

Environmental and Social Review Summary

Tasiast Gold Mine

This Environmental and Social Review Summary (ESRS) is prepared by MIGA staff and disclosed prior to the date on which MIGA's Board of Directors considers the proposed issuance of a Contract of Guarantee. Its purpose is to enhance the transparency of MIGA's activities. This document should not be construed as presuming the outcome of the decision by MIGA's Board of Directors. Board dates are estimates only.

Any documentation that is attached to this ESRS has been prepared by the project sponsor, and authorization has been given for public release. MIGA has reviewed the attached documentation as provided by the applicant, and considers it of adequate quality to be released to the public, but does not endorse the content.

Country:	Islamic Republic of Mauritania (Mauritania)
Sector:	Energy and Extractives
Project Enterprise:	Tasiast Mauritanie Limited S.A. (TMLSA)
Environmental Category:	A
Date ESRS Disclosed:	April 25, 2017
Status:	Due Diligence

A. Project Description

MIGA is considering a guarantee to Kinross Gold Corporation (Kinross) of Canada to cover its equity and shareholder loan investments in Tasiast Mauritanie Limited S.A (TMLSA or the Project Company) for the purpose of expanding the Tasiast gold mine (Tasiast or the Project) in Mauritania.

Tasiast is an existing open-pit gold mine located in northwest Mauritania, about 300 kilometres (km) north of the capital city Nouakchott. The mine has been in operation since 2007, and Kinross acquired it from Red Back Mining in 2010. Current operations at Tasiast include an existing 8 thousand tonnes per day (kt/d) carbon-in-leach (CIL) plant and dump leach.

The Project is a conventional open pit truck-and-shovel operation. The main components of the operating Project, all of which are located within a fenced area of approximately 125 km² (referred to as the 'Tasiast site') include:

- West Branch and Piment open pits;
- Waste Rock Dumps (WRDs);

- Run-of-Mine (ROM) pad and low-grade ore stockpiles;
- Crushing plant (primary crusher and ball mills);
- CIL Plant;
- Tailing Storage Facilities (TSFs);
- Dump leach pads;
- Process pond system;
- Adsorption-Desorption Recovery (ADR) plant;
- Explosives magazine;
- Offices, laboratory, maintenance workshop and reagent storage warehouse;
- Water treatment plant;
- Domestic wastewater treatment plant;
- Power plant;
- Worker accommodation (Tasiast Team Village (TTV); Old Town);
- Waste Management Facility (WMF) consisting of hazardous waste storage facility, non-hazardous waste sorting and storage area, incinerators, non-hazardous waste landfill, laydown areas and emergency burn pad;
- Airstrip; and
- Approximately 130 km of mine access road and internal haul roads.

The MIGA guarantee will focus on the first phase ('Phase 1') of a proposed two-phased expansion. The tentative plans for the second phase ('Phase 2') are described below, however the Feasibility Study for Phase 2 is ongoing and TMLSA has not yet determined whether they will proceed with Phase 2.

Phase 1 is front-end optimization and Phase 2 contemplates a full facility expansion. The Phase 1 expansion, which commenced in 2016 is expected to achieve full commercial production in the second quarter of 2018, includes the installation of a new gyratory crusher and semi-autogenous grinding (SAG) mill with gearless mill drive (GMD) to increase the existing plant capacity from 8 kt/d to 12 kt/d. This expansion has been sized to accommodate the proposed Phase 2. Phase 1 also includes the addition of three leach tanks, new tailings facility capacity, new process water pond and upgrades to some reagents' areas. Phase 1 does not require expansion of the existing water supply and power generation systems.

Phase 2, if approved for development, would take approximately 2 years to complete and would increase the plant capacity from 12 kt/d to 30 kt/d. The proposed Phase 2 would include the addition of a new gearless mill drive (GMD) ball mill, larger pebble crusher, pre-leach and tailings thickeners, leach tanks, CIL tanks, gravity circuit, elution circuit, gold room, cyanide destruction system and reagent mixing storage and distribution. Phase 2 would also require upgrades to the existing water supply infrastructure and power generation systems.

Both Phase 1 and the proposed Phase 2 expansion works will occur within the existing mine site perimeter fence (with the exception of the new water pipeline from the borefield ("Sondage") to the site). Based on current resource estimates, the life of mine is expected to be 16 years (until

2033); however, exploration is ongoing, which could extend the life of the mine. Ausenco has been engaged as the Engineering Procurement and Construction Management (EPCM) contractor for the Phase 1 expansion works.

Raw water for the Project is supplied from a borefield located 64 km west of the mine. The water is transported to site via pipelines. The water is treated in reverse osmosis (RO) water treatment plants and then stored in basins/tanks located at the mine site. The Phase 2 expansion would require the drilling of new wells, upgrading the infrastructure for the existing wells and construction of a new raw water pipeline to add the additional capacity.

Electric power is provided by three plants (heavy fuel oil (HFO) / light fuel oil (LFO) generator sets) with a total installed capacity of approximately 50 megawatt-electrical (MWe). These three plants are connected to a 33 kilovolt (kV) distribution system. For Phase 2, another power plant would be constructed to provide additional generation capacity. The new plant will comprise dual fuel (HFO / LFO) simple cycle, reciprocating engines with a total capacity of 70 – 80 MWe.

In addition to site infrastructure, TMSLA has an administrative office and guesthouse for transiting employees in Nouakchott.

The TTV, construction of which was completed in the first quarter of 2013, can accommodate a workforce of 3,540 personnel. It includes various facilities, such as clinic, laundry, kitchen and dining areas, gymnasiums, recreational rooms and various sports playgrounds. Old Town is the original mine camp, which has been re-furbished for contractor accommodations. Old Town can accommodate 695 people.

In addition to TMSLA, Kinross currently has three subsidiaries in Mauritania, Société d'Extraction du Nord de l'Inchiri S.A. (SENISA) which holds two exploitation permits for Tmeimichat and Imkebdene areas, Tasiast Mauritanie Limited (TML), which holds two exploration permits for Tasiast Sud and N'Daouas-Est areas and Société d'Extraction de Tamaya S.A. (SETSA), to which the Tasiast Sud exploration area was transferred on January 6th 2017. These areas, which are contiguous to Tasiast and have similar geology and ore characteristics, are commonly known as the Tasiast mine property. If exploited, ore from these areas would likely be transferred to the Tasiast CIL plant for processing, and therefore, any mining in these areas would be considered associated facilities (as defined in Performance Standard 1) of the Tasiast Project. It is understood that any mining in these areas would be managed by TMSLA in line with its existing processes and management systems.

The Project is located in a region with a low population density, and there are no incorporated towns or settlements near the mine. There are approximately 70 households (about 300 people) living a semi-nomadic lifestyle within a 30 km radius of the mine site.

B. Environmental and Social Categorization

The Project is a Category A under MIGA's Policy on Environmental and Social Sustainability (2013) because it has potentially significant adverse environmental and social (E&S) risks and impacts. The most significant potential E&S risks are related to water abstraction and resource use; and hazardous materials use (including cyanide) and hazardous waste generation (i.e. tailings). Other potentially significant E&S risks and impacts include waste generation (including waste rock and general domestic waste); air emissions; security risks; impact on archaeology and cultural resources; population influx; labor issues and workers' and community health and safety risks.

C. Applicable Standards

While all Performance Standards are applicable to this Project, MIGA's environmental and social due diligence indicates that the Project will have impacts which must be managed in a manner consistent with the following Performance Standards (PS):

- PS1: Assessment and Management of Environmental and Social Risks and Impacts
- PS2: Labor and Working Conditions
- PS3: Resource Efficiency and Pollution Prevention
- PS4: Community Health, Safety and Security
- PS6: Biodiversity Conservation and Sustainable Management of Living Natural Resource
- PS8: Cultural Heritage

As the project is located in a remote area that is sparsely populated, no physical or economic displacement is expected and therefore, PS5 (Land Acquisition and Involuntary Resettlement) is not applicable to this Project. Prior to establishment of the mine, the area was primarily pastoral and an area of transhumance (i.e. used for moving and grazing livestock). No resettlement (physical or economic) was required to develop the mine. The area has desert conditions and is prone to drought, and therefore it is not used for agriculture.

