## EXECUTIVE SUMMARY

Polymetal's proposed Kyzyl Gold Project comprises the extraction, via open pit (Phase 1, 2016-2024) and underground (Phase 2, 2025-2039) mining, of ore from a deposit located adjacent to the village of Auezov and surrounded by the municipality of Shalabay within Zharminsky District in East Kazakhstan Oblast. The deposit, which has been mined intermittently since 1956, has been operating under Care & Maintenance since 1997.

This submission contains:

- Environmental and Social Impact Assessment (ESIA) report published in December 2015 (English and Russian);
- Supplementary Environmental and Social Report (SESR, October 2016);
- Non-technical summary (combined ESIA and SESR, October 2016);
- Framework management plans (updated, October 2016), comprising
  - Water and Wastewater Management Plan (WWW MP)
  - Tailings Storage Facility Management Plan (TSF MP)
  - Waste Management Plan (WMP)
  - Emergency Preparedness and Response (DP 01-008)
  - Mine Closure and Rehabilitation Management Plan (MCRP)
  - Air Quality Management Plan (AQMP)
  - Framework Soil Management Plan
  - Biodiversity Management Plan (BMP)
  - Traffic Management Plan (TMP)
  - Stakeholder Engagement Plan (SEP)
  - Cultural Heritage Management Plan (CHMP)
  - Archaeological Chance Finds Procedure
  - Social Management Plan (SMP)
  - Noise Management Plan
- Environmental and Social Action Plan (ESAP, October 2016), issued by the European Bank for Reconstruction and Development (EBRD).

The ESIA and SESR together with the Environmental and Social Management documentation for the project form the ESIA disclosure documents prepared by the Project Sponsor, Polymetal. These documents together with the ESAP, prepared by the Project Funder, will be disclosed in three languages:

- Kazakh;
- Russian; and
- English

The ESIA was publically disclosed in December 2015 and following disclosure, Polymetal initiated discussions with the European Bank for Reconstruction and Development ("EBRD") to secure finance for the project. The SESR provides additional information to support and demonstrate the Project's



compliance with EBRD's Performance Requirements(PRs) and the EU Directives relevant to each phase of the Project.

The Project site area is in a rural area characterised by hilly grassland terrain and an extreme continental climate. Agriculture is the primary source of livelihood in the communities surrounding the Project. Grassland areas surrounding the Project are used by seasonal animal herders, tasked with keeping livestock belonging to residents of Auezov and Shalabay. Grasslands and local lakes and rivers are also used by residents for collecting berries, fishing, and hunting. While most agricultural produce is for home consumption, the village of Shalabay is home to the Shalabay LLP cattle farm, which also grows crops and cultivates bees for honey. As with many rural areas in Kazakhstan, and especially in Auezov since the Project fell into Care & Maintenance, the local communities are experiencing low-level out-migration at present, as residents seek employment opportunities elsewhere.

The Project will employ approximately 1,000 workers, including 608 for the first and 1,084 for the second operation phases. Polymetal will prioritise local recruitment and will aim for most operations jobs to go to residents of the local and nearby settlements.

While Project employment is expected to benefit local communities, it may also represent a transition away from traditional lifestyles for some residents of Auezov and Shalabay. Access to areas used to graze animals and collect berries and mushrooms will be partly restricted by the presence of Project infrastructure, in particular at and around the site of the future tailings storage facility (TSF) and processing plant to the south-east of Auezov.

The direct and indirect employment opportunities presented by the Project may serve as an attraction to in-migrants, potentially raising the local population and increasing the demand for goods and services. Increased demand, coupled with increased disposable income from mining wages, could generate localised inflation. Polymetal will work with local communities and government to minimise and manage the potential negative social impacts of the Project, through regular monitoring, information dissemination and awareness training, stakeholder engagement, and the administration of a community grievance mechanism.

With the current Project design, noise impacts at residential receptors in Auezov have been identified as significant during the night over the first few years of operations, and moderate over the longer term. Further mitigation measures have been developed at the detailed design stage. The distances between Project infrastructure and the local communities are such that most sources of air pollution are not expected to significantly affect local people. Detailed air dispersion modelling of emissions from boiler house stacks has been carried out and the impacts have been assessed to be minor - moderate. Mitigation measures to ensure the Project complies with the IFC's emission guidelines for small combustion facilities installed before 20<sup>th</sup> December, 2018 and EU's Medium Combustion Plant Directive should installation occur after 2018. Traffic impacts will be controlled to the extent possible, including by Polymetal constructing new roads allowing for the transportation of ores in isolation from the village's regular traffic.





Potable water for the Project is supplied from a surface water intake at the Kyzylsu River water reservoir (1,400m<sup>3</sup>/day) and from a wellfield constructed in the Kyzyltu River valley (100m<sup>3</sup>/day). Water from both sources is treated and decontaminated for use by Project workers and Auezov settlement. Process water is sourced from open pit and underground mine drainage water, which is first pumped into the mine settling sump (Open Pit No 2) and then to the water tanks of the process plant. The groundwater from the Kyzyltu wellfield serves as a backup source of process water. Mine site and domestic household effluents are transported by gravity flow sewers to the sewage pumping station and then pumped to the biological treatment facility, which has a capacity of 3,500m<sup>3</sup>/day.

The project will have no significant residual adverse impact on the surface water and groundwater resources utilised by the project. The ecological impacts resulting from the loss of flows in nearby streams, in particular at Akbastaubulak have been assessed to be minor. The majority of the Project will be located on 'brownfield' areas, where exploration and mining activities have already taken place for decades. As a result, the Project will have little impact on regional biodiversity and no impact on rare or threatened animal and plant species. However, the Project's activity will reduce the quality of immediately surrounding habitats as a result of noise and dust deposition. Potential impacts on biodiversity will be reduced to the extent possible by the implementation of management measures and by post-mining restoration.

After the planned life of the mine has expired, a complete mine closure will be carried out, which will include rehabilitation and restoration of disturbed land. Polymetal will ensure that public health and safety is not compromised and that any residual environmental impacts are minimised as a result of the Project activities, including ensuring that environmental resources will not be subjected to long-term physical or chemical deterioration as a result of the Project. Polymetal will also ensure that any adverse impacts on local communities are minimised and that socioeconomic benefits are maximised.

Surveys have identified no sites of archaeological significance within the Project area. A "chance finds procedure" will be in place at all times to ensure that any significant new site or artefact discovered during Project implementation can be recorded, investigated and removed or excavated as appropriate.

Stakeholder engagement is a core value of Polymetal. Throughout the Project's life cycle, the main aim of stakeholder engagement is to establish, develop, and maintain two-way communication between Polymetal and stakeholders at national, regional and local levels to ensure stakeholder views are incorporated into the ESIA and Project design. Good relationships with local communities have supported the development of Polymetal's activities on site thus far.

The Project will implement a comprehensive Environmental and Social Management Plan (ESMP) to govern the implementation, management and monitoring of the mitigation measures that the ESIA has identified as being necessary to control the environmental and social impacts of the Project. A total of 14 management plans have been developed as initial documentation for the ESMP. A comprehensive Environmental and Social Management System is being developed in order to





implement the commitments made in the ESIA, during the construction, operational and closure stages of the Project.

