ERDENES SILVER RESOURCE SALKHIT MINE CLOSURE PLAN PILOT

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STAGE 2 PROJECT OUTCOMES

The outcomes for Stage 2 of the Salkhit Mine Closure Plan are as follows:

1) Write a mine closure plan for Salkhit Silver Mine.
   a. The project aims to achieve this outcome by developing a mine closure plan which is innovative and incorporates international best practice, is realistic and economically achievable, supports socio-economic transition after mine closure, is responsive to climate change through adaptation.
   b. Identify potential improvement to laws and regulations guiding mine closure.

2) Enhance the knowledge and competencies of mine closure planning team members, stakeholders, and local citizens.
   a. Provide learning opportunities for planning team members through improving their knowledge and understanding of mine closure.
   b. Inform local communities and citizens about mine closure planning so they can meaningfully participate in public engagement sessions.

PROJECT ACTIVITIES

Environmental Field Sampling at the Salkhit Mine

The local environmental consultant MECSZB LLC conducted environmental sampling at the Salkhit mine from June 29 to July 2, 2022. The team was trained in Erdenes Silver Resources (ESR) safety requirements prior to the trip and were escorted by ESR personnel during field work.

The purpose of the sampling was to fill critical environmental data gaps identified in Stage 1 during the site condition review. The data gaps were related to understanding the chemical composition of the rock dump and overburden piles, the quality, chemical composition and condition of the salvaged topsoil piles and the chemical composition of water collecting in the mine pit. Filling the data gaps is important for reclamation planners to develop the most effective strategies for mine closure that will ensure the reclaimed land is safe for public uses and meets the environmental standards required by Mongolian laws. The team followed MERIT's Mine Reclamation and Closure Monitoring Field Manual (2022) and MERIT project's technical team provided detailed sampling methodology to the team.

Caption 1. MECSZB scientists and ESR LLC representatives at the Salkhit mine site

Caption 2. MECSZB scientists sample waste rock at the Salkhit Mine (Image courtesy of MECSZB)

The required samples and the associated laboratory testing are described in the following table. Quality control samples were taken for each sample type for assurance that the analysis results are accurate. Further explanation on the field and laboratory tests can be accessed by contacting MERIT at the email address below.

FIELD SAMPLE TYPES AND PURPOSE

Sample type	Sampling purpose
Topsoil	Sampling was conducted to determine quality and physical condition of salvaged topsoil for use in reclamation. Chemical and physical properties of topsoil inform reclamation planners about the productivity of the topsoil, for selection of the most appropriate plants for revegetation.
Rock from waste dump	Sampling is required to determine if the rock dump meets environmental standards and whether the material is prone to acid drainage. If the rock dump does not meet environmental standards established by law, or if the rock waste is acid forming, special measures must be taken during reclamation to manage these risks. These measures include capping areas with suitable soil where environmental standards are not met and managing water drainage to minimize acid drainage.
Overburden dump	Sampling was conducted to determine suitability of the overburden for use as reclamation material. (capping material). The overburden pile is associated with the tailings pond construction. The tailings pond will require suitable capping material during reclamation to isolate tailings that exceed environmental standards.
Water from mine pit	Sampling was conducted to understand mine pit water quality and potential risks after closure. Surface water collects in the mine pit from groundwater seepage and precipitation. Understanding the water quality informs closure planners to determine the most appropriate reclamation strategies to ensure both public safety and environmental compliance.

Caption 3. MECSZB scientists sample topsoil at the Salkhit Mine. (Image courtesy of MECSZB)

Caption 4. MECSZB scientists sample water from the mine pit at the Salkhit Mine. (Image courtesy of MECSZB)

CONTACT INFORMATION

For more information about the Pilot, please contact

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