Artisanal mining is a recent phenomenon in the area and no artisanal miners were displaced for the development of the Project. In 2016, a gold rush brought artisanal miners to the area around Tasiast. Project security and the presence of the Gendarmerie¹ have effectively prevented artisanal miners from encroaching on the Tasiast site, and the majority of artisanal miners have now left the area. The Project provides the artisanal miners emergency health services upon request from the Gendarmerie and continues to support government efforts to manage and minimize the environmental and social impacts of their activities.

¹ The Gendarmerie Nationale is the national police force of Mauritania. The gendarmerie is part of the army and maintains posts in the urban and rural parts of the country.

No “indigenous people”, as defined by PS7 (Indigenous Peoples), have been identified in the Project area (or in the vicinity of the Project area), and therefore PS7 is not applicable to this project.

The World Bank Group (WBG) General Environment, Health and Safety (EHS) Guidelines apply to the Project. Due to the range and nature of the proposed components, a number of industry sector EHS Guidelines are also applicable, including EHS Guidelines for Mining, Water and Sanitation, Thermal Power Plants and Electric Power Transmission and Distribution. The World Bank’s Operational Policy 4.37 – Safety of Dams will also apply to the tailings dams (TSFs) associated with the Project.

D. Key Documents and Scope of MIGA Review

The following documents were reviewed by MIGA:

- Tailings Storage Facility #3 Starter Cell 2016 Annual Inspection (Klohn Crippen Berger, February 2017)
- Summary Audit Report – International Cyanide Management Code Certification Audit (Ramboll Environ, January, 2017)
- Annual 2016 Environmental Declaration Report (TMLSA, January 2017)
- Tasiast Optimization Project Feasibility Study Report (Ausenco, May 2016)
- Tasiast Project (Mauritania). National Instrument 43-101 Technical Report (J. Sims, March 2016)
- Addendum to the Phase 2 Environmental Impact Assessment for the Expansion Project at the Tasiast Mine in Mauritania (SRK Consulting, January 2016)
- Sondage Internal (Quarterly) Summary Report – Q3 2016 (TMLSA, October 2016)
- Corporate Responsibility Report (Kinross, 2015)
- An Assessment of the Risks from Seepage from TSF2 to Groundwater, Tasiast Mine Site, Mauritania (SRK, June 2014)
- Phase 2 Environmental Impact Assessment: On-Site Mine Process and Infrastructure (URS/Scott Wilson, March 2012)
- Phase 1b Environmental Impact Assessment: Supporting Infrastructure and Preliminary Upgrades: Tailings Storage Facility 3 Starter Cell, Foundations, Power Plant, Fuel Farm, Waste and Water Management Facilities, Accommodation Camp, Airstrip, and Expansion of Borefield (URS/Scott Wilson, July 2011)
- Phase 1a(ii) Environmental Impact Notice: Supporting Infrastructure: Construction Camp, Offices, Warehouses and Fuel Farm (URS/Scott Wilson, June 2011)
- Phase 1a(i) Environmental Impact Notice: Access Road Upgrade: Access road, Borrow Pits, Temporary Mobile Crusher, Borefield Expansion, and Water Supply Pipeline (URS/Scott Wilson, May 2011)

MIGA’s review also included a due diligence visit in April 2017. The visit included a tour of the mine (including the pits, CIL and ADR plants and all ancillary facilities), a visit to the Sondage borefield and a visit to the SENISA concession area. Meetings were held with TMLSA staff and

union representatives, including staff responsible for environment, health and safety, human resources, procurement and supply chain, security and community relations.

The MIGA team also visited the local community of Chami (located approximately 80 km from the mine along the Project access route from Nouakchott), and met with community representatives and local government authorities. In Nouakchott, the team met with Mauritanian government authorities responsible for oversight of the Project, including the Ministry of Environment and Sustainable Development, Ministry of Petroleum, Energy and Mines, Ministry of Water Resources and the Mauritanian Institute of Scientific Research (responsible for management of archaeology and cultural heritage). The team also met with representatives of civil society.

E. Key Issues and Mitigation

PS1: Assessment and Management of Environmental and Social Risks and Impacts

Environmental and Social Assessment and Management System: Project operations are based on the formal approval by Mauritanian authorities of a number of Environmental Impact Assessment (EIA) studies completed before and since mine commissioning in 2007. For projects considered to have the potential to cause major environmental impacts, Mauritanian law requires a full EIA. Where projects present less significant environmental risks, Environmental Impact Notice (EIN) is required. Consideration of potential social impacts is included in both EIAs and EINs. TMLSA has prepared and submitted two EINs, two EIAs and one EIA Addendum for the proposed expansion works, all of which have been approved by the government. The EIAs and EINs prepared by TMLSA reference Mauritanian laws, the International Finance Corporation (IFC) PS² and the World Bank Group EHS Guidelines. Any changes to the Project design after approval of the EIA or EIN are assessed in an EIA addendum, which is submitted to the government for approval.

Project operations are underpinned by an environmental policy and a health and safety policy which builds on Kinross' overarching Policies, Corporate Responsibility Management System (CRMS) and its 10 Guiding Principles which are: (1) Promoting a safety culture; (2) Commitment to best practices; (3) Building relationships; (4) Environmental stewardship; (5) Life-of-mine approach; (6) Workplace and Community; (7) Our People our most Important Asset; (8) Building Skills and Capacity; (9) Engaging with the Local Community; and (10) Engaging with Society.

The CRMS embodies Kinross' corporate environmental and social governance and is based on International Standards Organization (ISO) for environmental management systems (ISO 14001) and grounded on extensive industry practice. The CRMS includes environmental management standards, reporting requirements, performance metrics and an internal audit program.

TMLSA is committed to managing the impacts of its operations, in conformance with Kinross' guiding principles, policies, CRMS, and recognized international best practice (MIGA / IFC PS

² MIGA PS are materially consistent with the IFC PS.

and WBG EHS Guidelines). As part of the CRMS, TMLSA has implemented an environmental management system (EMS) consistent with ISO14001 and based on the Plan-Do-Check-Act model. Implementation of the EMS ensures that environmental management is integrated throughout all departments and driven by line managers across the site.

The EMS is reviewed and updated on a systematic basis as part of a continuous improvement cycle to ensure that (i) environmental and social risks and impacts associated with new or altered facilities, infrastructure, processes and operations are considered against Kinross' corporate standards and MIGA / IFC PS and WBG EHS Guidelines; and (ii) it reflects the commitments made in the various EIAs / EINs as well as any new requirements that emerge from ongoing permitting activities. The EMS includes identification of roles, responsibilities and reporting structure. The principal components of the EMS are a set of standards, specific management plans and supporting procedures, checklists and forms. The Project EMS is in line with, and in some cases exceeds, the requirements of PS1.

A key aspect of the CRMS is the Site Responsibility Plan (SRP), which specifically addresses the management of its socio-economic impacts and stakeholder engagement, and includes measures to maximize the potential socio-economic benefits of the Project. TMLSA SRP is updated annually, and includes the following elements: (i) Engagement - ongoing dialogue with stakeholders, maintained in a spirit of transparency and honesty; (ii) Evaluation - analysis of engagement feedback, community aspirations and resources, project impacts, systematic analysis of socio-economic data and other information to inform TMLSA project designs and community development strategies; (iii) Action - strategic initiatives based on the results of engaged evaluation of stakeholder interests and concerns, designed to consolidate sustainable benefits within the communities where TMLSA operate and generate project support; and (iv) Monitoring - regular, quantitative and qualitative measurement of the effectiveness of TMLSA corporate responsibility initiatives, to inform further engagement, evaluation and action.

During Phase 1, TMLSA expects to have a peak of approximately 700 contractors' employees on-site to provide technical and non-technical services for the Project. All contractors and subcontractors are contractually obligated to comply with TMLSA's EHS policies and procedures (refer to more information under PS2 "Workers Engaged by Third Parties". Monitoring of contractor compliance is the responsibility of the TMLSA EHS Department.

