EDC PROJECT REVIEW SUMMARY: Tasiast Gold Mine

Project Description	Tasiast Gold Mine
Project Sponsors	Tasiast Mauritanie Limited S.A (TMLSA), Kinross Gold Corporation
Country	Mauritania
Project Category	A
Canadian Exporter(s)	Kinross Gold Corporation
Description of capital goods and/or services	Gold
EDC Product	Limited Recourse Financing
Date of publication on EDC's website (dd/mm/yy)	23/12/2019
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Project Categorization

Kinross' Tasiast open-pit gold mine in north-western Mauritania, is approximately 300 km north of the capital Nouakchott and 250 km southeast of the major city of Nouâdhibou. EDC's financing will support activities necessary for mine operations following the completion of a 2018 capacity expansion, taking mine capacity from 9 kilotonnes per day (ktpd) to 15 ktpd. The life of mine is currently expected to be 14 years, however, exploration and optimization studies could extend the life of mine in the future. The expansion included the installation of a new crusher and semi-autogenous grinding (SAG) mill to increase the plant's capacity, three leach tanks, new tailings facility capacity (TSF4), and new process water pond. The project was classified to be a Category A project. Category definitions can be found here.

Summary of EDC's Review

EDC reviewed the Project in accordance with our *Environmental and Social Review Directive (ESRD)* and the *Equator Principles (EPs)* and has determined that the Project has been designed in compliance with applicable host country environmental requirements, IFC Performance Standards and with the Equator Principles. To reach this conclusion, EDC reviewed Project Environmental and Social Impact Assessments, independent due diligence reports and project management plans.

Summary of Key Environmental and Social Risks and Mitigants

EDC due diligence determined that the Project Sponsors have demonstrated a strong capacity to manage their environmental and social risks and have suitably avoided and minimized impacts per the mitigation hierarchy. The following table summarizes key risks identified for the Project along with the most pertinent mitigations that were applied for each.

Key Risk	Key Mitigants
Water abstraction and resource use: The development of the Project has the potential to result in impacts to groundwater resources within the Project's area of influence. To meet the Project's water demand, the Project sources its water from a non-potable saline groundwater wellfield located approximately 60 km west of the mine. Water is pumped to tanks at the wellfield and conveyed to the mine site via pipelines located adjacent to an existing access road. While there are no other current users of this aquifer, there are several freshwater users 15 km away from the wellfield. Further, the Parc National du Banc d'Arguin (PNBA) - designated as a RAMSAR Site and UNESCO World Heritage Site – is located 65 km to the west of Tasiast and less than 5 km west of the wellfield. PNBA is thought to be one of the most important coastal wintering sites along the east Atlantic coast and has one of the world's largest concentrations of wintering water birds.	Extensive modeling and monitoring confirmed that abstraction of this water at the wellfield will not affect users of fresh water zones 15 km away from the wellfield. Management of the groundwater resources at the wellfield is and will be closely monitored by TMLSA, and the management program is designed to ensure that potential water supply issues are identified early. The project's Environmental Impact Assessments (EIAs) concluded that there are no impacts on the PNBA. In 2018, TMLSA commissioned The Biodiversity Consultancy to undertake an independent ecohydrology assessment, to reassess the conclusions of the 2011 EIA and covered the duration of the life of mine. The assessment was supported by an update of the regional numerical groundwater flow model developed by TMLSA's consultants, Piteau. The study concluded that there are no plausible pathways for impacts on any coastal or intertidal ecosystems and species or terrestrial habitats from the mine's water abstraction, and therefore no impact to the outstanding universal values of PNBA (primarily associated with coastal and intertidal areas: seagrass beds, mudflats, mangroves and the species they support). As part of ongoing stakeholder engagement efforts, TMLSA has engaged with the PNBA managers in the context of the ecohydrology assessment; the PNBA managers have aligned with the conclusions of the report. The results as outlined above, have also been shared with the UNESCO World Heritage Committee and published on the UNESCO website.
Hazardous materials management (including cyanide and tailings): The Tasiast project will use cyanide	A waste management facility management plan, inclusive of a contaminated and hazardous waste procedure, has been developed by TMLSA and provides instructions and procedures for safe collection, handling and disposal of hazardous waste generated by the project.

