federal agencies. These tools and resources are intended to minimize regulatory burden and streamline administrative processes, making room for inspectors, regulators and stakeholders to focus on the delivery of their mandate. Moving forward, the information gained from the pilots will be used to build their next steps and shared as lessons learned for other departments.