Monitoring and Review: A comprehensive environmental monitoring plan has been developed for the existing operations. The site EHS Department conducts daily inspections, which are scheduled to ensure all work areas are inspected on an at least monthly basis. The plan includes monitoring, sampling and analysis activities and establishes the reporting protocols, including quarterly and annual environmental data submissions to the relevant government ministries, Kinross Corporate Office, and annual performance reports to government. Annual monitoring reports will also be provided to MIGA. The monitoring plan is regularly reviewed and updated to ensure that it is in line with the Project changes and that monitoring of any emerging E&S issues is incorporated.

In addition, Kinross Corporate Office conducts a comprehensive EMS audit every two years to assess the site's environmental performance and compliance against its management system. The next audit at Tasiast is scheduled for June 2017. Government entities, namely Ministry of Environment and Sustainable Development (MESD) and Ministry of Water and Sanitation (MWS) also audit the Project regularly.

Organizational Capacity and Competency: TMLSA has an Environmental Health and Safety (EHS) Department comprised of an EHS manager supported by 12 environmental professionals and 6 health and safety professionals. The EHS manager reports to the Operations Director, who reports to the site General Manager. TMLSA also has a Government Relations (GR) / Community Relations (CR) Department, which is comprised of a GR / CR manager supported by 10 GR / CR staff. The GR/ CR manager reports to the Human Resources (HR), GR & CR Director, who reports to the General Manager. The HR Department is comprised of an HR manager, HR advisor and 28 HR professionals. The HR manager also reports to the HR, GR & CR Director. TMLSA has suitably qualified professionals staffing all departments.

Emergency Preparedness and Response: TMLSA's Emergency Response Plan (ERP) provides guidance for preparedness and response to emergency situations including, but not limited to, minor and major injuries and/or accidents, overtopping/leak/failure of the tailings impoundment, natural disasters, unplanned ignition or explosion, security emergencies, releases/spills of hazardous materials and fires. Potential emergency situations covered in the ERP were identified based on a risk assessment conducted by TMLSA on all activities associated with its operations. The ERP includes procedures for each identified emergency scenario, and outline roles and responsibilities of the various members of the response team. The ERP is a live document, which is regularly reviewed and updated, as required.

A key component of the ERP is the Cyanide Emergency Response Procedure (CERP). A review of the CERP undertaken as part of the Cyanide Code certification audit (see *Cyanide Management* under PS3) indicated that the CERP is fully compliant with the requirements of the Cyanide Code, and that the CIL and ADR plants are adequately equipped to enable response to cyanide emergencies. Security Response Team (SRT) and the on-site clinic are also trained and equipped to respond to cyanide emergencies.

The SRT is managed by the Security Department and is responsible for coordinating the immediate response to all site emergencies. Due to the remoteness of the mine, the SRT is self-sufficient and has the equipment and personnel needed to address most emergencies at the site. The site maintains seven SRT members plus three expat fire-fighters contracted from Emergency Training Solutions (ETS) Africa. Rotations are scheduled to ensure that there are always at least four SRT members and two expat fire-fighters on site at all times. TMLSA periodically conducts mock emergency drills to test the effectiveness of emergency response.

Cumulative Impacts: Potential cumulative impacts associated with the Project expansion, including increased water use from the borefield, have been considered in the Project Phase 2 EIA. The potential for significant cumulative impacts is expected to be limited because of the proposed

phased construction approach and that there are no other planned developments in the immediate vicinity of the Project. The closest areas of planned development are the towns of Chami, Boulanour, Akjoujt and Bennichab, which are respectively 80 km southwest, 120 km northwest, 150 km east-southeast and 130 km southeast from the mine site.

The Ministry of Environment and Sustainable Development indicated that a Strategic Environmental Assessment (SEA) for this region will be undertaken together with United Nations Educational, Scientific and Cultural Organization (UNESCO). The SEA terms of reference are currently being prepared and will be made public upon review and validation by the Government. It is likely that both formal and informal mining will be part of the SEA.

Closure and Rehabilitation: TMLSA maintains a Preliminary Rehabilitation and Closure Plan (PRCP) as part of its corporate governance as well as a legal requirement established in the EIA process. The PRCP was first developed in 2012 and was updated in 2013 to take into consideration environmental impact assessments and additional changes. The PRCP was developed to ensure safe closure of the mine at cessation of operations. The PRCP is based on a closure plan of eight years (three years for implementation and five years post implementation). Detailed closure plans for specific infrastructure are prepared on an ‘as needed’ basis, and submitted to the government for approval in advance of any closure activities (e.g. closure plans have been prepared and submitted for TSF 1 and TSF 2). The closure plans have been prepared in line with the WBG EHS guidelines for Mining.

External Communications and Grievance Mechanisms: TMLSA conducted stakeholder mapping and prepared a Public Consultation and Disclosure Plan (PCDP). Stakeholder mapping is regularly updated based upon (i) consultations done during the EIA process; (ii) ongoing consultation carried out as part of its PCDP; and (iii) the experience of the Government and Community relations team.

There is continuous stakeholder consultation with the semi-nomadic residents and communities in the vicinity of the mine site. Stakeholder communications are carried out in Arabic and French. French is typically used for printed communications, official documents (such as the EIAs) and other correspondence with stakeholders. TMLSA also translates certain documents into Arabic, such as the non-technical summaries of public consultation documents, key messages on recruitment, and other community relations and corporate responsibility information. TMLSA uses “StakeTracker”, stakeholder information management software, to maintain a comprehensive database of stakeholder contact information. The database is updated on a daily basis, and new stakeholders are added as they are identified. TMLSA’s Community Relations team has overall responsibility for all public stakeholder consultation and disclosure activities.

TMLSA has also implemented a Grievance Redress Mechanism to receive, respond to and seek resolution of stakeholder concerns in a systematic manner. Community can log a grievance by calling the grievance hotline or GR / CR department staff directly. Grievances are recorded in a grievance book (the GR / CR department maintains two grievance books – one in French and one in Arabic). Each original form has two carbon copies; the complainant retains the original form, GR / CR department retains the second copy as a working copy, and the third is given to the

department responsible for the grievance (e.g. if the grievance is related to noise from mining, then the Mining department will receive a copy of the grievance). When a complainant is unable to write his/her complaint, the TMLSA Community Relations Officer receiving the verbal grievance is responsible for recording the nature of the complaint and all pertinent details. The grievance is then logged into its stakeholder management system and followed up until the grievance is closed. The Mechanism requires the GR / CR department to respond to the complainant within 14 days.

PS2: Labor and Working Conditions

In 2016, the Tasiast mine employed approximately 1,140 employees, of whom approximately 1,010 are Mauritanian nationals. In addition, in early 2017, there were approximately 450 individuals working for contractors on site for the expansion project. For Phase 1, peak construction workforce is estimated to be 700 people, and for Phase 2, it is anticipated to be approximately 850 people. TMLSA has a "Mauritanization" plan to increase the number of local workers who have the necessary skills and experience to work at Tasiast.

Human Resources Policies and Procedures: TMLSA's Human Resource (HR) policies and procedures are based on Kinross' Code of Business Conduct and Ethics; Disclosure, Confidentiality and Insider Trading Policy; and Whistleblower Policy. These policies and procedures are consistent with, and in some cases exceed, the requirements of PS2. The relationship between TMLSA and its employees is governed by the following: (i) International Labour Organization (ILO) Conventions ratified by Mauritania (ii) Law No. 2004-017, as amended, which functions as the Labor Code in Mauritania; (iii) Mauritanian General Collective Labor Agreement (1974); (iv) Collective Labor Agreement (2016) and (v) TMLSA Staff regulations and Internal Rules.

Working Conditions and Terms of Employment: All TMLSA employees have employment contracts. There are different types of contracts including probationary workers engaged for a trial period and workers hired on either a fixed term or indeterminate period. Terms and conditions of contracts are supplemented by the Staff Regulations, Internal Rules and Collective Labor Agreement.

Once hired, an employee undertakes an induction program, EHS training, training to refresh or upgrade skills if working in a technical field, and then area-specific training that pertains specifically to the job. To complete this training, employees participate in classroom computer - based training combined with field training led by an instructor. Field training is followed by hands-on training and, finally, on the job training. Employees designated for specific trades training are expected to enroll in a multi-year apprenticeship program.

