SUMMARY AUDIT REPORT

for the November 2019
International Cyanide Management Code Recertification Audit

Prepared for:
Kinross Gold Corporation
Tasiast Mauritanie Limited S.A. (TMLSA)

Submitted to:
International Cyanide Management Institute
1400 "I" Street NW, Suite 550
Washington, D.C. 20005

FINAL
7 April 2020

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SUMMARY AUDIT REPORT

Name of Mine: Tasiast Mine

Name of Mine Owner: Kinross Gold Corporation

Name of Mine Operator: Tasiast Mauritanie Limited S.A. (TMLSA)

Name of Responsible Manager: David Hendriks, President and General Manager

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Location detail and description of operation:

The Tasiast mine is located in northwestern Mauritania at Latitude 20°34'10" N, Longitude 15°30'19"W; approximately 300 km north of the capital Nouakchott and 250 km southeast of the major city of Nouadhibou.

The site is in the arid western Saharan desert where the average annual precipitation is approximately 90 mm and usually occurs during July to September. The topography of the

region is mainly of flat, barren plains primarily covered by regolith and locally by sand dunes. The elevation ranges from approximately 130 metres above sea level (masl) to 150 masl. There are no permanent watercourses in the area; however, there are numerous, intermittent watercourses or "wadis", which flow for only a few days per year. The mine site is in the Inchiri Region, which has a very low population density. There are no permanent settlements within the vicinity of the Tasiast mine, although several isolated families have set up structures and reside within 30 km of the site. Residents practice animal husbandry and other subsistence forms of livelihood. There are also nomadic groups that occasionally transit the area.

The mine is an open pit operation, and processes ore through both milling/carbon-in-leach (CIL) and dump leach mineral extraction processes. Cyanide is received 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 include:

- Two dump leach facilities (Piment and West Branch) and associated barren and pregnant solution pipelines, pumping stations and process ponds; and an absorption desorption and recovery (ADR) plant and associated cyanide mix plant and dedicated cyanide warehouse;

- A grinding circuit consisting of a semi-autogenous grinding (SAG) mill and two ball mills; a CIL plant and dedicated cyanide warehouse and cyanide mix plant; a detoxification plant; an active tailings storage facility (TSF) currently TSF-4); and interconnecting tailings and reclaim water pipelines and pumping systems.

Since the 2016 ICMC certification audit TMLSA completed construction and commissioning of their Phase One expansion project (12K Expansion) that comprised installation of a SAG mill, gyratory crusher and three new leach tanks to the existing CIL plant to increase throughput from 8,000 to 12,000 t/d (tonnes/day). The other primary change since 2016 is the TSF-4 which is now used for deposition of treated tailings as TSF-3 has reached capacity. The two other tailings facilities (TSF-1 and TSF-2) are closed and have been capped.

SUMMARY AUDIT REPORT
Auditors' Finding

The operation is: ■ in full compliance
in substantial compliance
not in compliance with the *International Cyanide Management Code.*

TMLSA has experienced no significant International Cyanide Management Code (ICMC) compliance issues since the previous audit.

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Audit Team Leader: Clinton Phaal
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Names and Signatures of Other Auditors

Technical Auditor: John Lambert
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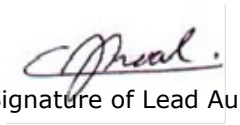
Date(s) of Audit: 11 November to 18 November 2019

I attest that I meet the criteria for knowledge, experience and conflict of interest for Code Verification Audit Team Leader, established by the International Cyanide Management Institute and that all members of the audit team meet the applicable criteria established by the *International Cyanide Management Institute* for Code Verification Auditors. I attest that this Detailed Audit Findings Report accurately describes the findings of the verification audit. I further attest that the verification audit was conducted in a professional manner in accordance with the *International Cyanide Management Code Mining Operations Verification Protocol*; *Guidance for Recertification Audits for the International Cyanide Management Code*; and using standard and accepted practices for health, safety and environmental audits.

Tasiast
Name of Mine



Signature of Lead Auditor

7 April 2020
Date

1. PRODUCTION **Encourage responsible cyanide manufacturing by purchasing from manufacturers who operate in a safe and environmentally protective manner.**

Standard of Practice

1.1 Purchase cyanide from manufacturers employing appropriate practices and procedures to limit exposure of their workforce to cyanide, and to prevent releases of cyanide to the environment.

The operation is: ■ in full compliance
in substantial compliance
not in compliance…with Standard of Practice 1.1

Discuss the basis for this Finding/Deficiencies Identified:

TMLSA has continued to purchase solid sodium cyanide from Cyanco Corporation LLC (Cyanco) produced at the Alvin production facility in Texas, USA. Sodium cyanide is purchased under a written agreement *Contract for Purchase and Sale of Sodium Cyanide (Solid)* (2017 Cyanide Contract) between Cyanco and Kinross Gold Corporation (Kinross) dated 13 June 2017. The date of expiry of the agreement is 31 December 2022. The contract stipulates that each part of the supply chain comprising road transportation from the Cyanco Alvin Texas Plant to the Port of Houston and ocean carriers to the receiving port in Mauritania is to be certified in full compliance with the International Cyanide Management Code (ICMC) and that certification is to be maintained for the duration of the contract.

Review of the International Cyanide Management Institute (ICMI) website confirms that the Cyanco Alvin Plant was originally ICMC certified in 2013 and recertified in February 2017. During the site inspection, the auditors noted supplies of sodium cyanide sourced from Australian Gold Reagents (AGR) based in Kwinana, Western Australia. Use of alternate sub-suppliers are permissible under the terms of the purchase and sale contract. Review of the ICMI website confirms that AGR became a signatory to the ICMC in November 2005, was initially certified in October 2007 and most recently recertified in August 2017.

2. TRANSPORTATION **Protect communities and the environment during cyanide transport.**

Standards of Practice

2.1 Establish clear lines of responsibility for safety, security, release prevention, training and emergency response in written agreements with producers, distributors and transporters.

The operation is: ■ in full compliance
in substantial compliance
not in compliance…with Standard of Practice 2.1.

Discuss the basis for the Finding/Deficiencies Identified:

Schedule A of the 2017 Cyanide Contract details specific purchase conditions for the Tasiast mine. Under the terms of the contract, solid sodium cyanide is to be delivered to the Port of Nouakchott under Incoterms Delivered at Terminal (DAT) conditions. Cyanco and their transporters included in the transportation chain are responsible for the following elements up to the Port of Nouakchott: packaging, labelling, addition of dye, storage prior to shipment, transport, unloading, evaluation of routes, safety and maintenance of means of transportation, task and safety training for transporters and handlers, and security and emergency response.

From the point of delivery at the Port of Nouakchott, TMLSA and their contracted transporter take receipt of the shipment. Delivery of solid sodium cyanide from the Port of Nouakchott to the mine has been contracted to Societe Generale de Consignation et d'Entreprises Maritimes S.A. (SOGECO) under *Agreement No. 000762* dated 1 May 2016 (SOGECO Agreement). SOGECO receives sodium cyanide as packaged by Cyanco, however is responsible for the remaining elements of transportation including training, security and emergency response to the point of delivery at the Tasiast Mine. Unloading at the mine is undertaken by SOGECO using equipment provided by TMLSA. Section 6 of Schedule A of the SOGECO Agreement requires TMLSA to provide a building and laydown areas, and unloading equipment such as a container handler, mover truck, side loader trailer and forklifts for use by SOGECO. TMLSA is responsible for providing transportation trucks and trailers for use by SOGECO between Nouakchott and for maintenance, licensing and insurance.

The Cyanco 2017 Cyanide Contract makes Cyanco responsible for any acts or omissions for any subcontractor used to perform any obligations under the contract. The SOGECO Agreement stipulates that no part of the services provided may be subcontracted without notification to TMLSA. Furthermore, SOGECO is responsible for any acts and omissions of its subcontractors.

2.2 Require that cyanide transporters implement appropriate emergency response plans and capabilities, and employ adequate measures for cyanide management.

The operation is: ■ in full compliance
in substantial compliance
not in compliance…with Standard of Practice 2.2.

Discuss the basis for the Finding/Deficiencies Identified:

The 2017 Cyanide Contract covenants that each part of the Cynaco supply chain is to be certified in full compliance with the ICMC and includes truck transport from the production facility in Alvin Texas to the Port of Houston using road transporters Action Resources/Quality Carriers/TransWood, ocean transport by Maersk or Mediterranean Shipping Company (MSC) and receipt at the Port of Nouakchott. The SOGECO Agreement requires that SOGECO be a signatory to and comply with the ICMC and that the ICMC will apply to the delivery of services.

Cyanco's supply chain to the Tasiast mine comprises the Cyanco Global Ocean Supply Chain and North American Rail & Truck Supply Chain. AGR sodium cyanide was supplied using the West Australian Supply Chain and the Ocean Freight Supply Chain. SOGECO are contracted to transport sodium cyanide from the Port of Nouakchott to the mining operation. Review of the ICMI website confirms that these supply chains were certified under the ICMC. Samples of chain of custody records, bills of lading and invoicing documentation confirm transport of cyanide from the points of origin to TMLSA using certified suppliers and supply chains.

3. HANDLING AND STORAGE **Protect workers and the environment during cyanide handling and storage.**

Standards of Practice

3.1 Design and construct unloading, storage and mixing facilities consistent with sound, accepted engineering practices and quality control and quality assurance procedures, spill prevention and spill containment measures.

The operation is: ■ in full compliance
in substantial compliance
not in compliance…with Standard of Practice 3.1.

Discuss the basis for this Finding/Deficiencies Identified:

Cyanide continues to be purchased exclusively in lined plywood pallet boxes, shipped in sea-containers and stored in dedicated, locked, security-fenced and guarded warehouses; one located at the main warehousing area near the CIL cyanide mixing facility, and the other near

the ADR plant and cyanide mixing facility. The unloading, storage and mixing facilities were all designed and constructed in accordance with standard engineering practices for such facilities. They have dedicated steel bag-cutting booths with electric overhead hoists for each mix tank; sumps and spillage return systems, high-level alarms, safety showers and concrete-bermed secondary containments to prevent seepage to the subsurface.

The cyanide tank and concrete containment basin at the CIL mix plant was observed to be in poor repair with significant degradation, including spalling, surface cracks, and loss of caulking. At the time of the field component of the audit a contracting company had been retained to repair the concrete containment and apply a chemical resistant coating. The company was actively working on the concrete basin for the cyanide holding tank. Prior to submission of this report TMLSA provided photograph evidence that the renovations on the containments for the mix tank and holding tank had been completed and the chemical resistant coating applied. TMLSA also completed a detailed inspection of the mix tank to confirm the tank's integrity. Evidence was provided to the auditors showing the non-destructive testing conducted and photographs of the repairs to the access hatch and repainting of the tank for corrosion protection.

The ADR and CIL areas and cyanide warehouse are located within guarded security fences, and are also located well within multiple concentric security perimeters staffed by a contracted security service, as well as by military patrols established under arrangement with the Mauritanian government. The mine site is in a remote area of the western Sahara Desert, over 60 km from the nearest village and there are no surface water bodies within the proximity of the mine.

The mix and holding tanks at both the ADR and CIL are located in the open and therefore are provided with adequate ventilation to prevent the build-up of hydrogen cyanide gas. The tanks are located in dedicated bunded containments and separate from incompatible materials such as acids, strong oxidizers and explosives. Procedures are in place that prohibit eating, drinking or smoking around cyanide. The cyanide reagent tanks in the mixing areas are fitted with high-level alarms that are also remotely monitored from operations office via electronic supervisory control and data acquisition (SCADA) systems. The high-level detectors are inspected on a monthly preventative maintenance (PM) work order. The alarms are tested prior to each mix.

Warehouse designs are virtually identical; both warehouses are open-fronted and constructed on concrete pads with sloped metal roofs and metal-sheathed back and side walls. Cyanide boxes are removed from sea-containers and stacked no more than three high. Both warehouses are dedicated to cyanide storage, and no chemically incompatible materials were stored nearby. Warehouse procedures are in place that prohibit eating, drinking or smoking around cyanide.

Storage procedures require that the boxes are stacked back from the edge of the roof to protect them in the event of precipitation. Because the roof at the ADR warehouse lacks an

overhang, a line marked on the concrete floor of the warehouse is used to define the outward limit that boxes may be stacked. During the audit cyanide boxes at the ADR warehouse were not being stored behind the line and were susceptible to impact from precipitation. Although it could not be determined whether boxes had been exposed to precipitation, many of the box labels were observed to be in a dilapidated condition; possibly resulting from water and/or wind damage. The auditors requested that the cyanide warehouse procedures be updated to ensure boxes are stacked away from risk of impact from precipitation and workers retrained in the procedure. Prior to submission of this report TMLSA provided the auditors with a copy of the revised procedure and training records in the revised procedure.

3.2 Operate unloading, storage and mixing facilities using inspections, preventive maintenance and contingency plans to prevent or contain releases and control and respond to worker exposures.