as part of ongoing mine processing activities. The Project will also generate hazardous waste, which will be stored in tailings storage facilities (TSF).	Kinross is a signatory of the International Cyanide Management Code (ICMC). In January 2017, Tasiast achieved ICMC certification and is in compliance with the ICMC for the procurement, transport and handling of cyanide during the operation of the mine. As part of the expansion, a cyanide destruction circuit was installed reducing weak acid dissociable cyanide to 45 parts per million (ppm) or less, meeting the ICMC standard. Approximately 50% of tailings water is recovered and re-used for processing. There are 4 tailings storage facilities (TSFs) on site. TSF 1 and TSF 2 were built by others prior to Kinross involvement and have been decommissioned. Use of TSF 3 was discontinued as part of the project, and currently the dam no longer stores water and is in the process of consolidation. TSF inundation reports are currently being undertaken for TSF 3 & 4, but the facility has been designed to withstand the probable maximum flood and the maximum credible earthquake, which are the highest possible standard of design. In the case of Tasiast, there are no surface or groundwater courses or local populations that could be affected by a tailings dam failure.
Labour issues and workers' and community health and safety risks: The mine employs approximately 3,400 workers through TMLSA and its contractors and 94% of TMLSA employees are Mauritanians. While TMLSA performs most of the production and maintenance activities of the project, contractors are increasingly engaged for logistical support. A contextual risk of the Tasiast project is that slavery was only abolished and criminalized in Mauritania relatively recently (1981 and 2007, respectively), and reports	TMLSA's human resource policies and procedures are aligned with the (i) International Labor Organization (ILO) conventions ratified by Mauritania (ii) Law No. 2004-017, as amended, which functions as the labour code in Mauritania; (iii) Mauritanian general collective labour agreement (1974); (iv) collective labour agreement (2019) and (v) TMLSA staff regulations and internal rules. These policies and procedures are aligned with, and in some cases exceed, the requirements of Performance Standard 2. TMLSA also implements a robust health & safety policy, which is focused around achieving zero harm and abides by a set of Cardinal rules. The project operates on zero tolerance policy for violations of the Cardinal Rules. As a result, TMLSA's health and safety performance meets international standards. TMLSA routinely conducts health and safety monitoring to ensure that potential threats to worker's health and safety are being adequately addressed or mitigated. Contractors are contractually obligated to adhere to TMLSA's Environmental, Health and Safety (EHS) requirements, and all

indicate that such practices are still widely undertaken. Additionally, mining operations present inherent health and safety hazards and the specific conditions around the Tasiast mine site present additional risks. For example, respiratory problems, heat stress, noise exposure, and physical injury from accidents involving machinery and movement of construction materials and explosives.	contractor employees undergo the same site induction, and EHS training as TMLSA employees. Suppliers are screened for EHS and labour standards as part of the pre-qualification process. All suppliers are required to adhere to Kinross's supplier standards of conduct which commits suppliers to conduct their operations safely and to comply with the Kinross code of business conduct and ethics, including the fundamental principles of the UN Global Compact respecting human rights, labour standards, and environmental protection. TMSLA engages with all contractors and suppliers to ensure consistency across the project with respect to labour standards and treatment of workers. TMSLA regularly audits both suppliers and contractors to ensure compliance with standards. TMLSA has good systems and controls in place to ensure that there is no forced labour of its employees and contractor employees and procedures have been developed to assess the risk associated with potential forced labour across the TMLSA supply chain.

Documentation Reviewed:

The following is an illustrative list of key documentation that was reviewed as part of the current confirmation of the ESRD.

1. Phase 1a (i) EIN - Access Road Upgrade: Access road, Borrow Pits, Temporary Mobile Crusher, Borefield Expansion and Water Supply Pipeline. Environmental Impact Notice (May 2011).
2. Phase 1a (ii) EIN - Supporting Infrastructure: Construction Camp, Offices, Warehouses and Fuel Farm. Environmental Impact Notice (June 2011).
3. Phase 1b EIA - Supporting Infrastructure and Preliminary Upgrades: Tailings Storage Facility 4 Starter Cell, Foundations, Power plant, Fuel farm, Waste and Water Management Facilities, Accommodation Camp, Airstrip and Expansion of Borefield. Environmental Impact Assessment (July 2011).
4. Phase 2 EIA - On-Site Mine, Process and Infrastructure. Environmental Impact Assessment (March 2012). Phase 2 Expansion Project provided facilities to process up to 60,000-70,000 t/d.
5. Addendum to the Phase 2 Environmental Impact Assessment for the Expansion Project. This document concerns incremental increases in production rates, namely "Step 1" (production up to 15,000 tpd) and "Step 2" (production between 30,000 and 38,000 tpd) (January 2016).
6. Environmental and Social Management System
7. Site visit reports produced from 2014-2018.
8. External Due Diligence Review of the Tasiast Project, Mauritania: Export Development Canada and International Finance Corporation. RPM Global. July 30, 2019.
9. Evaluation of potential impacts to the outstanding universal value of Banc d'Arguin World Heritage Site from water abstraction for the Tasiast gold mine, Mauritania. The Biodiversity Consultancy. June 2019.

Applicable International Finance Corporation (IFC) Environmental and Social Standards used by EDC (in addition to host country requirements):

• Performance Standard 1: Social and Environmental Assessment and Management Systems

• Performance Standard 2: Labour and Working Conditions

• Performance Standard 3: Pollution Prevention and Abatement

• Performance Standard 4: Community Health, Safety and Security

• Performance Standard 6: Biodiversity Conservation and Sustainable Natural Resource Management

• Performance Standard 8: Cultural Heritage

EDC has considered the relevant aspects of the World Bank General EHS Guidelines (April 2007), the EHS Guidelines for Mining (December 2007), and the EHS Guidelines for Electric Power Transmission and Distribution (2007).