Mine operations are 24 hours per day, 7 days per week, 365 days per year. Production workers are divided into three crews and work in 12 hour shifts to cover this schedule and on rotation. TMLSA provides accommodation, meals and laundry services for employees and contractors working at Tasiast. The accommodation is in accordance with the requirements of the IFC / European Bank for Reconstruction and Development Guidance Note: "Workers' accommodation: process and standards."

As established in the Code of Business Conduct and Ethics, TMSLA is an equal opportunity employer and does not tolerate any discrimination on the basis of race, color, religion, sex, national origin, age, sexual orientation or disability, or according to any other applicable laws and regulations in the jurisdictions where it operates. TMSLA is committed to fair employment, including equal treatment in hiring, promotion, training, compensation, termination and corrective action.

Worker's Organizations: Currently there are four unions at Tasiast. These are: (i) *Confédération Mauritanienne Libre des Travailleurs* (CMLT), (ii) *Confédération Libre des Travailleurs de Mauritanie* (CLTM); (iii) *Confédération Générale des Travailleurs de Mauritanie* (CGTM); and (iv) Union of Mauritanian Workers (UTM). There are no barriers to legitimate freedom of association through trade union membership and/or collective bargaining. The unions hold monthly meetings with management and, according to a union representative, currently there are no major pending issues or problems. Recent topics of discussion have included aspects such as dismissal as a result of breaking Cardinal Rules (Cardinal Rules are further explained under Occupational Health and Safety) and transfer of workers from one department to another.

Retrenchment: No retrenchment is planned for the near future. If a need for retrenchment is identified, a retrenchment plan will be developed by TMSLA in accordance with the Government of Mauritania and PS2 requirements. Due to market conditions and gold prices, in early 2015, retrenchment of approximately 220 staff (both expatriates and national staff) was undertaken. The retrenchment was carried out in accordance with local laws and PS2 requirements. TMSLA also developed a support program for laid-off national employees, which provided them with training and grants to start small businesses.

Grievance Mechanism: The Code of Business Conduct and Ethics and Whistleblower Policy provide the basis for TMSLA's employee grievance redress mechanism. The Whistleblower Policy was developed to facilitate open communication and to ensure that employees have a means to report actual or suspected violations of Kinross Policies or applicable laws without fear of reprisal. While the Code indicates that issues such as unlawful discrimination, harassment, workplace violence, working conditions and other improper treatment can be addressed to an HR representative, the Whistleblower Policy encourages employees who are reluctant to report these issues to HR to report them directly (either verbally or in writing) to the Senior Vice-President HR, Chief Legal Officer or Senior Vice-President & General Counsel or to another member of the Company's senior management team.

Occupational Health and Safety: Mining activities present inherent health and safety (H&S) hazards. The physical environment where Project activities take place presents additional potential H&S impacts, such as respiratory problems, heat and thermal stress, noise-induced hearing loss from excessive noise exposure; skin disorders and/or damage to internal organs from contact with a wide range of chemicals, and physical injury from accidents involving machinery and movement of construction materials and explosives.

Safety is considered a top priority at the Project. Overall, occupational health and safety (OHS) management on site is the responsibility of the EHS Department. TMLSA's H&S Policy is founded on achieving zero harm through effective management. In 2014 – 2015, Kinross rolled out the seven "Cardinal Rules" on all of its operations. The "Cardinal Rules" apply to behavior that can lead to potentially fatal hazards. The rules were developed based on an industry-wide assessment of serious injuries and fatalities over the past several years. The seven rules are: (1) Seatbelts must be worn while in a moving vehicle; (2) Operators must be trained and authorized to use equipment; (3) Entry into a restricted area requires proper authorization; (4) Hazardous energy control requirements must be observed; (5) Proper fall protection must be used when working at heights or near an open hole; (6) Specialized work permit requirements must be observed; and (7) Safety devices must never be removed, tampered with or bypassed. The Project operates on zero tolerance policy for violations of the Cardinal Rules. While infractions are assessed on a case-by-case basis, the majority result in dismissals.

In 2016, the Total Reportable Injury Frequency Rate (TRIFR) at the Project was 0.34, and TMLSA was recognized for exceptional safety performance. The TRIFR formula used is as follows: the number of recordable incidents (Medical Treatment, Restricted Work, Lost Time, and Fatal) multiplied by 200,000 and then divided by the total number of exposure hours (labor hours) for employees and contractors. It was evident from the site visit that workers adhered to safe working practices, for example, workers observed speed limits, used adequate Personal Protective Equipment (PPE), and conducted "Safe Watches." The Safe Watch program involves work safety observations of personnel to evaluate work place risks and includes space for commenting on safe and poor work practices and on actions to be taken to mitigate risk.

A medical clinic is currently in operation at Tasiast 24 hours per day, 7 days per week to provide medical advice and assistance to workers (staff and contractors) and the local community within 30 km of the site. The Clinic always has two doctors on site plus two of either a senior medical officer, paramedic and/or chief medical officer; as well as four nurses, and one head nurse. The clinic is equipped with 3 ambulances. Emergency services are provided to other community members (e.g. artisanal miners). Services provided by the clinic include: emergency response (including cyanide emergency) and stabilization for emergencies; evacuation of patient/s to appropriate facility should the medical needs of the patient/s exceed the on-site capabilities; normal, routine consultations (primary care); limited secondary care to initiate treatment or to stabilize the patient; occupational health services including health screening, annual medical examinations, exit and transfer medical examinations, health surveillance and health risk assessments (e.g. hearing conservation and respiratory programs, skin diseases and other risks associated with occupational illness); and public health programs to promote health and educate workers.

TMLSA is committed to reducing occupational health exposure at the source through good engineering practice and applying the principle of as-low-as reasonably possible and management of known hazards associated with work at the mine through its occupational health program, industrial hygiene, hearing conservation, respiratory protection, thermal stress and vaccination. TMLSA conducts health and safety monitoring to ensure that potential threats to worker's health and safety are being adequately addressed or mitigated.

Explosives are stored in dedicated explosive storage magazines separate from detonators, delays and detonating cord. Magazines have been fitted with lightning protection and locks, and are surrounded by earthen bund walls within a secure compound. Materials required for bulk explosive production are stored in separate tanks within the explosives batching plant compound. Mobile mixing units transport these products to the blast patterns where they are combined into a bulk explosive product, immediately before blast hole charging. Staff are informed of dates and times of planned blasting activity via signs at the entrance to the work site, and a 500 m exclusion radius is established and maintained during blasting activity.

Workers Engaged by Third Parties: In 2016, TMLSA engaged over 60 contractors to provide services to the site. While TMLSA performs a majority of the main production and maintenance activities of the Project, contractors are engaged mainly in areas of logistical support such as catering and accommodation, security, medical services, flight services, fuel supply and distribution among others. In line with its business needs, TMLSA is assessing shifting more of its activities to contractors. Contractors are contractually obligated to adhere to TMLSA' EHS requirements, and all contractor employees undergo the same site induction, and EHS training as TMLSA employees. For major contracts, bidders are prequalified to work on the Project based in part on their H&S management system and prior performance. Bid evaluation criteria is established based on the associated H&S risks for the work package. For all work packages issued for tender, the EHS requirements for the subcontractors' document are included. These requirements include minimum levels of onsite supervision, requirements for contractor onsite H&S personnel, PPE and site pre-access medical requirements. The HR Department also actively engages with all contractors to ensure consistency across the Project with respect to labor standards (namely forced and child labor) and treatment of workers including adequate compensation in line with Government of Mauritania Labor Code. The HR Department regularly audits contractors to ensure compliance with Project standards. Contractors are also encouraged to hire local employees.

Supply Chain: TMLSA screens potential suppliers as part of its pre-qualification process which includes but is not limited to EHS considerations and labor standards. All suppliers are required to sign and 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 applicable anti-corruption laws, as well as the fundamental principles of the UN Global Compact respecting human rights, labor standards, environmental protection, and anti-corruption. In addition, TMLSA conducts audits of its suppliers to ensure compliance with the Supplier Standards of Conduct. Every two years Kinross conducts site specific audits on the supply chain management system.