The operation is: ■ in full compliance
in substantial compliance
not in compliance…with Standard of Practice 3.2.

Discuss the basis for this Finding/Deficiencies Identified:

Empty boxes, strapping, polyethylene liners, and bags are removed to and burnt daily at a dedicated, posted, fenced, and locked burn pit located in a remote area several kilometres to the southwest of the mine site. Fencing at the burn pit was observed to be in good repair, and inspection indicated generally complete combustion and there was no evidence of being used to dispose of any other waste materials.

It was noted in the onsite portion of the audit that operators at the ADR mixing facility were not rinsing the empty bags prior to lifting the bag from the hopper, and that the operators at the CIL mixing facility were not triple rinsing the bags as required by the written mix procedure. The auditors requested that the operators were retrained in the requirements of the procedure. Training attendance sheets were provided to the auditors confirming that the retraining had been completed. In the auditor's opinion this non-conformance to TMLSA's mixing procedure was not considered an immediate risk to safety or the environment as the bags were immediately lowered into the empty box and transported to the burn area and burnt each day.

TMLSA have implemented the following procedures to prevent exposures and releases during cyanide unloading and mixing activities. These procedures address safety requirements during a mix including wearing appropriate personal protective equipment (PPE), pre-inspection checks, operation of valves, handling of cyanide containers, addition of colour dye, bag rinsing and post mix area wash-down, and response actions in the event of a spill during transport and handling. The procedures also detail the required respirator cartridge use and

replacement and specify that minimum of three operators be present during a cyanide mix operation (two conducting the mix and one operating the forklift).

4. OPERATIONS **Manage cyanide process solutions and waste streams to protect human health and the environment**.

Standards of Practice

4.1 Implement management and operating systems designed to protect human health and the environment including contingency planning and inspection and preventive maintenance procedures.

The operation is: ■ in full compliance
in substantial compliance
not in compliance…with Standard of Practice 4.1.

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Discuss the basis for the Finding/Deficiencies Identified:

TMLSA has developed and implemented a comprehensive suite of management plans and procedures for its cyanide facilities. These include procedures for start-up, shutdown, operation, and routine inspection of the 12K grinding circuit, gravity circuit, CIL plant, CIL elution area, tailings pipeline and storage facility, CIL reagent area, dump leach, ADR carbon adsorption, acid wash, ADR elution area, ADR regeneration, ADR reagent area, cyanide warehouse and cyanide mix facilities. The procedures include requirements for using appropriate PPE, pre-work inspections, and spill response and clean-up. In addition, TMLSA has established a series of environmental monitoring and inspection procedures to protect wildlife and the environment. A JD Edwards computerized PM system has also been installed in keeping with Kinross corporate standards to plan and track preventative maintenance activities. Cyanide facility design parameters are documented in a series of design reports and management plans.

As evidenced by field observation, review of records, and discussion with TMLSA management during the onsite portion of the audit, the routine inspection program was found not to be entirely effective at identifying deficiencies. Examples of deficiencies noted during the audit included a defective hydrogen cyanide (HCN) meter in the new elution area, a non-functioning HCN meter on the upper deck of the CIL Plant mixing area, low pressure flow in an eyewash at the Piment ponds, expired portable eyewash bottles, cracks in concrete containment, shut-off valves on cyanide lines not locked out, deteriorated signage, and cyanide salt deposits. Prior to the submittal of this report, TMLSA addressed the deficiencies identified, and retrained operators on conducting routine inspections, diligently fully completing inspection sheets, and accurately reporting observations. Several inspection sheets were also updated to include a space for review and supervisor sign-off. TMLSA provided photographs and documentation confirming that the deficiencies identified during the audit had been addressed, and inspection retraining records for operators and supervisors, and examples of completed updated inspection sheets.

The change management system established at the time of the 2016 ICMC certification audit has continued to be used over the last 3 years. The standard defines the minimum requirements to ensure changes in the workplace that can potentially invalidate prior hazard assessments do not create new risks. The standard is a formal process that applies to all locations operated by TMLSA or subsidiaries controlled by Tasiast, its projects, employees and contractors, and includes operational, physical, organizational and administrative changes.

The process utilizes an online entry system that guides the change originator through the change evaluation and approval procedure. The evaluation specifically checks for changes involving cyanide and requires review and approval by effected department heads and the health, safety and environment (HSE) manager. The program is owned by the Health and Safety (H&S) Department who also tracks progress and maintains a record of the changes. Review of records indicate the management of change process was used 45 times since the last audit. The Kinross' Authorizations for Expenditure ("AFE") procedure used for reviewing projects with capital expenditures specifically requests completion of a Management of Change review prior to approval.

TMLSA has established a suite of procedures specifically designed to manage the CIL facilities, tailings storage facility, Piment and West Branch dump leach, and ADR facilities in non-emergency and emergency shutdown scenarios, as well as the controlled startup after any such event. These procedures address all aspects of cyanide management in the event of a shutdown resulting from scheduled maintenance, an upset in operating conditions, emergency situations, power failures, or other non-scheduled events. They provide step by step checks and actions for the safe shutdown of the various cyanide facilities. Procedures include checks to ensure that process ponds have sufficient capacity to handle drawdown in the event of a shutdown of one or more leach pads. Because of the arid climate and negative water balance, overtopping of TSF-4 is not a significant threat but procedures are nevertheless in place for tailings shutdown and to address emergency situations including excess seepage, embankment gullying or slumping, and beach deformations or sinkhole development.

Routine inspections of cyanide facilities are undertaken each shift following written procedures supplemented with inspection checklists pertinent to each cyanide storage and process area. The Environmental Department also conducts daily inspections of the tailing storage facility and annual inspections of the stormwater protection systems, and the Safety and Environmental Departments conduct planned inspections that cover all areas of the site at least monthly. Routine inspections include checking cyanide solution tanks for structural integrity and signs of corrosion and leakage; secondary containments for their integrity, presence of fluids and available capacity; leak detection and collection systems at leach pads and ponds; pipelines, pumps and valves for deterioration and leakage; and ponds and impoundments for pond levels, beach locations, and integrity of liners and netting. In addition, a third-party auditor is retained annually to conduct a dam safety inspection of the tailing storage dams. It is the opinion of the auditors that the established frequency of

inspections is sufficient to assure and document that the cyanide facilities are functioning within design parameters

Each routine operator inspection sheet includes the date of the inspection, the name of the inspector, and any observed deficiencies. The completed inspection sheets are reviewed by the shift supervisor and any deficiencies are immediately addressed by the operators or a work order is generated. Once the work order has been generated TMLSA has a system in place to track deficiencies through to completion; however, it was difficult to determine through review of the checklist records whether a checklist had been reviewed by the shift supervisor. As discussed above, the routine inspections were not entirely effective as several deficiencies were observed during the audit. Following a request by the auditors, TMLSA made changes to the review and sign-off of inspection sheets and retraining operators in the revised inspection program.

The planned environmental inspections are recorded into an on-line database that allows corrective actions to be tracked to completion. The database record includes the date of the inspection, the name of the inspector, the issue (supported by a photograph is applicable), the required action, the responsible person assigned to complete the action and the scheduled date for completion. Although routine operator inspections were being completed as scheduled, record maintenance during the past three years was observed to be poor. Records were not being filed chronologically and many could not be located. This deficiency was recognized by TMLSA, and in early 2019 and changes were made to organize their record keeping procedures. Since that time inspection records are now being stored chronologically in area specific binders. Copies of inspection records are also provided to the H&S officer for review and retention.

Maintenance of all major and critical equipment is scheduled and tracked using a computerized JD Edwards system. TMLSA uses a "PI System" to track hours of equipment use through the supervisory control and data acquisition (SCADA) system for scheduling equipment maintenance. JD Edwards is also used to schedule to non-destructive testing (NDT) of selected equipment. Summary-level PM instructions are incorporated for each equipment item entered into the system. Routine PM schedules are automatically established for each item and associated work orders are generated. The system is also designed to respond to specific work order requests on a prioritized basis, with production, environment and safety being assigned the highest priority for action. Cyanide equipment bypasses the scheduling process and is fixed immediately. The system keeps track of maintenance history on each piece of equipment.

Planners prepare weekly schedules for PM work. Planned shutdowns are scheduled every 3 months. Each Sunday, supervisors and superintendents attend weekly shutdown meetings to plan and schedule maintenance activities in their areas of operation for these quarterly shutdowns.

In addition to routine PM and planned maintenance, TMLSA has commissioned studies to assess the integrity of plant. In May 2016 a company was retained to complete a structural inspection of the concrete structures at Ball Mill 1 and 2 to evaluate the condition and cause of concrete deterioration. A concrete engineering company has been contracted to undertake the recommended concrete remediation works. In 2017 a non-destructive testing program was undertaken on all CIL and pre-leach tanks, from which an inspection and maintenance schedule was developed for the tanks, based on criticality of the maintenance needed. Refurbishment of CIL Tank #2 has since been completed and tendering was underway at the time of the field audit for refurbishment of CIL Tank #1. In 2017 a long-range ultrasonic testing (LRUT) program was conducted on the tailings line which showed sections of the pipeline with significant loss of the nominal wall thickness in the line. Subsequent to the test, sections of the pipeline were replaced. TMLSA currently undertakes bi-annual NDT testing of sections of the line.

All electricity is generated on site from the Phase 1A, Phase 1B and TTV (Tasiast Team Village) power plants which are all connected to and able to feed onto the 33 kV distribution system to supply required site loads. These plants produce a total of 42.6 MWe, which is more than is required for operating at 12 kt/d. In addition, there is a 250 KV backup generator at TSF-4 and a potable 110KV backup generator at TSF-3 for operation of the decant and seepage pumps. Smaller portable generator sets also are available to support specific project activities (e.g., sampling of water quality wells using submersible pumps). All emergency generators are subject to weekly PM inspections and monthly cut-power and auto-start run tests scheduled through JD Edwards.

4.2 Introduce management and operating systems to minimize cyanide use, thereby limiting concentrations of cyanide in mill tailings.

The operation is: ■ in full compliance
in substantial compliance
not in compliance…with Standard of Practice 4.2.

Discuss the basis for this Finding/Deficiencies Identified:

TMLSA recently installed a new automated online cyanide analyzer at the CIL plant to replace a previously installed analyzer that had been difficult to reliably maintain because of the harsh operating conditions. The analyzer is used to monitor cyanide and pH concentrations at Pre-Leach Tank 1, Pre-Leach Tank 2 and at the tailings line prior to entering the detox plant. The analyzer is currently not used to automatically adjust addition rates because; these adjustments are based on manual titrations on samples collected from Pre-Leach Tank 1, Pre-Leach Tank and CIL Tank 6. The control room operator monitors operational parameters at the CIL plant in order to determine the amount of cyanide that should be added relative to set points established by the chief metallurgist. Manual titrations results are recorded and log sheets covering the past three years are retained in the metallurgist's office. The data is also collated in an online database allowing easy review and analysis. The use of the analyzer for automatic

addition may be considered in the future once TMLSA is confident with the instrument.

4.3 Implement a comprehensive water management program to protect against unintentional releases.

The operation is: ■ in full compliance
in substantial compliance
not in compliance…with Standard of Practice 4.3.

Discuss the basis for the Finding/Deficiencies Identified:

A site-wide probabilistic water balance using the GoldSim™ software platform was developed for the Tasiast operation in 2013. The model was designed as a probabilistic, dynamic simulator, running continuously through the historical period and into future mine life, in a sequence of daily time-steps with select inputs being allowed to vary within defined stochastic distributions. Since the 2016 ICMC certification audit Piteau Associates UK (Piteau) has been retained to provide quarterly calibration of the model, update the model as operational changes occur, and aid as required on predicting water consumption and management through the life of mine. Piteau updates and calibrates the model in response to data inputs provided by Tasiast staff. TSF-4 was commissioned during the 2018 first quarter calibration period. A planned shutdown of the process plant between 7th and 14th March 2018 allowed the transition from TSF-3 to TSF-4 to be executed. This significant change to mine operations was hard-coded into the model as part of the calibration. The switch from TSF-3 to TSF-4 did not cause a significant variation in water consumption per tonne of ore processed, based on the mine plan and operational rules used in the model.

The basic parameters considered in the water balance model have not changed significantly since the 2016 ICMC certification audit. The model incorporates total volumes and flow rates of tailings deposition (now to TSF-4) and barren solution application at the Piment and West Branch dump leach facilities (DLFs). A detailed evaluation of site-specific precipitation conducted in 2013 and used to develop a stochastic precipitation model showed that the historic precipitation and stochastically generated precipitation values had similar probabilities that suggest the model appropriately simulates mean and extreme values of precipitation. Records from four regional meteorological stations in the vicinity of the mine and weather stations installed at the power plant, TSF-3 starter cell and the airport were used in the development of the water balance model. Subsequently precipitation and evaporation data collected from the power plant weather station was utilized to update the model. Since July 2017 data collected from the weather station at the airport has been used to update the model after the power station weather station stopped operating. The TSF-3 weather station was recently moved to the administration building.

