

Central Térmica de Temane Project - Community Safety and Security Framework

Moz Power Invest, S.A. and Sasol New Energy Holdings (Pty) Ltd

Submitted to:

Ministry of Land, Environment and Rural Development (MIATDER)

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ACRONYMS

Abbreviations	Description
CPF	Central Processing Facility
CHSSF	Community, Health, Safety and Security Framework
CHSSP	Community, Health, Safety and Security Plan
СТТ	Central Térmica de Temane
EDM	Electricidade de Moçambique, E.P
ESIA	Environmental and Social Impact Assessment
HSE	Health, Safety and Environment
HSS	Health System Strengthening
IFC	International Finance Corporation
IMS	Integrated Management System
L and FS	Life and Fire Safety
OSH	Occupational Safety and Health
SNE	Sasol New Energy Holdings (Pty)



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APPENDICES

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1.0 INTRODUCTION

1.1 Background

The Mozambican economy is one of the fastest growing economies on the African continent with electricity demand increasing by approximately 6-8% annually. In order to address the growing electricity demand faced by Mozambique and to improve power quality, grid stability and flexibility in the system, Moz Power Invest, S.A. (MPI), a company to be incorporated under the laws of Mozambique and Sasol New Energy Holdings (Pty) Ltd (SNE) in a joint development agreement is proposing the construction and operation of a gas to power facility, known as the Central Térmica de Temane (CTT) project. MPI's shareholding will be comprised of EDM and Temane Energy Consortium (Pty) Ltd (TEC). The joint development partners of MPI and SNE will hereafter be referred to as the Proponent. The Proponent propose to develop the CTT, a 450MW natural gas fired power plant.

The proposed CTT project will draw gas from the Sasol Exploration and Production International (SEPI) gas well field via the phase 1 development of the PSA License area, covering gas deposits in the Temane and Pande well fields in the Inhassoro District and the existing Central Processing Facility (CPF). Consequently, the CTT site is in close proximity to the CPF. The preferred location for the CTT is approximately 500 m south of the CPF. The CPF, and the proposed site of the CTT project, is located in the Temane/Mangugumete area, Inhassoro District, Inhambane Province, Mozambique; and approximately 40 km northwest of the town of Vilanculos. The Govuro River lies 8 km east of the proposed CTT site. The estimated footprint of the CTT power plant is approximately 20 ha (see Figure 1).

Several activities associated with the project may impact upon the health, safety and security of the local communities adjacent to the project infrastructure, except for one of the southernmost sections of the transmission line, falls within the district of Inhassoro. This district is in the north of Inhambane province, 360 km from the provincial capital.

The CTT area is rural with few settlements located near proposed infrastructure. There are nominal rural agricultural settlements adjacent to the transmission line. Further east, as one move away from the CTT site, denser settlements occur along the EN-1 (east and west of the road) and from the EN-1 eastward to the coast.