As part of its Local Business Integration plan, TMLSA provides an opportunity for local business to provide goods and services that are within the capacity and capability of local businesses. This includes review of in-country capabilities compared with Project needs, characterizing all purchasing requirements based on potential source location, communicating with potential local suppliers, and offering training / capacity building programs for local business based on identified needs.

PS3: Resource Efficiency and Pollution Prevention

Resource Efficiency: As noted under the Project Description section above, the Project produces its own electricity through onsite power plants. In 2016, the Project consumed 4,128,193 liters of HFO, 15,177,276 liters of LFO and generated 81,496,861 kW/hr of electricity. Energy use is minimized as much as possible through the installation of low energy light bulbs and light sensors and the use of energy efficient appliances. The Project is also considering the installation of solar water heaters in the TTV.

Greenhouse Gases (GHG): GHG emissions from the Project are largely from the on-site power plant, but are also from fixed and mobile equipment, including vehicles and generators. In 2016, estimated GHG emissions were 176,151 tonnes of carbon dioxide equivalent (tCO₂e) (which is lower than normal due to temporary suspension of mine operations during 2016). Phase 1 will not result in a significant increase in GHG emissions, but Phase 2, assuming that power will be generated by an HFO/LFO reciprocating engine plant (as described above), is anticipated to increase annual GHG emissions to approximately 730,000 tCO₂e.

Water Consumption: The primary source of water for the Project is a groundwater borefield (referred to as 'Sondage') located approximately 65 km west of the mine. Sondage draws from a deep (50 – 70 m) brackish aquifer using a system of 49 production boreholes, though only 15 to 25 are required to be operational to meet the current water needs of the mine. Water from each borehole is pumped to a tank, and then diverted to the mine site via three pipelines. In 2016, the total water abstraction from the field was almost 3 million cubic meters (m³) and the average daily abstraction was 8,200 m³/day. In total, the existing borefield and pipelines are capable of supplying up to 24,000 m³/day of raw water to the site. Once at the site, water that will be used for domestic purposes (TTV, Old Town and sanitary facilities throughout the site) is treated by a RO plant. This water is not used for drinking. Process water is not treated prior to use.

The studies that have been undertaken of water quality and post-rainfall recharge suggest that the borefield is abstracting fossil water. The aquifer does not appear to be linked to the shallow, freshwater aquifers in the region and recharge post-rainfall is negligible. The aquifer is therefore considered a finite resource. The TMLSA permit allows abstraction of a total of 30,000 m³ of water per day from the borefield. There are currently no other users of this aquifer. TMLSA has undertaken studies to evaluate the abstraction capacity of the borefield, which indicate that the existing field is sufficient for the Phase 1 expansion and is likely to be able to provide the water that would be required for Phase 2. The Project has developed a comprehensive groundwater monitoring program to ensure that potential water supply issues are identified early (i.e. providing a lead time of at least three years to design and implement remedial measures). There are 35 monitoring boreholes to monitor changes in water level. All monitoring and production boreholes are equipped with data-loggers (84 boreholes in total), which automatically record water level fluctuations every 3 hours. Monitoring wells also allow the project to detect any potential impact on nearby freshwater aquifers.

The Feasibility Study estimates that, following the Phase 1 expansion, water requirements for the Project are estimated at approximately 13,000 m³/day. Following the Phase 2 expansion, if completed, it is estimated that water requirements would reach 25,000 to 28,000 m³/day. The Project is a zero-discharge site. Water re-use in the process is maximized, and approximately 50% of tailings water is recovered and pumped back to the plant or dump leach storage ponds for re-use.

Solid Wastes: All waste from the Project (excluding waste rock and tailings, which are addressed separately below) are segregated at source according to the following waste streams: putrescible and organics (food, paper, general rubbish), non-hazardous (which will be either recycled, incinerated or sent to landfill for permanent disposal) and hazardous. Each department is responsible for the designation and maintenance of the waste collection points and segregation within their own area. The wastes are transferred by a waste management contractor to the WMF.

Non-hazardous solid waste will either be incinerated or landfilled. Items such as scrap metal and wooden pallets are stored until a recycling solution is identified. All hazardous waste such as laboratory waste, oil and fuel drums, contaminated soil and others is transferred directly to the Hazardous Waste Storage Facility (HWSF).

The HWSF was designed in accordance with Good Industry International Practice with a concrete slab floor, and an exterior containment curb on top of which a number of concrete bays with 1 m high walls are constructed to prevent interaction between wastes in case of a leak or spill. The HWSF is surrounded by a 2 m high fence and access gates to prevent unauthorized access. All hazardous waste storage and handling areas are routinely inspected for leaks, spills and the implementation of appropriate containment measures. The hazardous wastes within the HWSF are stored in suitable closed leak-proof containers (sealed drums or 1000-liter High-density polyethylene). The HWSF was designed with a five year holding capacity. Hazardous wastes are stored on site until identification of suitable offsite disposal solutions.

Waste oil is kept in the oil collection tank at the WMF, which is periodically emptied by “Total” (the company responsible for transporting oil to site from Nouadhibou).

Medical waste (sharps, syringes, surgical tools, biomedical waste) is kept in a locked storage area near the clinic until it is transported to the WMF. At the WMF, sharps, syringes and surgical tools are encased in a concrete block and disposed of in the landfill at the WMF. Other biomedical waste is incinerated in the onsite incinerator. Chain of custody procedures are in place for the transfer of medical waste, and clinic staff accompany the waste and observe the disposal process.

Wastewater / Effluent: Approximately 50% of sewage is disposed of through septic tanks fitted with soak away overflow systems. Currently there are septic tank systems at the mine camp and at the mine offices. Tanks are emptied on an ‘as required’ basis and the effluent is placed in a bunded area to dry. A waste water treatment plant was commissioned in 2011, and treats the remaining 50% of sewage generated by the camps and offices. Capacity of the sewage treatment systems is approximately 1000 m³/day for the accommodation camp, and 200 m³/day for the CIL process plant. Treated effluent is currently disposed of through a spray field; however, the Project is

considering options for further treatment to bring the quality of the treated effluent to a usable standard for dust suppression on roads.

There are no permanent surface watercourses in the area, and the closest wadi (intermittent watercourse) is located approximately 6 km from the mine site. The discharge of treated effluent has no detectable impact on surface or groundwater resources.

Tailings Management: Tailings are the waste resulting from the CIL process. The Project is anticipated to generate approximately 208 Million tonnes (Mt) of tailings over a 16-year period (assuming the implementation of both Phase 1 and the proposed Phase 2). The tailings slurry is treated with ferrous sulphate as a cyanide destruction method prior to disposal in the TSF. The Tasiast Mine maintains Weak Acid Dissociable (WAD) cyanide concentrations of below 50 mg/l at its tailings storage facilities. As indicated above, approximately 50% of tailings water is recovered and re-used for processing. There are 4 tailings dams (TSFs) on site – two of which are decommissioned or are in the process of being decommissioned (TSF 1 and TSF 2, respectively), one is operational (TSF 3) and another is under construction (TSF 4). TSF 1 has been non-operational since 2009, and was officially closed (as per the closure plan approved by the government) in 2016. Closure included using waste rock to cap the TSF, and the installation of a double-lined seepage pond to collect seepage from TSF 1. A monitoring program is in place to monitor the quantity and quality of seepage flow. TSF 2 has been non-operational since 2012. The closure plan was approved at the end of 2016 and is currently being implemented. TSF2 has had historical seepage, and therefore, a program has been put in place to abstract seepage water and monitor cyanide concentrations in groundwater. As part of Phase 2, it is proposed that a cyanide destruction circuit be added to the process, which would further reduce the concentration of cyanide in the tailings. The deposited tailings, once dried, form a crust, which prevents potential for windblown dust from the TSFs.

Tailings Dam Design and Safety: Kinross has an internal standard for TSFs, which generally meet or exceed standard international practice (e.g. designed for Probable Maximum Flood, Maximum Credible Earthquake used 1:10,000 year return period). Kinross internal standards also require facilities to have a dam safety inspection by the external 'Engineer of Record' at least once per year. The most recent inspection, which was undertaken in February 2017, indicated that all of the dams associated with TSF 3 (the only operational TSF) were in generally good condition with no apparent signs of distress. The Process department is also responsible for undertaking daily inspections of the TSF operations.