TSF-4 and the Piment and West Branch Dump Leach Areas (DLAs) are built on flat, low-relief terrain; there are no upgradient sources of run-on apart from precipitation to the beach areas of TSF-4 that might report as sheet flow to the decant pond. The model accounts for the

infiltration of precipitation to the surface of the DLAs and the beach areas of TSF-4. The site is in a remote, arid region of the western Sahara Desert, and there are no freezing or thawing effects that must be accounted for in the water balance model. The model accounts for evaporation and solution losses to the decant, the drainage and reclaim systems, and seepage to the subsurface. There are no discharges in normal operating conditions and there are no surface water features that would be impacted by upset conditions.

The water balance model can simulate a major power outage or similar unforeseen downtime event at the mine. At the DLAs, in the event of a major outage with no backup generation capabilities, pumping would cease, and the leach pads would drain into the pregnant and intermediate ponds and increase the levels of solution in the ponds. The ponds are connected by overflow weirs to allow direct overflow to an adjacent pond when capacity is exceeded. Substantial backup generation capabilities are provided for the site and can be accounted for by the model in the prediction of actual conditions. There are no surface water features at the Tasiast site; TSF-4 and the West Branch and Piment dump leach facilities are operated as closed systems. However, the model is able evaluate the possibility of upset conditions that would result in loss of containment and alerts the user if any such event would occur in a predicted upset scenario.

Operating procedures require specific monitoring data inputs to be collected. These data are reported to Piteau on a quarterly basis for use in updating and calibration the water balance. In addition, TSF-4 and the West Brand/Piment DLFs and associated solution ponds are subject to daily inspections and pond levels are recorded daily.

Design and operating criteria for ponds and impoundments are documented in facility design reports. The process pond capacities (excluding the design freeboard of 0.25 m) are sized to accommodate a minimum of 24 hours of operating solution storage combined with excess solution reporting to the ponds as a result of a 100-year, 24-hour rainfall event and also drain down solution from the dumps during a forces 24-hour shutdown. TSF-4 is designed to retain the probable maximum flood (PMF) which is the 30-day probable maximum precipitation (PMP) assuming underdrains, pumping and evaporation losses are negligible. This was determined to be 666 mm while maintaining 1 m freeboard. The underdrain pond and return water ponds are designed to retain precipitation from a 30-day duration 100-year storm event while maintaining a minimum of 0.5 m dry freeboard.

Piteau provides quarterly calibration reports based on data provided by Tasiast staff. Included in the data provided to Piteau are daily precipitation and evapotranspiration data obtained from the airport weather station. The calibration reports provided by Piteau summarize operational changes that have occurred in the reporting interval, updated data, results of model calibration, forward projections of the updated model, and conclusions which include specific suggestions for revisions of operating practices and considerations for future water management and facility operation planning efforts.

4.4 Implement measures to protect birds, other wildlife and livestock from adverse effects of cyanide process solutions.

The operation is: ■ in full compliance
in substantial compliance
not in compliance…with Standard of Practice 4.4.

Discuss the basis for the Finding/Deficiencies Identified:

Pregnant, intermediate and barren solution collection ponds at the West Branch and Piment DLF solution collection ponds are netted and fully fenced to exclude birds and other wildlife. Daily inspections include checking the condition of the bird netting and fencing. Netting is also used to cover pregnant solution collection boxes at the base of the leach pads and to cover ponding that may occur on the leach pads. At the time of the audit local ponding was observed along the toe of the Piment leach pad. Review of ADR log sheets and discussion with the Metallurgical Superintendent indicated that cyanide concentrations in pregnant solution were in the range of 10 to 15 mg/L free cyanide, as cyanide is no longer being added to the barren solution being applied to the pad. The Environmental Lead indicated that the ponding was not a common occurrence and was likely the result of recent precipitation rather than seeping pregnant solution at the base of the pad. Nevertheless, it was recommended as good practice to eliminate or cover such ponding even though the cyanide concentrations are well below 50 mg/L.

The site is in a remote location at the western edge of the Sahara Desert; observations of wildlife are rare, and it is understood that security patrols monitor and intercept potential incursions of nomads with domestic animals many kilometres distant from any of the site's cyanide facilities.

Daily cyanide concentrations in spigot discharge to TSF-3 and TSF-4 over the past three years has averaged 18.2 mg/L weak acid dissociable (WAD). A few exceptions (eight in past three years) have exceeded 50 mg/L WAD. These elevated discharges were usually associated with plant start-ups or short duration process upsets of three days or less. It is opinion of the auditors that these infrequent short time exceedances do not pose a significant risk to wildlife. The pregnant, intermediate and barren solution ponds at the West Branch and Piment DLF are fenced and covered by bird netting to exclude birds and other wildlife. The netting over one of the Piment process ponds was observed to have collapsed. We understand the netting collapsed during a storm that occurred in October 2019. At the time of the collapse, the pond was not holding barren solution as it had just been refurbished and was being tested with raw water. Since that time the pond has been used only to hold pregnant solution returning from the pad that has a free cyanide concentration of between 10 and 20 mg/L. TMLSA was waiting on the delivery of a suitable pump to allow the pond to be emptied and the netting repaired. The netting repair was completed in December 2019.

Barren solution applied to the leach pads is in excess of 50 mg/L WAD cyanide. The solution is applied using dip emitters not spray irrigation and the only opportunity for overspray would be if there was a pipe, flange or valve failure. Pad Inspections includes checking to ensure solution is contained on the liner, there are no leaks from pumps or valves, and piping is operating as designed.

Shift inspections of the pads include reporting on excessive ponding. A procedure is in place to minimize ponding on the leach pads through identifying and reporting actual and possible ponding situations, stopping flow of process fluids, repairing damaged distribution pipes, using a dozer to rip the surface of the pad. The procedure appears to be generally effective at minimizing open ponding of solution on the pads. Although some recent local ponding was observed on Pad 2 of the West Branch Pad during the field audit, existing ponding had been netted and pad operators were observed to be actively responding to shutting-off flow to an area of recent ponding. Where an area is prone to ponding due to low ground or low permeability, the irrigation is switched off and the area allowed to dry sufficiently to allow access for the surface to be dozed and ripped to remove depressions and improve drainage.

Observations of wildlife are rare at the site due to the remote and arid environment, as are wildlife mortalities. Records for the period 2017 through 2019 show a total of 22 reported mortalities (including several species of birds and a few foxes). Of these only two were potentially related to cyanide. One occurred in 2017 where a dead fox was found in a solution pond at the West Branch, and the other was a bird found near to CIL Tank 3.

4.5 Implement measures to protect fish and wildlife from direct and indirect discharges of cyanide process solutions to surface water.

The operation is: ■ in full compliance
in substantial compliance
not in compliance…with Standard of Practice 4.5.

Discuss the basis for the Finding/Deficiencies Identified:

This Standard of Practice does not apply as TMLSA operates as a closed system and there are no direct discharges to surface water. Also, TMLSA is in a dry desert region of the African Sahara and there are no surface water bodies located near to the property that could be impacted by indirect discharge.

4.6 Implement measures designed to manage seepage from cyanide facilities to protect the beneficial uses of ground water.

The operation is: ■ in full compliance
in substantial compliance
not in compliance…with Standard of Practice 4.6.

Discuss the basis for the Finding/Deficiencies Identified:

The primary environmental legislation governing water quality in Mauritania are the Environment Code No. 2000-045 (26 July 2000) and the Water Code No. 2005-030 (2 February 2005). These documents however do not provide specific standards relevant to assessing substances in groundwater. As a result, international standards and guidelines for groundwater protection are referenced and adopted at Tasiast for protection of beneficial use of groundwater.

Because of the absence of surface water in this region of Mauritania the protection of aquatic life is not an issue. Groundwater analytical data collected from the site shows it to be saline with total dissolved solids (TDS) ranges between 20 g/L and 50 g/L. Groundwater with total dissolved solids (TDS) levels of greater than 10 g/L is considered non-beneficial as it is unsuitable for potable water and cannot be used for irrigation or as feed for livestock. The groundwater beneath the site is therefore considered to have no beneficial use. Nevertheless, TMLSA has protective measures in place, included secondary containment for process tanks and pipelines, and high-density polyethylene (HDPE) lined dump pads, ponds, and operating tailings facility, to protect groundwater from contaminant releases. A groundwater monitoring program is also in place to monitor groundwater quality.

When significant levels of cyanide were discovered in monitoring well MBH1 during scheduled quarterly groundwater monitoring in 2011, TMLSA voluntarily implemented investigation and remedial measures to prevent further degradation and reduce potential risk to workers and ecological receptors.

The cyanide contamination resulted from seepage beneath TSF-2 which had been constructed prior to Kinross's ownership of the site. The TSF-2 was not constructed with a basal liner and boreholes within the footprint had not been fully abandoned prior to facility construction. TMLSA ceased use of TSF-2 in December 2012. SRK Consulting (SRK) was commissioned to design a perimeter groundwater extraction system and this was installed and operational by November 2012. Groundwater monitoring showed that cyanide concentrations peaked in July 2013 with total cyanide of 30.4 mg/L below the north perimeter of TSF-2. SRK determined that most of the cyanide was associated with ferricyanide complexes and therefore relatively stable. As of September 2013 SRK, reported that the abstraction system had removed 184,292m^3 of water, which equated to the removal of approximately 1,579kg of cyanide from the groundwater. Typical cyanide concentrations were reported to be 10.7 mg/L total cyanide, 1.9 mg/L WAD cyanide and 1.6 mg/L free cyanide beneath TSF-2.

SRK was also commissioned to conduct a risk assessment to assess the potential long-term risk to workers and ecological receptors. The assessment modelled the migration of a contaminant plume toward the West Branch and Piment pits over time and considered the reduction of groundwater mound within TSF-2, the reduction in efficiency and limited life of the extraction system as the groundwater table lowers, and influence of providing a cap over TSF-2. The migration of cyanide from TSF-2 in groundwater was assessed using the predictive groundwater model that extended beyond the operational period (currently until 2025) until 2150 to simulate how the rebound of the pits and formation of the pit lakes may affect the groundwater regime. Based on the results of the risk assessment future cyanide concentrations at the pit and pit lake are not likely to exceed receptor screening criteria, therefore the risks to pit lake receptors is very low. SRK concluded that no mitigation measures are required to reduce risk to receptors at the pit lakes and that the abstraction wells had negligible beneficial effects in the long term and therefore were not required to protect receptors. The wells were therefore turned off in December 2016.

In 2018 WAD cyanide concentrations in weekly monitoring samples of seepage collected in the West Branch Pit were noted to be starting to spike above 0.5 mg/L from previous non-detect to usually less than 0.04 mg/L WAD. There was concern that the SRK conclusions may not be credible. TMLSA reinitiated pumping from the extraction wells to reduce the potential for seepage from TSF-2 toward the pit. Review of the data revealed that the consolidation pressure caused by the capping of TSF-2 with waste rock was causing an increase in groundwater flow toward the pit. The increased porewater pressure has since subsided and with it the seepage toward the West Branch Pit. Sampling data since August 2019 has shown that WAD cyanide concentrations have returned below 0.5 mg/L. Although TMLSA is continuing to pump wells at TSF-2 as needed, cyanide concentrations are not expected to be a concern in seepage to West Branch in the future now that TSF-2 capping is complete and porewater conditions have stabilized. TMLSA continues to collect samples quarterly to monitor cyanide concentrations in the groundwater at TSF-2. The results show a trend of decreased cyanide concentrations since the capping of TSF-2 was completed in 2018.

4.7 Provide spill prevention or containment measures for process tanks and pipelines.

The operation is: ■ in full compliance
in substantial compliance
not in compliance…with Standard of Practice 4.7.

Discuss the basis for the Finding/Deficiencies Identified:

Concrete containment is provided as the main spill prevention measure for all cyanide mixing and process solution tanks. With exception of the three recently constructed CIL tanks, all tanks are founded on concrete pads and the containment basins are provided with sumps equipped with automatic pumps that return spill fluid back to the process circuit. The new CIL

tanks on ring-beam foundations infilled with compacted oil impregnated sand overlain with 1 mm thick HDPE membrane. The membrane is overlain by a 150 mm sand bed with drain ports to monitor for potential leakage. With exception of those areas discussed below, all containments were observed to be of adequate size and in good condition. All of the concrete impoundments in the ADR, CIL, and associated cyanide mix and storage facilities are constructed with collection sumps fitted with dedicated pumps designed to return spillage or other cyanide-contaminated water directly to the process.

As discussed in Section 3.1 the significantly degraded bunded concrete impoundments observed at the cyanide mix plant at the CIL process area were repaired and painted with chemical resistant coating prior to submission of this report. On inspection of the Mill minor cracking was observed in the concrete containment floor in the vicinity of the thickener tank and the ball mills. Subsequent to the field component of the audit TMLSA provided photograph evidence that these cracks had been repaired with sealant.