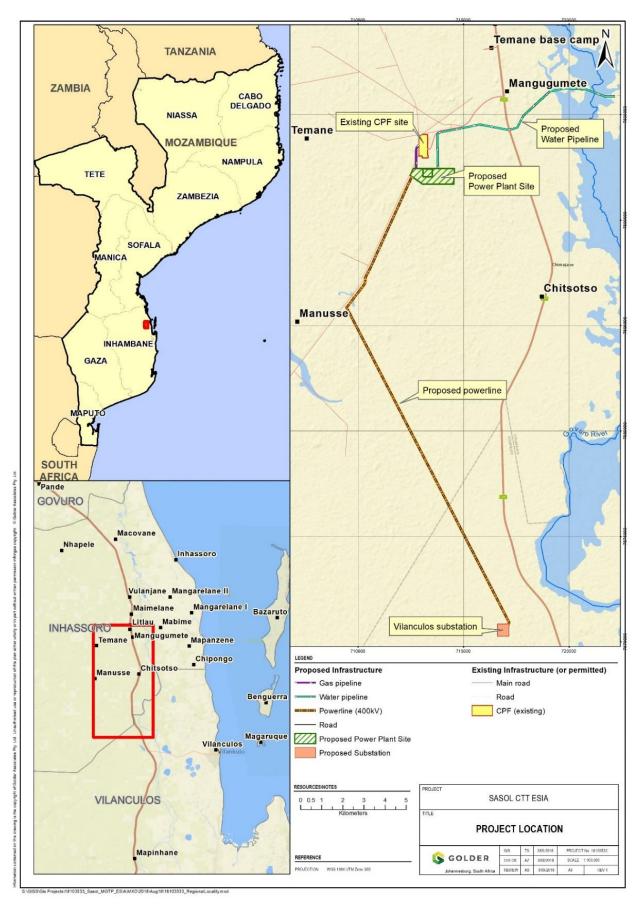


Figure 1: Project Location

1.2 Purpose

The purpose of this Community Health, Safety and Security Framework (CHSSF) is to:

- Identify the relevant regulatory requirements at the National and International level;
- Define the scope of the CHSSF, including roles, responsibilities and timeframes;
- Prepare a list of potential community health, safety and security risks associated with the proposed project;
- Discuss project commitments, programmes, operational procedures and guidance that respond to and mitigate the identified risks;
- Suggest monitoring and reporting procedures and identify Key Performance Indicators to measure the achievements of the proposed project commitments, programmes and key health, safety and security measures:
- Anticipate training requirements; and
- Discuss the audit programme.

1.3 Application and commencement

The requirements set out in this CHSSF apply to the entire CTT operations including contractors and subcontractors.

The CHSSF will be implemented at the beginning of the construction phase and continue to the end of the project life.

2.0 DESCRIPTION OF THE KEY PROJECT COMPONENTS

The CTT project will produce electricity from natural gas in a power plant located 500m south of the CPF. The project will consist of the construction and operation of the following main components:

- Gas to Power Plant with generation capacity of 450MW;
- Gas pipeline (±2 km) that will feed the Power Plant with natural gas from the CPF;
- 400kV Electrical transmission line (± 25 km) with a servitude that will include a fire break (vegetation control) and a maintenance road to the Vilanculos substation. The transmission line will have a partial protection zone (PPZ) of 100m width. The transmission line servitude will fall inside the PPZ;
- Water supply pipeline to one or more borehole(s) located either on site or at boreholes located east of the Govuro River;
- Surfaced access road to the CTT site and gravel maintenance roads within the transmission line and pipeline servitudes;
- Temporary beach landing structures at Inhassoro for the purposes of delivery of equipment and infrastructure to build the power plant. This will include transhipment and barging activities to bring equipment to the beach landing site (construction phase only) for approximately 1-2 days with up to 3-4 months between shipments over a period of approximately 8-15 months;
- Construction camp and contractor laydown areas adjacent to the CTT power plant site; and
- Temporary bridge structures across Govuro River and tributaries, as well possible new roads and/or road upgrades to allow equipment to be safely transported to site during construction.







Figure 2: Examples of gas to power plant sites (source: www.industcards.com and www.wartsila.com)

The final selection of technology that will form part of the power generation component of the CTT project has not been determined at this stage. The two power generation technology options that are currently being evaluated are:

- Combined Cycle Gas Turbine (CCGT); and
- Open Cycle Gas Engines (OCGE).

Please refer to Chapter 4 of the main ESIA document for further details on the technology option.

At this early stage in the project a provisional layout of infrastructure footprints, including the proposed linear alignments is indicated in Figure 1. A conceptual layout of the CTT plant site is shown below in Figure 3.

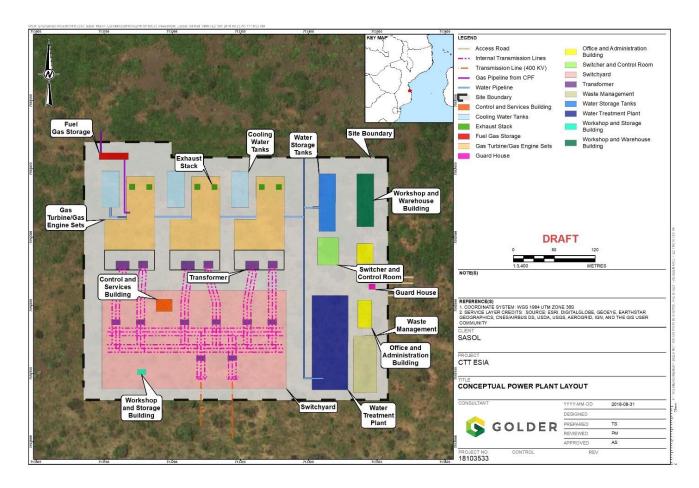


Figure 3: Conceptual layout of CTT plant site

2.1 Ancillary Infrastructure

The CTT project will also include the following infrastructure:

- Maintenance facilities, admin building and other buildings;
- Telecommunications and security;
- Waste (solid and effluent) treatment and/or handling and disposal by third party;
- Site preparation, civil works and infrastructure development for the complete plant;
- Construction camp (including housing/accommodation for construction workers); and
- Beach landing laydown area and logistics camp.

The heavy equipment and pre-fabricated components of the power plant will be brought in by ship and transferred by barge and landed on the beach near Inhassoro. The equipment and components will be brought to site by special heavy vehicles capable of handling abnormally heavy and large dimension loads. Figure 4, Figure 5 and Figure 6 show examples of the activities involved with a temporary beach landing site, offloading and transporting of large heavy equipment by road to site.

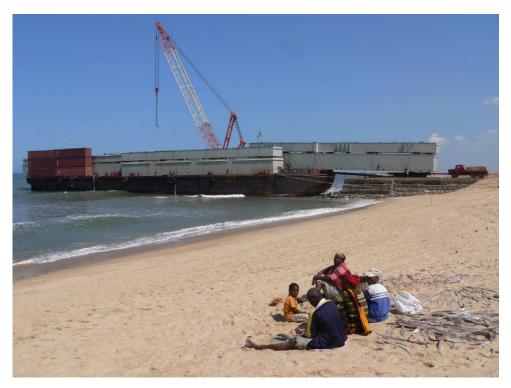


Figure 4: Typical beach landing site with barge offloading heavy equipment (source: Comarco)



Figure 5: Example of large equipment being offloaded from a barge. Note the levels of the ramp, the barge and the jetty (source: SUBTECH)



Figure 6: Heavy haulage truck with 16-axle hydraulic trailer transporting a 360 ton generator (source: ALE)

2.2 Water and electricity consumption

The type, origin and quantity of water and energy consumption are still to be determined based on the selected technology to construct and operate the CTT plant. At this stage it is known that water will be sourced from existing boreholes located on site or east of the Govuro River for either of the technology options below:

- Gas Engine: ± 12 m³/day; or
- Gas Turbine (Dry-Cooling): ± 120 240 m³/day.

2.3 Temporary Beach Landing Site and Transportation Route Alternative

As part of the CTT construction phase it was considered that large heavy equipment and materials would need to be brought in by a ship which would remain anchored at sea off the coast of Inhassoro. Equipment and materials would be transferred to a barge capable of moving on the high tide into very shallow water adjacent to the beach to discharge its cargo onto a temporary off-loading jetty (typically containers filled with sand) near the town of Inhassoro. As the tide changes, the barge rests on the beach and off-loading of the equipment commences.

Currently, the SETA beach landing site is the preferred beach landing site together with the road route option to be used in transporting equipment and materials along the R241 then the EN1 then via the existing CPF access road to the CTT site near the CPF (according to preliminary technical, economic and enviroenmental and social considerations). Figure 7 and Figure 8 indicate the beach landing site and route transportation option. The alternative beach landing sites of Maritima and Briza Mar are still being evaluated as potential options, as well as the southern transport route, which would also require road upgrades and a temporary bridge construction across the Govuro at the position of the existing pipe bridge. As part of the transportation route, the Govuro River bridge may need to be upgraded / strengthened to accommodate the abnormal vehicle loads. Alternatively, a temporary bypass bridge will be constructed adjacent to the existing bridge.