TSF inundation reports (break analysis) have been undertaken for TSF 3 and 4. These analyses indicate that in the event of a catastrophic failure, tailings material is unlikely to migrate outside of the mine perimeter. There are no surface or groundwater courses or local populations that are likely to be affected by a tailings dam failure.

Waste Rock: The Project has a high stripping ratio, which means that a large amount of waste rock is generated to expose the ore. Waste rock generated from the mining process is stockpiled in waste rock dumps, which have been designed, including overall slope angles, height restrictions,

groundwater and surface water interaction and closure requirements, in accordance with Kinross Standards for Waste Rock and the WBG EHS Guidelines for Mining.

Acid Rock Drainage (ARD): ARD can occur when sulfidic material in waste rock, tailings or pit walls is exposed to oxygen. A waste rock characterization was undertaken at Tasiast to assess ARD potential, and the results indicated that the waste rock typically exhibits a net neutralization capacity (as opposed to a net acid generating capacity). The study results, coupled with the arid climate, lack of surface water and very limited groundwater indicate low potential for ARD or metal leaching to develop. As new pit areas are developed, additional analysis of ARD potential will be undertaken. If ARD is found to be a risk in certain materials, suitable measures will be developed and implemented to mitigate these risks. Similarly, analysis of tailings indicated overall neutralizing capacity.

Hazardous Materials: TMLSA uses a number hazardous materials in its operations such as sodium cyanide (NaCN) and hydrochloric acid (HCl) amongst others. Hazardous materials are managed through a combined EHS approach which includes safe transportation and loading/offloading, handling, storage and disposal as per the Material Safety Data Sheet (MSDS) guidance and appropriate training and use of PPE. MSDS are posted in prominent areas in the mine; supervisors are responsible for ensuring their staff review the relevant MSDS's. MSDS are also accessible on the Kinross intranet site and for employees without ready access to a computer these may be retrieved through a request made to their immediate supervisor.

Cyanide Management: Cyanide is used in the process to assist in the extraction of gold from the ore. Cyanide is received on site in conventional dry briquette form (nylon supersacks overpacked in plywood boxes in standard steel sea containers) via ocean transport at the Port of Nouakchott, and then trucked to the mine site. Cyanide facilities on site include:

- ADR plant, including a dedicated remote cyanide warehouse, a dedicated cyanide mixing and storage facility, two (Piment and West Branch) dump leach facilities, and associated barren and pregnant solution pipelines and pumping systems; and
- CIL plant, including a dedicated cyanide warehouse, a dedicated cyanide mixing and storage facility, an active tailings storage facility (TSF 3), and interconnecting tailings and reclaim water pipelines and pumping systems.

Project components and processes (such as the off-loading and storage area, mixing/processing plant, HLF, solution ponds and associated pipelines) have been designed to comply with the requirements of the International Cyanide Management Code (ICMC). Kinross is a signatory of the ICMC, and in January 2017, Tasiast achieved ICMC certification for the procurement, transport and handling of Sodium Cyanide during the operation of the mine, including the expansion. The results of the audit undertaken as part of the certification process indicated that the Project is in full compliance with the Code.

TMSLA has developed, and continues to revise and update as required, a comprehensive suite of management plans and procedures for the management of cyanide facilities, which cover (*inter*

alia) the storage of high strength cyanide solution separate from acids or other reactive materials; the implementation of secondary containment for all cyanide solution transfer, mixing, leaching and detoxification tanks; avoidance of accumulation of cyanide gas; and day to day monitoring and management of the ADR and CIL operations. Access is restricted to properly trained workers at cyanide facilities. Cyanide is purchased from and transported by ICMC authorized producers and transporters. A secure burn area for disposal of cyanide packaging residues from both the ADR and CIL operations is also provided.

Pit Dewatering: Groundwater resources in the vicinity of the Project are very limited and of poor quality. The groundwater inflow rate to the pit will decline as the pit is deepened, but will continue following closure, though at decreasing rates. In the long term there is expected to be a permanent depression of groundwater levels in the vicinity of the pits. The pits are effectively acting as a sink or large diameter abstraction, drawing groundwater from the surrounding area within the cone of depression. The low permeability means that the cone of depression will be steep and effects will remain relatively close to the pit. A ten-meter drawdown is predicted to remain within the mine perimeter boundary in the long term. Effects are not expected to extend beyond the perimeter boundary. During mining, pit dewatering solution will be used for road watering. Post closure, some of the water will be lost to evaporation and the rest will accumulate, along with any rainwater, in the pit. Initially, post-closure, water that collects in the base of the pit will be similar to groundwater quality (i.e. brackish with high concentrations of dissolved solids and not potable). Rainfall will provide some dilution, but subsequent evaporation will likely cause further concentration of dissolved solids. Over several decades, the pit lake will stabilize at approximately 500 m below ground level.

Soil contamination: There is potential for soil contamination as a result of spills and/or leaks of fuels, oils and other chemicals and windblown contaminated dust blowing off the TSF, dump leach and heap leach facilities, during extreme weather conditions. There is a Spill Response Plan in place, and spill response equipment is included at key sites (e.g. reagent storage and mixing facilities) and available on the emergency response vehicles. Spills or leaks are immediately cleaned up and given the sandy nature of the soil and its lack of potential to support arable land use, the potential impacts of soil contamination during expansion and operation are of low significance.

Fuel storage facilities within the power plant site have capacity for 30 days operational requirement. The fuel farm design is in line with the requirements of WBG EHS guidelines. It is banded to contain any spillages and includes secondary containment designed to contain 110% of the largest tank. Fire prevention and control systems are also installed.

Air Quality: Air quality is dominated by elevated concentrations of both coarse dust particles and respirable suspended particles (particles with a diameter of 10 micrometres or less – PM₁₀) as a result of natural desert conditions and, to some degree, existing mining operations. Sources of emissions include exhaust emissions from the power plant, mobile plant, road vehicles and airstrip operations. Due to the remoteness of the mine, air quality is not affected by any other surrounding industries.

TMLSA has in place an Air Quality Management Plan (AQMP), which includes a dust management plan that includes measures such as watering roads periodically and temporarily stopping activities during a sand storm and also provides provisions for monitoring. Ambient air monitoring is undertaken annually and includes the following air emission parameters: Carbon Monoxide (CO), Sulphur Dioxide (SO₂), Nitrogen Dioxide (NO₂), Nitric Oxide (NO), and Nitrogen Oxides (NOX) and Particulate Matter (PM₁₀). Stack emission monitoring is undertaken once every three years and the latest one conducted December 2016. The Emission results are assessed against WBG EHS Guidelines

Noise and Vibrations: Due to the Project's remote location, the closest sensitive receptor is TTV and site layout allows for adequate distance between noise-generating equipment and TTV. Noise levels at TTV have been assessed and are within WBG EHS Guideline values for residential areas daytime and night-time. The existing mine perimeter provides a buffer zone around noise-generating equipment at the mine. No noise impacts on semi-nomadic residents have been identified thus far, and none are expected to result from the expansion.

Visual impacts: The landscape surrounding the Project is open desert, typical of the Saharan landscape and the majority of Mauritania. The Project will result in the creation of permanent landscape features from the waste rock dumps, pits and TSFs. However, as the landscape of the Project site and its immediate area has no unique or distinctive features and there are no communities with a direct line of site to the Project, the impact on visual amenity is considered to be low.

PS4: Community Health, Safety and Security

Community Health and Safety: There are no communities and only a limited number of people located in the vicinity of the Project; therefore, community health and safety risks associated with Project operations is limited. For any blasting at sites located outside of the existing perimeter fence (e.g. eventual blasting in the SENISA, TML and SETSA concessions), TMLSA will have a blasting procedure in place, which will include notifying local residents of planned blasting activity and establishing a 500 m exclusion zone around the blast site prior to the blast. There are no permanent community structures within several kilometers of the proposed blasting sites. Semi-nomadic structures also tend to be established at least 1 km from the Tasiast fence line.