During the 2016 certification audit TMLSA was requested to survey all bunded concrete containments at the ADR and CIL facilities and to complete documented volume calculations for each containment to ensure they meet a nominal 110 % of the largest contained tank, plus potential flowback, plus contribution of design storm event volume capacity; taking into account any volume reductions from tank plinths, pump bases, and other structures. A containment survey was completed and evidence to verify adequate containment was provided for audit team verification, prior to the submittal of the 2016 report.

As part of the 12K Expansion Project, facility changes since the 2016 ICMC certification audit have included construction of three new CIL tanks with containment, a new intensive leach reactor (ILR) tank with containment, and modifications to the pregnant and barren solution tank containment TMLSA provided calculations and supporting evidence to demonstrate that the new and modified containment basins had sufficient capacity to retain the volume of the largest tank within the containment plus any piping draining back to the tank.

Because the mine is in an extremely arid desert setting, there are no surface water bodies where cyanide pipelines present a risk. Cyanide tanks and pipelines are constructed of carbon steel, with some valves, flowmeters, and other piping system components constructed of stainless steel. Solution pipelines are typically constructed of carbon steel or HDPE. Except as noted below, all process solution pipelines are located within bunds or above concrete paving or HDPE liners that drain to a containment area or pond. The tailings and reclaim water pipelines are constructed in HDPE-lined trenches.

Inspection and maintenance procedures are in place to prevent releases to the environment. Based on the condition of the piping and the absence of leakage in the tailings and process solution lines these procedures appear to be effective. Solution pipelines on two short bridge crossings spanning between concrete containments at the ADR Plant were not contained. Prior to submission of this audit report TMLSA installed containment trays under the pipeline

bridges to direct potential pipeline leaks into the concrete basins. Photographs were provided as evidence of the completed installation.

4.8 Implement quality control/quality assurance procedures to confirm that cyanide facilities are constructed according to accepted engineering standards and specifications.

The operation is: ■ in full compliance
in substantial compliance
not in compliance…with Standard of Practice 4.8.

Describe the basis for the Finding/Deficiencies Identified:

As documented in the 2016 ICMC certification audit report the records for the Piment and West Branch Dump leach facilities, the ADR and associated cyanide mixing and storage area, TSF-3, and the lined trench with seepage collection, tailings, and reclaim water pipelines connecting the CIL facility to TSF-3, include signature buyoffs on as-built drawings indicative of the application of appropriate quality assurance /quality control (QA/QC) programs to the design and construction of the noted facilities; see 4.8(3) below. However, corresponding or analogous QA/QC program records were not located for the CIL facility. TMLSA subsequently completed an independent engineering review per Standard of Practice 4.8(5) and made repairs and improvements as recommended prior to issuance of the final 2016 ICMC audit report.

New construction since the 2016 certification includes:

- TSF-3 Phases 3, 4 and 5;
- the SAG Plant;
- three additional CIL tanks and connecting infrastructure;
- new ILR tank and containment;
- TSF-4 and associated underdrain and return ponds, and tailings line.

With exception of the original construction of the CIL facility for which an engineering review was completed, the 2016 ICMC audit report reported that QA/QC programs were in place for all pre 2016 construction. Review of samples of construction records for the new cyanide facilities listed above verified that QA/QC programs were also in place. These programs included geotechnical soil tests and compaction tests to ensure earthworks met engineering specifications; thickness checks, welds and leak tests to confirm integrity of HDPE liner placement; slump and strength tests on concrete, and material specification checks and weld tests on steel to confirm integrity of construction, and hydrostatic testing on pipelines to confirm tightness.

The records for construction completed since the last ICMC certification audit were signed and stamped by an appropriately qualified person indicating that the facility had been constructed as presented. The transfer binders provided by the design and construction engineers include

certificates asserting completion of the scope of construction/ installation in accordance with drawings, specifications and inspection. The certificates are signed by the QA/QC Manager, Construction Manager and Commissioning Manager. The TSF-3 and TSF-4 dam construction summary reports are signed and stamped by a licensed professional engineer. All records are retained by TMLSA.

4.9 Implement monitoring programs to evaluate the effects of cyanide use on wildlife, surface and ground water quality.

The operation is: ■ in full compliance
in substantial compliance
not in compliance…with Standard of Practice 4.9.

Describe the basis for the Finding/Deficiencies Identified:

TMLSA continues to use the Environmental Monitoring Plan developed for the site in 2010 and provides the framework to maintain compliance with Mauritanian Law, international environmental standards and environmental commitments and obligations required at the Tasiast mine. The Plan documents the monitoring program objectives, design, sampling and analytical protocols, quality control and assurance, schedule, and reporting procedures for all environmental monitoring. The Environmental Department reviews and updates the Plan as required or at least annually to ensure that the program is up-to-date and appropriately designed. The Plan was last updated 19 July 2019. The Plan is supported by several written procedures that address packaging and environmental sampling from monitoring wells and the tailings storage facility. These procedures have not changed since the 2016 ICMC certification audit.

The Environmental Monitoring Plan was developed initially by environmental specialists within the Scott Wilson Group. The Plan was designed to meet the requirements set out in the Environmental Impact Study (EIS) that formed an integral part of the development permit and approval for the mine under Mining Environmental Degree No. 2004-054 (dated 6 July 2004). Subsequently the Plan and associated procedures have been reviewed and updated by senior staff at TMLSA that hold university degrees and have over 10 years of direct environmental experience. Oversight of the environmental monitoring activities is under the HSE manager whom has a bachelor's degree in Environmental Engineering and 24 years of environmental experience in mining and milling industry.

The *Plan i*ncludes a map showing the locations of all groundwater monitoring wells and an annual schedule for the sampling and monitoring program. A monitoring/sampling schedule is prepared at the beginning of each year and includes quarterly groundwater sampling that are submitted to a third-party ISO 17025 Accredited laboratory for a broad suite of parameters including cyanide.

Sampling protocols are presented in standard operating procedures that provide instruction on groundwater well purging and sampling, required PPE, pump operation, sampling bottle preparation, sampling bailer operation, measurement of static water levels, sample container preparation, sample handling and preservation, packing and shipping of samples, and completion of shipping documents and chain-of-custody forms.

Sampling logs are completed that document the name of the field sampler, date and location of sampling, equipment used, sample number, groundwater purge information (oxygen, conductivity and temperature) and any additional comments on conditions that may influence the quality of the sample. The data is transferred to an online database when the sampler returns from the field and the field logs are filed in binders retained with the Environmental Department.

Surface water is not monitored as no surface water bodies are located within or near the mine property. Groundwater is monitored on a quarterly basis via a series of environmental monitoring boreholes that are strategically located near mine processing infrastructure so that potential impacts to the environment are captured. The number of baseline groundwater monitoring wells sampled to monitor background and downgradient water quality is eighteen; unchanged from the 2016 ICMC certification audit.

In addition, there were six groundwater extraction wells located around former tailings facility TSF-2 that were installed in 2012 after elevated levels of cyanide were identified in monitoring borehole MBH1 located at the northeast corner of TSF-2. Two of these wells were closed at the end of 2016 and the remainder, as noted in 4.6, are also used to monitor cyanide related to TSF-2.

All workers are instructed to report wildlife mortalities or significant encounters (usually snakes or stressed migratory birds) as part of environmental training. Wildlife monitoring is also included as part of documented daily operator inspections of ponds and pads. In addition, Environmental Department staff conduct wildlife monitoring as part of their daily monitoring and sampling activities. Wildlife encounters or mortalities are reported directly or through security to the Environmental Department for investigation and tracking. Mortalities are reported annually as part of the *Environmental Declaration Report* to the Mauritanian Government. Records for the period 2017 through 2019 show a total of 22 reported mortalities (including several species of birds and a few foxes). Of these only two were potentially related to cyanide. One occurred in 2017 where a dead fox was found in a solution pond at the West Branch, and the other was a bird found near to CIL Tank 3.

TMLSA monitors groundwater on a quarterly schedule to characterize groundwater quality. The schedule is reviewed annually to determine if changes to the monitoring schedule are necessary and the revised schedule is included in the annually updated Environmental Monitoring Plan. Where groundwater quality changes have been noted or incidents have occurred that could impact groundwater quality the schedule has been modified, and where needed additional monitoring wells have been installed. Based on the review of groundwater

records, the response record by TMLSA to groundwater protection, the deep groundwater table and lack of beneficial use within the influence of the mine property due to its high saline nature, the current groundwater monitoring frequency is considered appropriate for the site.

5. DECOMMISSIONING **Protect communities and the environment from cyanide through development and implementation of decommissioning plans for cyanide facilities.**

Standards of Practice

5.1 Plan and implement procedures for effective decommissioning of cyanide facilities to protect human health, wildlife and livestock.

The operation is: ■ in full compliance
in substantial compliance
not in compliance…with Standard of Practice 5.1.

Describe the basis for the Finding/Deficiencies Identified:

The original Preliminary Reclamation and Closure Plan (PRCP) for the Mine was developed in 2008 and has been built upon and modified several times to incorporate infrastructure changes and specific PCRP commitments made in subsequent impact assessments for project expansions. The current version of the PCRP aligns with the 2019 finance assurance estimate for the existing Mine infrastructure and the infrastructure of the 12k expansion (Phase 1 Expansion Project) that was completed in 2018. In addition to Mauritanian legislation, this PCRP, was prepared to meet the requirements of the International Finance Corporation's (IFC) Performance Standards on Social and Environmental Sustainability, the ICMC, and applicable Kinross Standards, to ensure that the Mine is closed in an environmental and socially responsible manner. The scope of this PCRP assumes that all existing infrastructure will be decommissioned and, where appropriate, dismantled and demolished on-site. The PRCP provides description of the proposed decommissioning activities including cyanide facilities. A closure and reclamation schedule has been developed that provides expected dates for closure of various cyanide facilities.

TMLSA reviews and updates its decommissioning procedures to incorporate infrastructure changes and specific PCRP commitments made in subsequent impact assessments for project expansions. The latest Plan includes closure strategies for decommissioning existing and expansion components including the recently commissioned 12k Expansion Project. These decommissioning procedures will be modified as needed based on the results of further test work to verify leach pad rinsing volume, drain-down duration and residual drainage quality. As required by Mauritanian legislation the Plan will be updated and finalized with actionable detail at least two years prior to the cessation of mining.

5.2 Establish an assurance mechanism capable of fully funding cyanide-related decommissioning activities.

The operation is: ■ in full compliance
in substantial compliance
not in compliance…with Standard of Practice 5.2.

Describe the basis for this Finding/Deficiencies Identified:

Mauritanian Mining Environmental Law, Decree No.2004-54 defines concepts such as rehabilitation, financial guarantee, environmental liabilities (Article 3) and provisions to obtain cancellation of a financial guarantee and release of liability for rehabilitated and closed mining affected lands (Article 14). Decree No.2007-105 modifying and supplementing certain provisions of Decree No.2004-094 describes essential Environmental Impact Assessment (EIA) content and includes requirements for development of a Site Rehabilitation Plan and closure cost estimate in support of a financial guarantee for rehabilitation and closure liabilities for the project (Article 7). Nevertheless, the government has yet to specify the nature of an acceptable financial mechanism. TMLSA has proposed a letter of credit as the type of financial assurance; however, prior to deciding the acceptability of this surety method, the Government of Mauritania has asked for a third-party review of the cost estimates. TMLSA has been working with the Government to establish a transparent review process to select the third-party reviewer and are aiming to complete this in 2020 followed by the establishment of a suitable surety type.

TMLSA prepares annual "Kinross Decommissioning Liability" (KDL) estimates in accordance with Kinross corporate Policy, which forms that basis for the cost estimates for the PRCP. Review of the current KDL spreadsheet confirms that estimated costs are produced based upon labour, equipment and materials costs obtained from a cost reference guide or similar source (lease or rental rate), marked up to reflect a third-party estimate. TMLSA prepares KDL estimates at least annually in accordance with Kinross corporate Policy.

In the interim until the Government has decided on the acceptability of the surety method, TMLSA has separately established its own financial assurance mechanism for the Tasiast mine in compliance with the corporate "*Internal Code for Self-Insurance of Decommissioning and Closure Liabilities" (Internal Code)* that was created specifically in response to the ICMC for self-insurance in situations where host nations have not fully developed a financial assurance mechanism for funding decommissioning and closure of cyanide facilities. The *Internal Code* requires that the mine have appropriate ratios of net worth to liabilities (meeting at least two of three acceptable options); net worth at least six times the sum of all cyanide-related decommissioning activities; net worth equal or greater to an established minimum value; and assets worth at least six times the cost of all cyanide-related decommissioning activities, as determined by Kinross's decommissioning liability/asset retirement obligation reports. The *Internal Code* was independently verified for its adequacy as a financial assurance and

requires that the audit be conducted in accordance with Section 9100 of the Canadian Institute of Chartered Accountants Handbook).