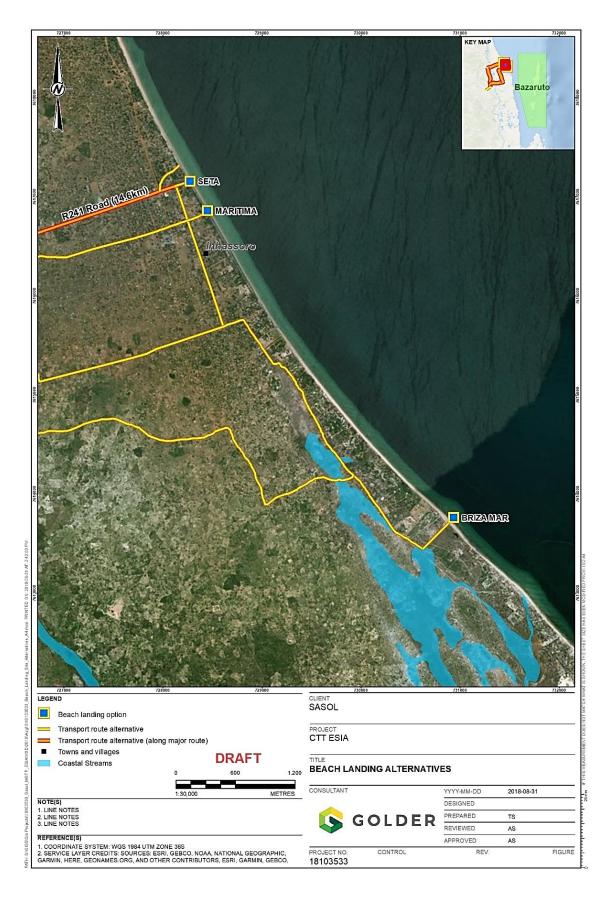


Figure 7: The three beach landing site options and route options at Inhassoro



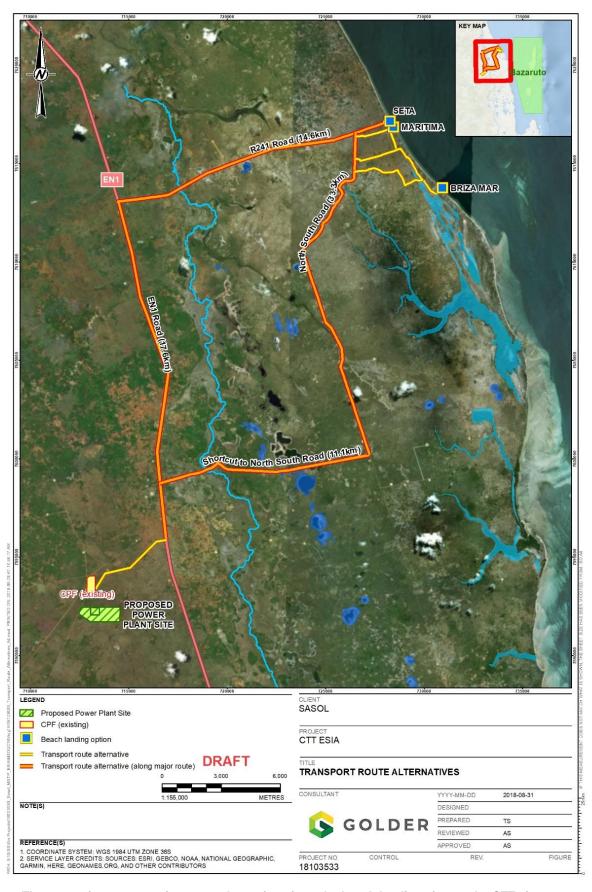


Figure 8: The two main transportation route alternatives from the beach landing sites to the CTT site



3.0 REGULATORY REQUIREMENTS

Applicable Standards must be complied with for all project activities (the "Project Standards"). Project Standards comprise:

- 1) Applicable Mozambican national standards;
- 2) International standards and guidelines; and
- 3) Other industry guidelines with which CTT has committed to comply.