The main community health, safety and security impacts from the Project include risks associated with hazardous materials and personnel transport from Nouakchott and / or Nouadhibou to site, risk of traffic accidents along the access roads to the SENISA, TML and SETSA concession areas, and health issues exacerbated by influx and interactions between workers and local communities.

Project reagents, including cyanide, are transported to site from Nouakchott via National Road 2. TMLSA's GR / CR team, through their existing stakeholder engagement processes, raises public awareness of traffic risks, and all reasonable measures are taken to ensure public safety during the transport of oversized equipment and/or hazardous shipments. As indicated in the section above, the Project and its transportation contractors are in full compliance with the Cyanide Code

requirements for transportation of cyanide. Site road safety procedures will apply to the SENISA, TML and SETSA access roads. Speed limits will be strictly enforced, and only 40 ton trucks will be used.

All Project employees, with the exception of a small number of people employed from Chami, including contractors, are housed within TTV and Old Town. There are no contractor camps or other staff accommodation facilities outside the mine perimeter or in the local communities. The employees from Chami (all of whom are engaged by a contractor) are bussed on a daily basis. To further reduce the potential for influx, the Project does not receive employment requests on site – instead potential applicants are referred to the office in Nouakchott. In general, due to the remoteness of the mine and the lack of water resources in the area, the potential for in-migration in the immediate vicinity is limited. As a result of Project mitigation measures and the natural conditions of the area, very little mine-related influx has occurred. Regular socio-economic surveys are undertaken to ensure that any changes in local populations related to Project activities are captured.

The town of Chami was established by the government in 2013. The purpose of the town is to provide a base between Nouakchott and Nouadhibou for rural populations to receive services (health, education, etc.), and the government is actively encouraging people from the surrounding areas to relocate to the town. Unrelated to the Project, Chami has recently experienced an influx from the artisanal mining activities. While the establishment and growth of Chami is not related to the Project, TMSLA is working with the government to support sustainable development of the town through its CSR programs.

Pre-employment medical screening and fitness-for-work programs minimize the risk of transmitting communicable diseases to members of the public exposed to TMLSA workforce. Furthermore, as part of its corporate responsibility activities, TMLSA allows residents within 30 km of the mine to use the on-site medical clinic and has funded a third party mobile clinic to provide general medical services to Inchiri region residents. Last year, the mobile clinic provided over 3,000 consultations to residents of Inchiri. The mobile clinic provides both general services and specialized services, such as ophthalmology, cardiology, pediatrics, diabetes care, and x-ray services.

Community safety has been recognized as a core objective of the Preliminary Rehabilitation and Closure Plan. All closure works are designed to eliminate, or as a minimum significantly reduce the risk to public safety. Additional specific measures, if required, will be detailed in the final Rehabilitation and Closure Plan at least two years prior to closure.

Security Arrangements: Kinross applies its corporate global, Africa region and Tasiast specific security policies and standards to the Project. Kinross Global Security standards are based on industry best practice, and establish the baseline security policies, procedures and practices that each Kinross location must implement. Kinross Africa security has put in place policies, standards, plans and procedures and provides the infrastructure, equipment and personnel required to protect both personnel and assets including staffed guard posts, site access control, personnel transportation

and protection of infrastructure, consumables and product. On site, TMSLA has its own security team, as well as two private contractors. One contractor functions as the site SRT (described above under PS1 *Emergency Preparedness and Response*), which provides support in areas such as journey management (including protection of gold shipments), protection details, investigations and information collection. The other, a large international security contractor, provides security officers to support access control and general day to day security activities. All security personnel on site, including contractors, receive training from Kinross Africa security, and are required to comply with Kinross security standards and policies. Training topics include appropriate use of force, de-escalation techniques, human rights, and engaging with the local community. Project security policies, procedures and standards are compliant with the requirements PS4.

The Mauritanian Gendarmerie also has a dedicated unit stationed on site. TMSLA security team has established a good working relationship with the Mauritanian Gendarmerie, and they have entered into formal memorandum of understanding and co-operation in intelligence gathering.

TMSLA has adopted the Voluntary Principles on Security and Human Rights (VPSHR), an international norm that promotes and protects human rights and the use of force. TMSLA regularly conducts risk assessments, training and monitoring consistent with the VPSHR to ensure security measures used at the Project do not unintentionally cause, contribute to, or benefit from human rights abuses. Any security related grievances can be reported via the grievance redress mechanism.

PS6: Biodiversity Conservation and Sustainable Management of Living Natural Resource

The Project is located within the Saharan-Sindian bioclimatic zone, which occupies up to three-quarters of Mauritania and is of low floristic diversity. Three separate biodiversity surveys have been undertaken of the Project area as part of the Project EIAs (initial EIA (2004), Phase 1 expansion (2009) and Phase 2 expansion addendum (2015)). The habitat present within the Tasiast site is of a gravelly regs type (i.e. desert landform of broad plains covered with sand and gravel), which is the typical habitat of much of the middle, north and north-east of Mauritania. While the site is now considered 'modified habitat', prior to the development of the Project, the area was considered 'natural habitat' as defined by PS6. The surrounding areas, including the SENISA, TML and SETSA concession areas, are still generally considered 'natural habitat'.

Vegetation cover is low and is comprised of relatively few plant species. None of the plant species identified in the surveys are rare or threatened, and none are designated as protected by local, national or international standards. Three species found on site are recognized by national forestry legislation as an important socio-economic resource. These three species are also widely disbursed throughout the region.

The fauna (birds, mammals and invertebrate) recorded is similarly of relatively low diversity. Hares, hamsters and gerbils are the most common mammals at the mine site, and jackals, fennec fox and polecat can also be found in the area. No protected species are in the Project area; however, the site is situated adjacent to the West African bird flyway.

The closest protected site is the Parc National du Banc d'Arguin (PNBA), which is located 65 km to the west of Tasiast and less than 5 km west of Sondage (borefield). PNBA, which is designated as a RAMSAR Site and UNESCO World Heritage Site, is a major breeding site for migratory birds, including flamingos, broad-billed sandpipers, pelicans and terns. The breeding habitat is primarily sand banks along the coast and on the offshore islands.

Potential project impacts on biodiversity include: risk of wildlife death as a result of accidents (e.g. vehicle or transmission line) and cyanide levels in tailings and solution circuit ponds (e.g. given proximity to the West African bird flyway, artificial waterbodies on site have the potential to attract large numbers of migrants); clearance of vegetation and permanent loss of habitat; noise and vibration disturbance to wildlife; and degradation of habitat due to abstraction of groundwater resources. Given that the natural habitats present in the Project area are common and widespread, and the associated species are expected to occur wherever suitable habitat conditions are present, the impact of vegetation and habitat loss is not expected to be significant. Similarly, as very limited wildlife is present in the area, noise and vibration are not expected to have significant impact. Vegetation loss was also not identified to have significant impact on ecosystem services. While the semi-nomadic herders will lose access to grazing lands within the Project area, this was not identified to be a significant impact as they have access to large areas of land with similar characteristics and vegetation.

The ecology and habitats of the PNBA are not dependent on groundwater, and therefore abstraction from Sondage is unlikely to have any impact on the PNBA. Regardless, the project has established an extensive groundwater monitoring system to allow early identification of any impact on regional aquifers (deep and shallow) related to abstraction from Sondage.

The presence of surface water resources (e.g. raw water ponds, ponding on the dump leach, process ponds and TSFs) is likely to attract birds and wildlife to the site, and wildlife death resulting from cyanide poisoning could occur. The Project has installed driplines on the dump leach to prevent ponding and process ponds are fenced and covered with nets to prevent bird and wildlife access. TMLSA maintains WAD-cyanide concentrations of below 50 mg/l (which is recognized as being protective of most terrestrial wildlife) at its TSFs.