KPMG LLP, a professional accounting firm with membership in the Institute of Chartered Accountants of Ontario, in a letter dated 11 December 2019, provided a statement that Kinross Gold Corporation satisfied all the specified auditing procedures as set out in the "*Internal Code for Self-Insurance of Decommissioning and Closure Liabilities*". The Kinross Gold Corporate financial assurance reserves were therefore determined to be acceptable to cover the cost of decommissioning the cyanide facilities.

6. WORKER SAFETY **Protect workers' health and safety from exposure to cyanide.**

Standards of Practice

6.1 Identify potential cyanide exposure scenarios and take measures as necessary to eliminate, reduce and control them.

The operation is: ■ in full compliance
in substantial compliance
not in compliance…with Standard of Practice 6.1.

Describe the basis for the Finding/Deficiencies Identified:

TMLSA has developed a suite of standard operating procedures (SOPS) that address operation of the CIL, ADR and leach pad areas and safe working for cyanide related tasks (see Section 4.1). These SOPS include instruction for routine inspections, operator duties, cyanide titration and analysis, equipment clean-up and maintenance, routine inspections, cyanide mixing and reagent preparation, warehousing operations, responses to cyanide spills and emergency response.

Equipment decontamination procedures are set out in procedure *TAS-PRS-SAF-SOP-001-EN - Decontamination of Cyanide Facilities* and requires that any plant or equipment that has been subject to a cyanide environment must be decontaminated before performing invasive maintenance, moving from a bunded or secondary containment area, being decommissioned or leaving site in such a manner which does not expose unprotected people or the environment to cyanide hazards.

SOP TAS-HS-FORM-023c - Confined Space Assessment Form identifies confined spaces and describes the nature of the space, entry points, process chemicals and hazards likely to be present, atmospheric testing and ventilation requirements and requirements for a rescue plan. All confined spaces entry is addressed in a permit to work *TAS-HS-FORM-023a - Confined Space Entry* and *TAS-HS-FORM-023b - Confined Space Logs Form*. The permit requires a description of the work and reason for entry, detailed work methods, special precautions,

safety equipment required including PPE, respirators, breathing apparatus and tasks to be completed before the permit acceptance including gas testing.

All employees and contractors are required to don a minimum level of PPE prior to entering the mine site. Mandatory PPE requirements are a safety helmet, safety shoes, protective eyewear and high visibility clothing. Certain tasks related to the handling and management of cyanide, or where there is a risk of exposure to cyanide, require the use of additional PPE such as protective clothing, respiratory masks, protective goggles and the use of portable HCN monitors. PPE requirements are addressed at site induction and during training on operating procedures. Signage indicating mandatory PPE for certain work areas are also posted throughout work area locations. Standard operating procedures address pre-operational checks for both the CIL and ADR processing plants including cyanide mixing and reagent preparation.

The following observations were made by the auditors during a cyanide mix within the CIL and ADR plants: operators were not wearing head protection, portable hydrogen cyanide monitors were not in use, cyanide bags were not adequately rinsed, the CIL receiving hopper door was not adequately closed and respirator cartridges were not dated. Subsequent to the field component of the audit, TMLSA conducted retraining of the ADR and CIL plant sodium cyanide mixing operators to address the above items and provided training attendance records as evidence.

As discussed in Section 4.1 TMLSA continues to maintain a change management procedure, implemented through on an online system Kinross Connect (also known as K2). The procedure applies to new installations. The proposed change undergoes a risk assessment to determine if the change is major or minor and requires approval from the H&S and Environment Departments. A minimum of three management approvals are required before the proposed change is implemented, and a work order generated. The entire change management request, authorisation and implementation process is recorded and tracked on the K2 system.

TMLSA also maintains an AFE process which applies to capital repairs or upgrades and is similar to the Management of Change (MOC) procedure, requiring approval from the process manager, H&S Department and Environmental Department.

Worker input regarding health and safety procedures is obtained through several mechanisms:

- Take 5 Program: This initiative was introduced to encourage workers to consider and identify hazards for both routine and non-routine tasks. The system comprises a booklet of forms with a 5-stage assessment for any task which requires input from the worker. The form also is also visually represented with symbols for workers with low literacy.
- Safe Watch Program: designed for supervisors to observe and evaluate workplace risks and considers the work area, PPE, work environment, machinery and equipment

in use, chemical handling and permits. Based on these observations, recommendations are provided and the completed form is submitted and tracked by the H&S Department on a spreadsheet. Supervisors are required to conduct a minimum of four such observations per month.

- Permit to Work (PTW): A PTW system remains in place and is applicable for confined space work, working at height, hot work and excavations. Permits require completion with input from the person undertaking the work.
- Planned Task Observations (PTO): Supervisors are required to complete a minimum of four PTOs per month and are conducted at a specific work area on a specific employee against the requirements of an SOP. The PTO form is completed by the supervisor in consultation with the employee.
- Hazard Identification: Employees are encouraged to observe and record any unsafe condition on a form and provide this to a supervisor for action including raising a work order for correction or repairs. The identified hazards are assessed by the Safety Department and process manager and a prize awarded for the most noteworthy observation.
- Toolbox Talks: conducted every shift and lead by a supervisor with shift members encouraged to participate. Discussion includes a safety topic selected by the safety team and which is periodically emailed to the supervisors. A *Toolbox Form* is completed by all attendees and retained on record by the Safety Department. The Safety Department also attends at least one toolbox talk a day.
- Weekly Safety Meetings: These are conducted weekly during which a wide array of safety topics are discussed such as health and safety standards, procedures, regulations, and audit/inspection reports and findings, and are selected by the Safety Department or supervisor. Open participation from workers is encouraged.
- Job Safety Analysis (JSA): JSAs are prepared for non-routine tasks and are prepared in order to obtain a PTW. The process involves a supervisor, team leader or facilitator leading the worker team through a task discussion, hazard identification and a risk assessment process.
- Pre-Work Inspections: Every shift, the operator is required to conduct an area inspection following a checklist which is provided to a supervisor and any issues observed by the worker may be raised.

6.2 Operate and monitor cyanide facilities to protect worker health and safety and periodically evaluate the effectiveness of health and safety measures.

The operation is: ■ in full compliance
in substantial compliance
not in compliance…with Standard of Practice 6.2.

Describe the basis for the Finding/Deficiencies Identified:

TMLSA has established that process solution must be maintained at greater than pH 10 to prevent the generation of HCN. Procedures require that pH is retained sufficiently high to

prevent generation of HCN. Cyanide may only be added to the CIL circuit if the slurry is above pH 10.3 and that the CIL circuit is to be constantly monitoring for pH and cyanide concentrations.

The CIL Plant has automated pH probes in the pre-leach tanks #1 and #2 and CIL tanks #3 and #6 to maintain a target pH range of between 10.3 and 10.9. Operators are also trained to complete a checklist on a two-hourly basis. A pH setpoint determined by the chief metallurgist is noted on a control room tracking board. If pH drops below a critical level, then lime is added. The system is automatically set to maintain a pH of 10.2. If pH drops below a critical level of 9.3 the SCADA system automatically halts the addition of cyanide. A review of a sample of *Daily Operator Log Sheets* showed that pH was generally maintained in the range between 10.36 and 10.99.

In the ADR Plant, procedure requires that the flow of caustic reagent is checked and added as necessary to maintain a minimum pH of 10 at all times. The caustic dosing pump is started and run for a minimum of 5 minutes before the addition of sodium cyanide. Lime is added at a ratio of 2.5 kg/tonne of ore on the heap leach pads to maintain pH control.

TMLSA has conducted risks assessments for all work areas to identify those locations and tasks where there is a risk of significant cyanide exposure. Fixed HCN Drager Polytron 7000 and 8100 units are installed at locations with the potential to generate hydrogen cyanide gas. Auditors noted that the risk assessment conducted on areas requiring fixed monitors did not document all areas nor accurately reflect the location of all monitors. Subsequent to the field audit, the risk assessment was updated to include assessments of all areas and accurately record the location of all monitors.

Operators in the reagent, CIL, elution, ILR and gold room areas; and workers undertaking cyanide mixing tasks are required to use portable Drager PAC 7000 personal monitors; and if working in confined spaces, a Drager X-am 5000 Multi Gas Detector equipped with an HCN Sensor. Warehouse workers are issued with portable HCN monitors when receiving, unpacking, loading and delivering sodium cyanide boxes and inspecting cyanide storage facilities.

The fixed HCN meters are linked to a SCADA control system. Both fixed and portable monitors are set to alarm at a high limit of 4.7 ppm HCN with a high-high alarm setpoint of 10 ppm HCN. For detected HCN levels between 4.7 ppm and 10 ppm, fixed monitors will emit an intermittent audible alarm and trigger a red strobe and an alarm will also be triggered on the SCADA system. Operators may continue to work in the affected area up to eight consecutive hours provided that HCN levels do not exceed a level of 10 ppm. The supervisors are instructed to maintain a log of the time spent by any personnel in the area and a portable detector is to be used for continuous HCN readings in addition to that recorded by the fixed HCN monitors.

For HCN levels above 10 ppm, a red strobe will trigger, and a continuous alarm will sound. All operators must evacuate the area immediately to a safe area either up or crosswind from the cyanide source. The area supervisor is required to evaluate HCN concentrations and if confirmed as greater than 10 ppm, is to barricade the affected area. The area superintendent or head of department jointly determines one of several actions: if a local area evacuation only is required, stopping cyanide addition to the process, increasing process pH by lime addition, triggering a full plant evacuation or initiating the *Cyanide Emergency Response Procedure*.

The auditors noted that the procedures instructing process workers on responses to portable and fixed alarms contained contradictory information on the alarm HCN trigger levels and incorrect portable alarm models were referenced. Subsequent to the field audit TMLSA revised procedures for HCN gas monitors to reflect the correct alarm trigger points and portable monitor information and training was provided to operators.

TMLSA specifies the minimum mandatory PPE for entry into operational areas which requires use of safety hat, safety shoes, protective eyewear and high visibility clothing. Additional PPE and the use of portable HCN monitors is required for tasks involving cyanide or in areas where cyanide exposure may occur. Signs indicating the mandatory and minimum level of PPE required are posted at key locations around operational areas. A formal respirator face fit test and training program remains in place and is managed by the HSE Department.

Fixed HCN monitors are inspected every shift by an assigned control room operator. A preventative maintenance work order is also generated monthly through JD Edwards maintenance software and calibration is performed every six months, in accordance with the manufacturer's recommended calibration interval. Monthly inspections include checks on the condition of the instrument, filters, cable connections, sensors, sirens and alarms and a diagnostic check. Any meters deemed as faulty are immediately repaired under an emergency work order.

Portable monitors are calibrated every six months by trained technicians from the electrical and instrumentation department based on a calibration date displayed by the instrument. Records reviewed confirmed training certificates valid for three years had been issued by Drager. Portable monitors are retained by the Permit to Work office and are issued to workers as required and tracked on electronic and paper registers. Each portable monitor is calibrated using a Drager X-Dock 6300 dock station, calibration software and 10 ppm HCN calibration gas.

During the field audit, the auditors noted a fixed HCN monitor at the upper deck of the cyanide mixing area in the CIL Plant was not functioning; and a second monitor at the upper elution deck was not connected to a detector. TMLSA subsequently generated maintenance orders to repair both detectors.

Warning signs indicating cyanide use areas are prominently displayed throughout process areas on fencing, entry gate to the ADR Plant, entry areas to the CIL and ADR plants, ILR areas, CIL process water ponds, ADR and CIL cyanide storage areas, ADR ponds, main warehouse cyanide storage area, waste burning area and approaches to the tailings storage facility. Warning signage is also posted on the CIL and ADR plants mixing, storage and process tanks, and on tanks at ILR process. In addition, signs indicating mandatory PPE, the use of portable HCN monitors and no eating or drinking are also posted at key site areas. Smoking is prohibited within the CIL and ADR Plants and cyanide storage warehouses, apart from in designated areas, and is instructed as such during mandatory induction. No smoking or open flame signs are also posted at entrance to the CIL and ADR Plants, cyanide storage warehouses and at strategic locations throughout these areas. During the field component of the audit, an absence of cyanide warning signage was noted at the entrance to the ILR area and some PPE signage was peeling and not readily legible. An absence of cyanide warning signage was also noted at the entrance to the SAG mill area. Subsequent to the field component of the audit TMLSA installed new signage at the ILR area and the entrance to the SAG mill.

Cyanide solution pipelines are colour coded and signed to indicate the presence of cyanide and flow direction. Information boards indicating the colour coding for process solutions are erected at the CIL plant, SAG mill and ADR plant. The site inspection identified examples of unlabelled piping and faded and illegible pipework signs in the ILR reactor area and ADR ponds; and inadequate labelling of cyanide containing water pipelines in the SAG mill. Subsequent to the field audit, TMLSA conducted an inspection and improved and installed labelling and signage in these areas

Cyanco supplies solid sodium cyanide with premixed dye. Procedures requires that if solid sodium cyanide is not coloured, the operator is to add Carnosine Red colouring agent.

Safety showers, low pressure eye wash stations and portable eyewash bottles are located at key locations throughout process areas and where there is a risk of cyanide exposure. These are inspected at each shift and prior to each planned cyanide mix at the CIL and ADR plants. Additionally, monthly checks are also conducted as part of preventative maintenance inspections and safety showers/eyewash stations may also be assessed during monthly H&S management inspections. During the field audit, emergency showers located above CIL tanks and at the CIL plant cyanide mix tank area were noted to be unsigned and nearby signs were observed indicating the incorrect shower locations. At the ADR ponds and piment, inadequate water pressure was observed at several eyewash stations and several portable eyewash bottles were out of date. Inspection checklists completed for these areas did not make record of these items. Subsequent to the field audit, TMLSA placed appropriate signage at the two showers in the CIL plant, inspected and adjusted eyewash stations to ensure adequate water pressure, replaced out of date portable eyewash bottles and provided refresher operator training on effective workplace inspections to ensure that the intent of the checklists is understood.

A safety shower and eyewash station located at the main warehouse is inspected by an operator at each shift to confirm working condition. A supervisor also conducts a twice monthly inspection.

Fire extinguishers comprising ABC dry chemical type fire extinguishers are positioned at strategic locations throughout the process areas. These are visually inspected during each shift and monthly by the emergency response team (ERT) who maintain a record of inspections.

Cyanide Material Safety Data Sheets (MSDS) are provided by Cyanco and are made available in hard copy in the mix operators changing rooms at the CIL and ADR plants, storage warehouses, the supply department, emergency response vehicles; and an electronic copy is available on a common shared computer drive. MSDS sheets are provided in French and English, with French being the predominant language of the workforce in areas where cyanide is managed. A French speaking supervisor is always available during each shift to provide an explanation of the MSDS if required.

An incident investigation procedure is in place. Any incident must be reported to a supervisor before the end of each shift. The incident is classified as low, medium, high or catastrophic based on a consequence and probability matrix. Low to medium incidents are assessed by the superintendent, head of department and H&S head of department. A "5 Whys" investigation process is followed prior to the supervisor closing the incident. High and catastrophic incidents require investigation by an investigation team convened by an investigation facilitator. The investigations deliver an incident summary, root cause analysis, contributing factors, lessons learned and describes corrective actions, responsible persons and due dates for actions which are tracked on an investigation corrective action register.

TMLSA have reported no cyanide exposures over the past three years and a review of incident registers from 2017 through to 2019 did not identify any cyanide exposures. Cyanide incidents related to operational release incidents which were contained or cleaned and did not result in exposures to workers.

6.3 Develop and implement emergency response plans and procedures to respond to worker exposure to cyanide.

The operation is: ■ in full compliance
in substantial compliance
not in compliance…with Standard of Practice 6.3.

Describe the basis for this Finding/Deficiencies Identified:

Emergency response equipment and supplies are available to respond to cyanide exposure emergencies. Safety showers and eyewash are located at key locations where cyanide is used. Oxyviva kits containing medical oxygen and resuscitators are located at the ADR clinic, CIL

reagent mix area, CIL titration room, CIL laboratory and the CIL training room and can be refilled at the TTV clinic. A stock of medical oxygen cylinders is also retained in the TTV clinic emergency room and site ambulances. Radios and mobile telephones are carried by operators and operational areas are equipped with visible and audible alarm systems to communicate emergencies.

TMLSA retains a supply of seven cyanide antidote kits comprising hydroxocobalamin (Cyanokits). Two are stored at the clinic emergency room, three in the pharmacy, one in a mobile responder's bag at the ADR plant clinic, and one in an ambulance located at the site clinic. Cyanokits stored in the TTV clinic and ADR clinic are temperature controlled, with room temperature checked twice daily and recorded on a room temperature checklist. A review of a sample of records showed that temperatures were generally maintained at <25 ^{o}C. Subsequent to the field audit, the Cyanokit stored in the ambulance was relocated to within the temperature regulated clinic.

The Cyanokits are inspected daily with a more detailed weekly check conducted by a paramedic or doctor per an inspection checklist. Oxyviva medical oxygen kits in process areas are inspected weekly by the area supervisor and the inspection form is provided to the safety department. The Oxyviva kit in the ADR clinic is inspected weekly by the on-duty nurse. Clinic responder bags located in the main and ADR clinics and containing first aid equipment are inspected and checked weekly by the paramedic. Safety showers and eyewash stations are inspected daily as part shift area inspections and monthly as part of preventative maintenance inspections. The H&S Department also conducts monthly management inspections that generally include observations of plant and equipment including safety showers and eyewash stations.

Since the 2016 recertification audit, TMLSA has continued to maintain a *Cyanide Emergency Response Procedure* (CERP) which describes responses including for cyanide emergencies and that is integrated into an overarching Emergency Response Plan (ERP). The CERP includes a procedure for first aid treatment of cyanide poisoning and sets out roles and responsibilities for supervisors, ERT and medical, security and H&S teams). The locations of first aid and medical supplies such as Oxyviva kits, cyanide antidotes (Cyanokits), first aid kits, cyanide specific PPE and medical response kits are also listed.

TMLSA continues to maintain a clinic at the main camp compound (TTV), which is operated under contract by ISOS International (ISOS). The clinic is staffed by a senior expat medical officer, two general practitioner doctors, a paramedic, three nurses on day shift and four preparedness and response personnel and is on 24-hour call. The clinic has three ambulances equipped with medical response equipment including advance life support equipment and medical oxygen and is an approximately 5 minutes' drive from the CIL plant and 10 to 15 minutes' drive from the ADR plant. A smaller clinic has been established at the ADR plant due to the ambulance response time and is equipped with first aid response equipment, medical oxygen and a Cyanokit. Medical personnel man the clinic during cyanide reagent preparation and mixing and are present to observe the process and provide first aid response to any

emergency. All workers receive mandatory training on first aid procedures. Supervisors receive training in basic life support (BLS), use of Oxyviva kits (including oxygen administration and resuscitation techniques) and cyanide awareness training.

TMLSA has contracted Rema Broking to provide medical insurance for Mauritanian national employees and who maintains formal agreements with hospitals, clinics, pharmacies and other medical providers in Mauritania. In the event of a medical emergency requiring a referral, ISOS personnel would, in collaboration with Tasiast Human Resources and Benefits Departments, plan for transfer to the relevant medical facility using ground transport. Healix International (Healix) is appointed as a global medical services provider for emergency and non-emergency medical care and referrals to clinics, medical facilities and practitioners. Patients requiring medical care can be evacuated by ground ambulance to Clinique Kissi in Nouakchott or transported by air ambulance from Nouakchott Airport to Clinica San Roque, Las Palmas, Spain, or Hospital Universitario de Gran Canaria Doctor Negrin, Las Palmas, Spain. Transportation procedures are detailed in a *Medical Emergency Response Plan* (MERP). TMLSA has onsite capability to respond to cyanide exposure emergencies; however, should medical facilities in Mauritania or Las Palmas be required, Healix and Rema Broking have assured that these facilities have adequately qualified and trained staff and appropriate facilities and equipment to deal with cyanide emergencies.

Since the 2016 certification audit TMLSA has continued to conduct mock emergency drills to test emergency response procedures and readiness. The ERT conducts drills monthly to a planned schedule, and since the 2016 recertification audit have conducted thirteen cyanide mock drills that considered both cyanide release and exposure scenarios. The drills included scenarios at the CIL and ADR plants, cyanide storage warehouse, and transport and hazardous material spills. Each mock drill included the participation of the ERT, safety and process departments and security. The drills were observed by the safety department, positive and negative observations were noted, and areas of improvement recommended. These critiques are collated by the ERT into a "Mock Drill Report" with any corrective actions logged, actioned and tracked. Review of records from 2016 through to 2019 confirmed that corrective actions were tracked through to completion.

7. EMERGENCY RESPONSE **Protect communities and the environment through the development of emergency response strategies and capabilities.**

Standards of Practice

7.1 Prepare detailed emergency response plans for potential cyanide releases.

The operation is: ■ in full compliance
in substantial compliance
not in compliance…with Standard of Practice 7.1.

Describe the basis for the Finding/Deficiencies Identified:

Emergency response planning for cyanide is managed through a CERP and the ERP into which the CERP is integrated. The ERP provides general guidance for preparedness and response to emergency situations including fires, explosions, traffic accidents, equipment emergencies, emergencies in confined spaces, natural disasters, hazardous substances releases, tailings impoundment failures or other geotechnical emergencies, civil disturbances and other security incidents. Each of these probable situations were identified based on operations and activities undertaken at the Tasiast mine site and following a risk assessment. Responses to each scenario are specified appropriate to the level of emergency which are classified as: Level 1 (Low) that can be controlled locally by personnel from the affected area; Level 2 (Medium) that cannot be controlled locally and requires the ERT, but does not exceed the resources of the Tasiast Mine; and Level 3 (High) which exceeds the available resources and requires external assistance. Responses will also depend on the level of severity for an event or issue as defined in the Kinross Crisis Management System (KCMS) severity rating matrix. Responses for each emergency including various roles and responsibilities such as for the discoverer, first on the scene, security, on-scene incident commander, ERT, supervisor, medical responders, H&S department, environmental department and site services are detailed. Specific response procedures for the ERT for emergencies in defined plant areas are also included in the ERP.

The CERP provides additional instruction and guidance for emergency response to cyanide specific incidents. General emergency procedures are detailed including evacuation and decontamination procedures, emergency medical treatment and first aid, emergency alerting and response procedures, and post emergency responses. Cyanide incidents are classified into Stage 1 (low risk): sodium cyanide solids with no water or fire involved; Stage 2 (medium risk): sodium cyanide involving water, chemicals with no fire; and Stage 3 (high risk): sodium cyanide with fire involved. For each category, the CERP describes the PPE required, decontamination procedures and the minimum number of ERT personnel required to respond which is determined by an incident commander. The CERP also includes roles and responsibilities for first responders, the on-scene incident commander (IC), security response team (SRT), ERT, emergency medical team (EMT), Health, Safety and Environment Department and an external relations coordinator.

Both the ERP and CERP are aligned with the with the Kinross Crisis Management Plan (KCMP) which is developed as part of the KCMS to respond to crisis level emergencies. The KCMP and KCMS are managed through an online crisis management software tool EMQnet. The KCMS and KCMP details management level responses depending on the level of the crisis. These management teams are defined as the Site Crisis Management Team (SCMT), the Regional Crisis Management Team (RCMT) and Corporate Crisis Management Team (CCMT). The KCMS provides a severity matrix to rate an event or issue requiring response from different management levels depending on the level defined i.e., low, the SCMT; medium, the SCMT and RCMT; and high, the SCMT, RCMT and CCMT. Transportation emergencies are the responsibility of Cyanco from the production plant to the Port of Nouakchott; and SOGECO from the Port of Nouakchott to the mine operation. Review of the Summery Audit Reports for Cyanco posted on the ICMI website confirms that emergency response planning has been included in the supply chain routes and specifically considers the road transportation route and transport of solid sodium cyanide in briquette form, packed in boxes in 20-foot shipping containers.

All employees, contractors and visitors receive induction training which includes evacuation procedures. The ERP details emergency evacuation procedures and directs workers to muster points and assembly areas. For cyanide specific emergencies, the CERP instructs that if an evacuation is required, this is instructed by the IC and notified to workers and contractors by radio and public address systems. Evacuation routes are selected cross wind or upwind from any cyanide spill or release to avoid exposure and windsocks are located at key site areas to aid with determining wind direction. Initial isolation of the incident scene is set at a minimum of 100 m in all directions and thereafter safe distances are determined. The CERP also includes SOPs for the handling of cyanide spillages including isolating the source of the leak or release, and containment and collection of spills/releases.

The KCMS and KCMP defines management level and coordination responses for crisis level emergencies including communication channels to follow that may include notifying regulators and any affected communities.

7.2 Involve site personnel and stakeholders in the planning process.

The operation is: ■ in full compliance
in substantial compliance
not in compliance…with Standard of Practice 7.2.

Describe the basis for the Finding/Deficiencies Identified:

The ERP and CERP has been developed through input of the various TMLSA departments such as the H&S Department, the ERT, Environment Department, Security and ISOS medical personnel. The ERP and CERP require signoff from the HSE manager, health and safety superintendent, security manager and the general manager. The ERP and CERP and

associated procedures are reviewed periodically: upon change of personnel, significant changes to site operations, when an emergency or drill has identified that changes are required and to incorporate lessons learned; or following an audit or other review that has identified that changes are required. The ERT also directly provides feedback after every mock drill or response to an emergency which can be incorporated into the emergency response planning process. Healix has in collaboration with TMLSA developed a MERP in the event of medical emergencies including those arising from cyanide exposures.