TMLSA has a 'Biological Resources Management Plan,' consistent with the requirements of PS6, in place to ensure best practice is followed and potential impacts from the Project to birds and other wildlife are minimized. Incidences of wildlife mortality on site are recorded, and investigations are undertaken into the cause of death. Since 2012, there have been 52 wildlife mortalities on site (several species of birds, foxes and snakes). Only 10 of these were near cyanide facilities (e.g. TSF or dump leach ponds), and none of the deaths were deemed to be attributable to cyanide. Migratory bird mortalities occasionally occur, most of which appear to involve juvenile storks who have been blown inland from coastal flyways. With the implementation of appropriate mitigation, the impact of the Project on biodiversity and living natural resources (including ecosystem services) is expected to be of low significance.

PS8: Cultural Heritage

Six archaeological studies have been undertaken at and in the vicinity of the Project, and additional studies are undertaken as exploration continues outside of the Tasiast perimeter. The Project area is characterized by three key types of archaeological sites: Neolithic settlements on old ogolian dunes, protohistoric tombs clustered on gravels and rocky ridges, and historic Muslim tombs. The surveys identified a total of 74 sites within the Tasiast Project perimeter. All of the archaeological sites identified at the Mine are considered to be normal and typical of the region. None have been designated according to local, national or international standards in terms of their outstanding aesthetic, artistic, documentary, environmental, historic, scientific, social, or spiritual value.

TMLSA works with Mauritanian archaeologists from the Institute of Scientific Research (IMRS) to preserve and manage cultural heritage on site. TMLSA has an established Cultural Heritage Management Plan and Chance Finds Procedure as required by PS8. Cultural sites with the potential to be disturbed are fenced to avoid accidental impact. When a site must be disturbed, IMRS is engaged to properly excavate and preserve any physical cultural resources. Training is provided to all staff (including contractor staff) regarding the importance of protecting archaeological sites and management of chance finds.

F. Environmental Permitting Process and Community Engagement

Environmental Permitting Process: The key national regulatory authorities involved in permitting and environmental management of the mining industry in Mauritania are: (i) Ministry of Petroleum, Energy and Mines (MPEM). The MPEM has a function to prepare and implement mining policy and regulation, promote exploration and develop geological studies and maps; (ii) Delegated Ministry of Environment and Sustainable Development (MESD) which is responsible for ensuring the inclusion of sustainable development in public policies and in the management of natural resources and industry. It is composed of several departments including the Department of Environmental Control (DCE) that has overall responsibility for the national process for managing development project Environmental Impact Assessment (EIA) and Environmental Management Plans (EMPs) and also undertakes a general regulatory role, including monitoring; and (iii) Ministry of Water and Sanitation (MWS) which is responsible for the protection and integrated management of water resources, and the coordination of all activities involving the abstraction, distribution and use of water including the treatment and discharge of effluents.

The provisions for environmental permitting for the mining industry in Mauritania are established in Decree No. 2004-054, Mining Code - Environmental Requirements (July 6, 2004) and Law No. 2000-045, Environment Code (July 26, 2000) and the following implementing decrees: Decree No. 2004-094 (November 4, 2004) and Decree No. 2007-105 (March 7, 2007).

These decrees stipulate that approval for mineral exploitation is subject to the EIA process. The MPEM has the principal jurisdiction for mining-related activities, and the MESD has the principal jurisdiction related to environmental activities. MESD is responsible for reviewing and approving EIAs and EINs. In addition, EIA guidelines have also been prepared to supplement existing Mauritanian legislation. Other permits required are the water extraction permit from Ministry of

Water and authorization by the Ministry of Culture for disturbance or removal of features and artefacts. To date, the Project has indicated it is in full compliance with Mauritanian requirements.

Stakeholder Engagement: Public consultations are carried out as a requirement of the EIA process whereby the project is presented to the local authorities, local populations, governmental departments involved, NGOs and other relevant organizations. The EIA is made public and a register kept by the *Hakem*³ and town Mayor to which the populations have access and are able to record any comments and suggestions for the project. The comments must be addressed in the EIA which is then reviewed by the Ministry of Environment and Sustainable Development.

In addition to public consultations associated with project permitting, there is ongoing engagement with key stakeholders to maintain open channels of communication as per the PCDP described under PS1 in this ESRS. Overall, the public is generally supportive of the Project.

TMLSA, through its SRP and community relations strategy implements an extensive Corporate Social Responsibility program to ensure that Project benefits are shared with the local communities. They have supported key projects, including social initiatives for education, access to health services, and the development of income generating activities focused on generating sustainable community outcomes long after mine closure. Community projects include: (i) microbusiness opportunities – in partnership with a local NGO, TMLSA has helped create 45 new microbusinesses; (ii) Mobile Clinic Programs – free access to specialized health services and medicine for the surrounding Project localities; (iii) Donation of medical equipment – TMLSA in partnership with an international NGO has facilitated provision of medical supplies to nearly 30 health facilities and hospitals across Mauritania; (iv) Veterinary programs – in partnership with a local NGO, TMLSA has provided animal care services for camel, sheep and goat herds, which is the main source of income for the semi-nomadic residents; and (v) Water supply program for the local communities – TMLSA has provided and regularly refills three water bladders for the residents within a 30 km radius of the mine site. TMLSA has also committed to supporting the strategic development of Chami town and cooperating with the government in the rehabilitation of areas disturbed by artisanal mining.

G. Availability of Documentation

The documentation listed below is available electronically as PDF attachments to this ESRS at www.miga.org.

- [Summary Audit Report – International Cyanide Management Code Certification Audit \(Ramboll Environ, January, 2017\)](#)
- [Addendum to the Phase 2 Environmental Impact Assessment for the Expansion Project at the Tasiast Mine in Mauritania \(SRK Consulting, January 2016\);](#)
- [Phase 2 Environmental Impact Assessment: On-Site Mine Process and Infrastructure \(URS/Scott Wilson, March 2012\)](#)

³ Hakem is a government appointed official (prefect) of departments within a region.

- [Phase 1b Environmental Impact Assessment: Supporting Infrastructure and Preliminary Upgrades: Tailings Storage Facility 3 Starter Cell, Foundations, Power Plant, Fuel Farm, Waste and Water Management Facilities, Accommodation Camp, Airstrip, and Expansion of Borefield \(URS/Scott Wilson, July 2011\)](#)
- [Phase 1a\(ii\) Environmental Impact Notice: Supporting Infrastructure: Construction Camp, Offices, Warehouses and Fuel Farm \(URS/Scott Wilson, June 2011\)](#)
- [Phase 1a\(i\) Environmental Impact Notice: Access Road Upgrade: Access road, Borrow Pits, Temporary Mobile Crusher, Borefield Expansion, and Water Supply Pipeline \(URS/Scott Wilson, May 2011\)](#)

The documentation is also available for viewing at the following locations:

- ZRA 741, BP 5051, Tevragh Zeina, Nouakchott, Mauritania

For additional information, please contact:

- Contact Kinross Gold Corporation at:
 - 1-866-561-3636
 - info@kinross.com

MIGA supports its clients (as defined in MIGA Policy on Environmental and Social Sustainability) in addressing environmental and social issues arising from their business activities by requiring them to set up and administer appropriate grievance mechanisms and/or procedures to address complaints from Affected Communities.

In addition, Affected Communities have unrestricted access to the Compliance Advisor/Ombudsman (CAO), the independent accountability mechanism for MIGA. The CAO is mandated to address complaints from people affected by MIGA-guaranteed business activities in a manner that is fair, objective, and constructive, with the goal of improving environmental and social project outcomes and fostering greater public accountability of MIGA.

Independent of MIGA management and reporting directly to the World Bank Group President, the CAO works to resolve complaints using a flexible, problem-solving approach through its dispute resolution arm and oversees project-level audits of MIGA's environmental and social performance through its compliance arm.

Complaints may relate to any aspect of MIGA-guaranteed business activities that is within the mandate of the CAO. They can be made by any individual, group, community, entity, or other party affected or likely to be affected by the environmental or social impacts of a MIGA-guaranteed business activity. Complaints can be submitted to the CAO in writing to the address below:

*Compliance Advisor/Ombudsman
International Finance Corporation
2121 Pennsylvania Avenue NW*

Room F11K-232

Washington, DC 20433 USA

Tel: 1 202 458 1973

Fax: 1 202 522 7400

E-mail: cao-compliance@ifc.org