Due to the isolated location of the Tasiast mine in a desert region of Mauritania, there are no permanent communities in the immediate vicinity and proximate population numbers are low Consequently, there is low likelihood that any external members of the public would be affected by an emergency and there is limited opportunity for involvement of such stakeholders in the emergency response planning process. Nevertheless, TMLSA maintains stakeholder engagement, community outreach and cyanide education programmes that provide opportunity for stakeholder inputs. In 2016, and more recently in August 2019, the Community Relations Department conducted two cyanide awareness campaigns with eight villages located along the cyanide transport route between Nouakchott Port and the mine that included information on cyanide awareness and response actions in the event of a cyanide release.

Due to its remote location TMLSA has developed onsite emergency response capacity to be largely self-sufficient with personnel and resources able to respond to most probable emergency scenarios. As such there are no outside emergency response agencies explicitly included within the emergency response plan. ISOS provides medical expertise at the onsite clinic and any patients requiring offsite medical support would be transferred by the site ambulance(s) to medical facilities. Kinross has also appointed Healix to provide air ambulance services for transfer of patients and referrals to clinics, medical facilities and practitioners in Las Palmas, Spain.

7.3 Designate appropriate personnel and commit necessary equipment and resources for emergency response.

The operation is: ■ in full compliance
in substantial compliance
not in compliance…with Standard of Practice 7.3.

Describe the basis for the Finding/Deficiencies Identified:

The CERP defines roles and responsibilities of emergency response coordinators including the on-scene incident commander, the ERT officer in charge and the security response team (SRT) officer in charge (OIC). The ERP allocates responsibility to the general manager to ensure that adequate resources are available to carry out the emergency response procedures. The CERP contains a contact directory with primary and alternate emergency response coordinators. For

crisis level emergencies the KCMS and KCMP designates roles and responsibilities for emergency response coordinators.

Members of the ERT and EMT and contact information for the SRT are listed in the CERP and the ERP and training requirements detailed. All staff and long-term contractors complete mandatory training modules to enable staff to deal with an emergency should this occur. For tasks where workers may come into direct or indirect contact with cyanide, a cyanide awareness training course must also be completed. Refresher training is provided for all workers on safety and environmental issues. The ERT comprises trained firefighters with first aid training. ISOS are contracted to provide medical services and retains trained doctors, paramedics and nurses at the TTV clinic. Medical personnel are provided ISOS specific cyanide training. The ERT, EMT and SRT conduct regular mock emergency drills for training purposes. For crisis level incidents the SCMT members receive initial and refresher training and periodically convene for training and to undertake mock emergency desktop drills.

Communication and call out procedures are detailed in the ERP and include emergency call numbers, and radio channel protocols. Security Operations Centre (SOC) monitor communication channels 24 hours a day and will notify and coordinate emergency response with the ERT.

TMLSA continues to maintain stocks of emergency response and personal protective equipment at key locations where cyanide is used, handled or stored, at the fire station and the TTV clinic. Detailed equipment inventories for the ERT are included in the ERP. The CERP lists the locations of Oxyviva kits, Cyanokits, first aid and medical supplies. An inventory of portable HCN monitors is retained by the Permit to Work Department and records those devices issued to the ERT. Requirements for inspection of emergency equipment is described in the CERP. The ERT conducts weekly inspections of emergency response equipment in emergency response vehicles and at the fire station.

7.4 Develop procedures for internal and external emergency notification and reporting.

The operation is: ■ in full compliance
in substantial compliance
not in compliance…with Standard of Practice 7.4.

Describe the basis for the Finding/Deficiencies Identified:

Notification procedures are listed in the ERP and the CERP and includes internal notification procedures. The ERP and CERP also require that the onsite Government representatives are notified of any incidents through TMLSA's Government Relations Team. In addition to the incident notification, TMLSA provides regular quarterly reports to Government Departments via the External Relations Department in the TMLSA Nouakchott Office. For crisis level emergencies, the KCMP defines roles and responsibilities of the SCMT, RCMT and CCMT

including communication procedures. The level and detail of communication is dependent on the overall severity of an incident and includes procedures for communicating with the public, employees, government, regulators, the media and other stakeholders. A stakeholder list is retained on the "EMQnet" system and on "StakeTracker" a stakeholder management software system.

Cyanide related incidents that may affect the community would trigger the KCMP which includes procedures for communication with communities and the media and contains relevant contact information. Cyanide emergency incidents outside the mine and along the transport route between the Nouakchott Port and Tasiast would be the responsibility of SOGECO who would follow notification procedures as set out in their emergency response plan.

For medical emergencies, contact information for Healix is contained in the CERP and the emergency contact directory available on EMQnet system that forms part of the KCMP. The MERP also includes a list and contact information for medical facilities within Mauritania and Las Palmas Spain, and also providers of ground and air ambulance services. The HSE Manager maintains a list of Mauritanian medical facilities and contact information that form part of Rema medical network.

7.5 Incorporate into response plans monitoring elements and remediation measures that account for the additional hazards of using cyanide treatment chemicals.

The operation is: ■ in full compliance
in substantial compliance
not in compliance…with Standard of Practice 7.5.

Describe the basis for the Finding/Deficiencies Identified:

The CERP details procedures for the handling of cyanide spills and includes general procedures for handling cyanide spills and handling of dry/liquid cyanide spills inside/outside of bunded areas. General procedures require that the area is barricaded and the source of the spill (pump, valve, pipe etc.) is isolated. If not in containment, the spill is to be contained by the construction of earth bunds. The spill is cleaned into appropriate receptacles and cyanide disposed by recycling back into the process system. If the spill is within containment, dilution with water is required followed by pumping back into the process. Where spills occur out of containment, contaminated soil is to be excavated and returned to the process. Instruction is provided for neutralizing solid cyanide spills with lime, covering with water and then pumping the solution to CIL tanks. For cyanide solutions, procedure instructs neutralisation using ferrous sulphate. Stocks of lime and ferrous sulphate are stored in bulk bags in the ADR and CIL plants reagent areas. Where soils have been impacted procedures instructs that neutralised soils are excavated and moved to an appropriate area as directed by the supervisor. At the CIL plant this may be the dump leach facilities or SAG mill sump; and to the leach pads if occurring at the ADR plant.

During the field audit it was noted that instructions for workers on the use and application of lime and ferrous sulphate were not sufficiently detailed. Subsequent to the field audit, TMLSA updated the spill response procedure to include detailed instructions on the application of neutralizing agents to solid and liquid cyanide spills.

Following a cyanide release, procedures provide instruction on the collection of soil and groundwater samples, completion of chain of custody forms and shipping to a laboratory and analysis protocols with oversight provided by the HSE manager or environmental superintendent. Clean-up criteria are specified by the Mauritanian government who require that any cyanide releases are remediated to levels below laboratory method detection limits. Regional groundwater quality is saline and unsuitable for potable use and due to the arid desert setting, there is also an absence of potable surface water sources. The nearest fresh water supply is approximately 50 km from site and not in hydraulic continuity with groundwater beneath the mine. Water supply at the mine site and of surrounding areas is by bottled water and as such the provision of an alternate water supply is not necessary in the event of a cyanide spill.

7.6 Periodically evaluate response procedures and capabilities and revise them as needed.

The operation is: ■ in full compliance
in substantial compliance
not in compliance…with Standard of Practice 7.6.

Describe the basis for the Finding/Deficiencies Identified:

The ERP requires that the plan and associated procedures are to be reviewed and updated periodically when there is a significant change to site operations, following an emergency or drill that has identified changes to the ERP, following an audit or internal/external review that has identified that changes are required, and following changes to personnel or their contact details. The ERP was most recently reviewed in January 2019. The CERP contains similar provisions including after an emergency or mock drill to incorporate lessons learned and following an unanticipated emergency scenario to ensure that an appropriate procedure for that scenario is developed. The overall owner of the CERP is the HSE manager and updates to both the ERP and CERP can be made by superintendent or manager level personnel from the safety, environment or security departments with approval of the general manager. The CERP was most recently reviewed in November 2019.

The CERP requires that cyanide emergency mock drills are conducted to test emergency preparedness and capabilities on a frequency of four times a year. The planning and design of these drills are the responsibility of the ERT. Since the 2016 certification audit, the ERT have conducted thirteen mock cyanide drills that considered both cyanide release and exposure scenarios. The drills included scenarios at the CIL and ADR plants, cyanide storage

warehouse, transport and hazardous material spills. Each mock drill was documented on a *Mock Drill Report* and included a description of the scenario, attendees, a log of the event timeline, positive observations and areas for improvement.

Since the 2016 audit, there have been no cyanide related incidents or emergencies that have required implementation of the ERP or CERP. However; as described in 7.6(1), the ERP and CERP would be reviewed following any such event and updated as necessary.

8. TRAINING Train workers and emergency response personnel to manage cyanide in a safe and environmentally protective manner.

Standards of Practice

8.1 Train workers to understand the hazards associated with cyanide use.

The operation is: ■ in full compliance
in substantial compliance
not in compliance…with Standard of Practice 8.1.

Describe the basis for the Finding/Deficiencies Identified:

New employees, contractors and visitors are required to attend General Site Induction training before being allowed to enter or work on the TMLSA mine site. The General Site Induction includes topics on the seven cardinal rules, evacuation procedures, emergency contact numbers, alarms, mandatory PPE, security, hazards, safety signage and electrical hazards. Furthermore, area specific induction is required for anyone entering the ADR and CIL plants and processing areas. Cyanide awareness training is provided to anyone entering the facility. Training topics include cyanide properties, toxicity and health effects, exposure pathways, symptoms of poisoning, exposure thresholds, handling and use of PPE, emergency response and administration of first aid. Participants are required to complete a written exam to confirm understanding of the training module. Cyanide awareness training is also provided to medical personnel stationed at the clinic.

Permanent employees are also required to complete mandatory training components that include basic and area specific PPE, cyanide awareness, JSA preparation, the Safewatch program, HAZMAT response and environmental impact awareness.

Since the 2016 recertification audit, training has been separated into two departments, a Processing Training Department responsible for delivering safety and operating procedures training to ADR and CIL plant operators; and a Mining Training Department who provide training to all other personnel. The Processing Training Department currently comprises a training superintendent and three trainers. The training superintendent has 19 years operations experience, a Higher National Diploma in Chemical Engineering and has completed "train-the-trainer" courses.

Annual refresher training is provided on all mandatory modules including on cyanide awareness upon return of a worker for annual leave. Refresher training presents summarised information for modules except for induction and cyanide awareness content which is provided in full detail. Refresher training is tracked on a matrix which lists each worker, the training module applicable to that worker, when last trained and when training is next due. Each employee is issued with an "HSE Training Passport" indicating the mandatory training modules required for work tasks and those that have been completed including refresher modules. Workers are not permitted to undertake tasks without the requisite passport.

Cyanide training records are retained and logged on Learning Management System (LMS) software package, currently being transitioned to a new management system titled Kinross University; and in paper copy. Records include log and signoff sheets indicating the trainer, trainee, dates and training topic(s), and are managed by the training departments.

8.2 Train appropriate personnel to operate the facility according to systems and procedures that protect human health, the community and the environment.

The operation is: ■ in full compliance
in substantial compliance
not in compliance…with Standard of Practice 8.2.

Describe the basis for the Finding/Deficiencies Identified:

New employees follow an enrolment plan in which training prioritised in accordance with a *Development Plan* specific to each operational area and grade of operator or worker. The Processing Training Department train workers on SOPs specific to tasks in the CIL and ADR plants, and for maintenance and which are tracked on a training matrix. Training topics include general induction, workplace induction, cyanide general awareness, incident investigation, inspection, chemical handling, cyanide spills, emergency evacuation, JSA training, working in confined spaces, first aid; and task specific topics involving cyanide unloading, mixing and production. An assessment of understanding of these topics is undertaken before a worker is allowed to operate in the field. Classroom training is supplemented with on the job training provided by an experienced operator who would accompany any new worker/operator or change of operator grade or position over a period of six months and provide a field assessment using the relevant SOP as a checklist.

Each training element necessary to perform a task or to function in a work area/department is tracked in a training matrix. The SOPs are used as the basis for training which detail each step necessary for the task including those for cyanide management. Cyanide awareness training includes topics on cyanide properties, toxicity and health effects, exposure pathways, symptoms of poisoning, exposure thresholds, handling and use of PPE, emergency response and administration of first aid.

The Supply Chain Management Department warehouse operators receive training on procedures for the receipt, unloading, storage and stacking of cyanide boxes and cyanide awareness before being allowed to work with or load cyanide boxes. Operators also receive training on the sodium cyanide MSDS, cyanide emergency response, required PPE and use of portable HCN monitors.

The Process Training Department is headed by a training superintendent who oversees three trainers. The training superintendent has a Higher National Diploma in Chemical Engineering, is qualified to provide "train-the-trainer" courses and has 19 years of operations experience. The Process Training Department provides both safety training and training on task specific SOPs. On the job training is provided by experienced shift supervisors, who are qualified to deliver training based on experience.

Refresher training is provided annually, scheduled to coincide with an employee's return from annual leave and comprises a mandatory list of topics including on cyanide awareness. Each employee is required to carry a "HSE Training Passport" which indicates the modules completed as required for their task or role and which is signed or stamped by the Processing Training Department and the Mining Training Department. Workers may not undertake tasks without the appropriate signoff of training topics on the HSE Training Passport.

Following induction and task training, employees are required to confirm understanding by completing a written multiple-choice examination. Furthermore, workers are required to work under the supervision of an experienced operator or supervisor and to demonstrate competence in a procedure/task and understanding of the work area before being allowed to work unaccompanied.

TMLSA continues to operate systems to observe work tasks and areas: the Safe Watch Program where supervisors are required to conduct a minimum of four workplace evaluations a month; and PTOs where supervisors conduct a minimum of four observations per month on employees specific to their work areas and tasks and performance against the relevant SOPs.

TMLSA retain records throughout an individual's employment term which are retained in both paper copy and on LMS computer systems. Training records observed included the name of the trainer and trainee, topics covered, date, and log and signoff sheets competed by both the trainer and trainee. Induction signoff sheets are also retained.

8.3 Train appropriate workers and personnel to respond to worker exposures and environmental releases of cyanide.

The operation is: ■ in full compliance
in substantial compliance
not in compliance…with Standard of Practice 8.3.

Describe the basis for the Finding/Deficiencies Identified:

All workers involved with cyanide related tasks including storage, unloading, mixing, production and maintenance are trained in the relevant SOPs. Workers are also trained on the CERP, cyanide spill response and HCN gas monitoring which include procedures to be followed if cyanide is released.

Where hydrogen cyanide releases trigger HCN alarms, workers are trained to evaluate HCN concentrations and, if necessary, abandon and evacuate the area. If levels are confirmed above 10 ppm, the responsible supervisor, superintendent and head of department determine if a local area evacuation is required, the process needs to be modified, a full plant evacuation is to be triggered, or the CERP is to be initiated. For emergencies, communication and call out procedures are detailed in the ERP. Evacuation routes are selected crosswind or upwind of any cyanide spill or release to avoid exposure and windsocks are located at key site areas to aid with determining wind direction. The IC liaises with the SRT who appoints a security commander to cordon off the area with an initial perimeter. The SRT subsequently liaises with and passes responsibility to the ERT incident commander within the affected area.

The ERP and CERP describes first aid procedures. First responders may carry out first aid if safe to do so, otherwise emergency medical treatment and first aid is provided by the ERT and EMT in accordance with procedure *First Aid Treatment of Cyanide Poisoning*. Procedures for the handling of cyanide spills and releases are described in the CERP and include a general procedure for handling cyanide spills and specific procedures for handling of dry and liquid cyanide spills inside and outside of containment.

All workers receive training on cyanide awareness, training on the CERP and first aid procedures. This training includes a description of the symptoms of cyanide poisoning, administration of oxygen including use of Oxyviva kits and the use of Cyanokits and thorough washing of a patient. The CERP also contains a decontamination plan for personnel and equipment. Training on the use and application of Oxyviva cylinders are provided by clinic personnel to CIL and ADR plant operators.

Maintenance workers are trained on decontamination of cyanide facilities. Any plant or equipment that has been subject to a cyanide environment must be decontaminated before maintenance or decommissioning.

The ERT receives induction and cyanide awareness and first aid training. In addition, ongoing weekly training is conducted to a schedule including on the elements of the CERP and ERP applicable to the ERT, enhanced training on HAZMAT response and Cyanco provided training materials on handling of sodium cyanide and transportation emergencies. Training is also provided on the use of SCBA, fire extinguishers, fire suppressants and operation of the fire truck. The ERT also provides weekly training to site workers and operators on the use of SCBA, fire extinguishers and the duties of fire wardens and fire suppression topics. The ISOS medical team receive training specially tailored to cyanide response. Medical staff are tested on understanding with a multiple-choice questionnaire with a pass mark of 90% required.

The ERT (including ISOS medical responders), CIL and ADR process workers, HSE Department and security participate in routine mock drills that include scenarios for worker exposures and application of first aid. Emergency response coordinators are designated in the ERP and CERP and have been provided training on these plans. Refresher training is also provided by means of periodic mock drills attended by the ERT, supervisors, HSE department, medical teams and security.

Three crisis level training exercises have been conducted in accordance with the KCMS and KCMP in the last three years. These comprise training exercises and desktop emergency scenarios that appraise the response of site management, SCMT and emergency response coordinators to crisis level emergencies. Although these exercises did not specifically test cyanide emergency scenarios, they are intended to test and appraise managers and emergency response coordinators responses to crisis level emergencies.

TMLSA has maintained capacity to be self-sufficient in dealing with emergencies and has the necessary response teams and equipment to respond to most emergency situations including cyanide emergencies. Therefore, offsite emergency responders are not allocated specific roles within the ERP and CERP. The ERT comprises two expat trained firefighters and ten Mauritanian nationals trained in HAZMAT response and paramedic/first aid training. The ERT is based at the fire station which is equipped with Zetros fire truck, two rescue vehicles (Rescue 1 and Rescue 2) and a HAZMAT Unimog. The vehicles and ERT are also equipped with portable HCN monitors, chemical suites, SCBA and decontamination equipment. The TTV clinic retains a senior expat medical officer, two general practitioner doctors, a paramedic, three nurses on day shift and four preparedness and response personnel who are on 24-hour call. The clinic retains Cyanokits for application in the event of cyanide exposures and has an emergency room equipped with three beds, oxygen and medical response equipment. The clinic also retains three ambulances equipped with medical response equipment including advance life support equipment and medical oxygen. TMLSA has contracted Healix to provide overarching support in the event of a medical emergency requiring evacuation to hospitals outside of Mauritania and which has been formalised in the MERP.

Refresher training including on cyanide awareness, emergency response procedures and first aid procedures is mandatory for all employees and provided annually. Training is provided by

the Process Training Department for ADR and CIL plant workers and by the Mining Training Department for other employees and tracked on a training matrix.

Toolbox talks are conducted every shift which include safety topics such as cyanide hazards and awareness. The ERT completes regular training to a weekly schedule including on cyanide and HAZMAT response and conducts periodic monthly mock drills involving cyanide release scenarios and exposures which also serve as refresher training. ISOS medical staff receive ISOS developed cyanide specific medical response training (including the application of Cyanokits) three to four times a year as part of continuous medical education training.

The CERP requires that cyanide mock drills are periodically undertaken to test emergency preparedness and capabilities and require the participation of relevant personnel, senior site management, the ERT and medical team, and HSE and security representatives. Since the 2016 recertification audit TMLSA has conducted thirteen mock drills at the CIL and ADR plants and cyanide storage areas that have considered both cyanide release and exposure scenarios. Mock drills are observed and evaluated by the ERT and safety department with positive and negative observations noted and areas for improvement recommended. Observations and evaluations are collated, and any corrective actions tracked and assigned to a responsible person. The action list is distributed to the heads of departments, the general manager, safety department and training departments. If required any changes to procedures will be implemented through this system and training on the changes provided to affected workers.

TMLSA has continued to maintain training records for induction, cyanide awareness training, cyanide task specific training and refresher training. Records are retained by the Process Training Department and Mine Training Department in hard copy and on LMS. ERT training records are retained by the ERT supervisor. Training records for ISOS personnel based at the clinic are retained by the senior medical officer. Understanding of training topics is demonstrated through completion of written exams provided for each of the training areas. Additionally, workers are required to work under supervision of an experienced operator or supervisor to demonstrate understanding of a task and work area before being allowed to work unaccompanied. Training records include logs of the attendees, signatures of the trainer and trainee, the date and topics covered and results of written examinations.

***9. DIALOGUE* Engage in public consultation and disclosure**.

Standards of Practice

9.1 Provide stakeholders the opportunity to communicate issues of concern.

The operation is: ■ in full compliance
in substantial compliance
not in compliance…with Standard of Practice 9.1.

Describe the basis for the Finding/Deficiencies Identified:

TMLSA continues to maintain an External Relations Department which includes a Community Relations (CR) Department, Government Relations Department and Communications Department. The CR Department comprises five permanent members and two external consultants. The CR manager is based in Nouakchott and is supported by a superintendent and team based onsite. The Government Relations Department is based in Nouakchott and maintains engagement with government and regulators. These stakeholders also maintain an office at the mine site to allow for continuous engagement. The CERP requires that any cyanide releases are reported to the onsite government representative who may subsequently visit the scene of the incident resulting in further discussion around issues of concern or cyanide management.

The CR Department maintains a continuous stakeholder engagement process with CR team members set a goal of undertaking at least three interactions per day (by phone or personal interactions) with the community, government, regulators or other stakeholders. Periodic meetings are also held at the request of communities. Stakeholders are also provided the contact phone numbers for members of the CR team and frequent daily calls are received and tracked on StakeTracker stakeholder management system. In addition, the CR Department maintains a planned stakeholder engagement program where each member of the CR team conducts three formal calls per quarter with stakeholders such as NGOs, government and community leaders (or "Notables").

TMLSA continues to conduct periodic cyanide education and awareness campaigns. These have been undertaken in 2016 and more recently in August 2019 and involved visits to villages along the cyanide transport route between the mine and Nouakchott Port. During these meeting opportunities were provided for open discussion and for any concerns to be raised and discussed. Cyanide related topics are presented in PowerPoint format and include a description of the properties of cyanide and sodium cyanide, cyanide risks, cyanide use at Tasiast, mandatory PPE, the cyanide supply chain, an introduction to the International Cyanide Management Code and community actions in the event of cyanide transport vehicle accident or spill. A copy of these presentation materials is provided to communities. Approximately 10% of the mine workforce is sourced from communities regionally proximate to mining operations and provides informal channels whereby community concerns may be raised.

9.2 Initiate dialogue describing cyanide management procedures and responsively address identified concerns.

The operation is: ■ in full compliance
in substantial compliance
not in compliance…with Standard of Practice 9.2.

Describe the basis for the Finding/Deficiencies Identified:

As discussed in 9.1, TMLSA has conducted two cyanide education and awareness campaigns in 2016 and 2019 which comprised visits to eight communities located along the cyanide transportation route; during which any concerns related to cyanide management were discussed.

TMLSA has implemented a grievance mechanism. Any complaints received are classified into an expression of dissatisfaction or a grievance that has resulted in harm. Complaints are received either by telephone or submitted in writing and are captured on a *Complaints Form* and entered into StakeTracker stakeholder information management software. Complaints and grievances are tracked, investigated and addressed. TMLSA aim to close out any issues or grievances within two weeks of receipt. Review of records shows that Tasiast have received five complaints since 2016, none of which were related to cyanide.

A government office is present on site and officials may inspect TMLSA facilities or request information related to the mine's operations. Any requests for information related to cyanide use and management arising from community meetings, complaints/grievance mechanisms and government interactions are evaluated, and information provided on a case by case basis.

TMLSA maintains a French language Mauritanian website (www.kinrosstasiast.mr/tasiast) that provides information about Tasiast mining operations in a brochure format and corporate social and environmental responsibility activities. The Kinross corporate website also contains a description of TMLSA operations and includes a Technical Report dated October 2019 prepared in conformance with Canadian National Instrument 43-101 Standards of Disclosure for Mineral Projects. The report contains a detailed technical description of mine operations including cyanide facilities and use of cyanide in processing.

9.3 Make appropriate operational and environmental information regarding cyanide available to stakeholders.

The operation is: ■ in full compliance
in substantial compliance
not in compliance…with Standard of Practice 9.3.

Describe the basis for the Finding/Deficiencies Identified:

As discussed in 9.2, written descriptions of cyanide use at the mine including of how cyanide is transported is provided in PowerPoint presentations which are presented and provided to communities as part of cyanide education outreach programs. A French language Mauritanian website is available with descriptions of the operation; and a detailed Technical Report dated October 2019 describing mine operations including cyanide facilities and the use of cyanide in the gold extraction process is also published on the Kinross corporate website. Kinross evaluates any requests for written information from communities, members of the public, regulators and any other stakeholders on a case by case basis and will provide this information as necessary.

Stakeholders identified as part the cyanide education outreach program include populations of nomads and semi nomads where literacy may be an issue. Therefore, as well as in PowerPoint format, presentations are also provided in flip chart format with illustrations. Content is displayed in Arabic and verbal explanation provided in Hassaniya or French as circumstances dictate. These outreach meetings also provide opportunities for discussion with the target population during which any information related to cyanide can be verbally explained.

Since the 2016 recertification audit, TMLSA has not experienced cyanide exposures resulting in hospitalization or fatalities; or cyanide releases requiring response or remediation, resulting in significant adverse effects to health or the environment or that exceeded applicable cyanide limits. Were such incidents to occur, the CERP requires that these are reported to the onsite government officials who represent the Ministry of Mines, Customs and Labour Inspection. In addition, the KCMS and KCMP would be activated including procedures for notifying stakeholders. Summaries of such incidents would also typically be published as part of corporate sustainability reports which are accessible on the Kinross corporate website.