3.1 Applicable Mozambican national legislation

3.1.1 Relevant National laws to ensure the health and safety of employees

Summary/citation: The employer must provide its employees with good physical, environmental and moral work conditions, inform them about the risks present at their workplace, and instruct them on the proper observance of OSH rules:

- Law n.º 23/2007 of 1 August Labour Law. (Article 59°; 216/2°);
- Decree n.º 120/1971 of 13 November; Regulation on Personnel Safety and Hygiene at Work applicable to civil engineering works;
- Decree n.º 61/2006 of 7 November, that approves the Regulation of Technical and Health Security for Geological-Mining Activities and revokes the legislation that opposes this Regulation; and
- Decree n.º 48/1973 of 5 July; General Safety Rules at Work in Industrial Units.

3.1.2 Relevant National laws to ensure the health and safety of people other than their own employees

Summary/citation: On a construction site measures to protect the visitors must be taken. The safety of the public must be ensured with regard to the installation of scaffolding, ladders and walkways and other facilities.

Decree n.º 120/1971 of 13 November; Regulation on Personnel Safety and Hygiene at Work applicable to civil engineering works (Article 20°; 52°).

3.1.3 Relevant National laws to ensure surveillance of the working environment and working practices

Summary/Citation: In the industry, construction and mining sectors there are specific OSH regulatory developments, namely on premises, facilities, vehicles and other work equipment, work environment, use of explosives and social facilities.

In the event of any production and storage units of explosives, the enterprise must define safety and emergency rules and procedures:

- Decree n.º 120/1971 of 13 November; Regulation on Personnel Safety and Hygiene at Work applicable to civil engineering works;
- Decree n.º 61/2006 of 7 November, that approves the Regulation of Technical and Health Security for Geological-Mining Activities and revokes the legislation that opposes this Regulation;
- Decree n.º 40/2013 of 21 August, approves the Regulation of Law 6/2011 of 11 January, Law on Explosive Substances (Article 38°); and
- Decree n.º 48/1973 of 5 July; General Safety Rules at Work in Industrial Units.



3.2 International standards and guidelines

The international standards which CTT will implement are those set by the WB OP 4.03 PS4

WB OP 4.03 Performance Standards for Social and Environmental Sustainability set out a range of recommendations with regard to community health, safety and security (Performance Standard 4). CTT will comply with Performance Standard 4.

Key requirements include:

- Evaluation of the risks and impacts on the affected community during the design, construction, operation and decommissioning of the project;
- Infrastructure and equipment safety
- Where the project poses risks to the health, safety and security of communities, an Action Plan will be disclosed on an ongoing basis to enable the community to understand the risks and adverse impacts;
- The Design, construction, operation and decommissioning of the project will be in accordance with good international industry practice. Consideration will be given to potential exposure to natural hazards;
- Adverse impacts on soil and groundwater as a result of the project will also be avoided;
- The transmission of communicable diseases from temporary or permanent labour will be minimised;
- Risks and impacts of project activities will be assessed and communicated in a culturally appropriate manner. Emergency community situations shall be addressed; and
- Where employees or contractors are retained to provide security, the risks to those inside and outside the project site will be assessed.

The WBG Environmental, Health, and Safety Guidelines include community health, safety and security aspects. The guidelines address aspects related to:

- Water quality and availability preventing adverse impacts to the quality and availability of groundwater and surface water resources, and protecting drinking water sources, whether public or private, at all times;
- Structural safety of project infrastructure reducing potential hazards posed to the public while accessing project facilities, and undertaking hazard analysis to identify opportunities to reduce the consequences of a failure or accident;
- Life and fire safety design, construction and operation of all new buildings accessible to the public in accordance with building codes, fire regulations, legal/insurance requirements, and an internationally accepted life and fire safety standard. Fire prevention means of egress (design measures that facilitate safe evacuation in case of an emergency), detection and alarm systems, and an emergency response plan are important elements of the life and fire safety provisions (best practice standards will be adopted);
- Traffic safety preventing traffic accidents and promoting traffic safety of all project personnel and community;
- Transport of hazardous materials establishing procedures to ensure compliance with local laws and international requirements applicable to the transportation of hazardous materials, as well as measures presented for preventing or minimising the consequences of catastrophic releases of hazardous materials;



■ Disease prevention – preventing the occurrence and spread of communicable diseases, including surveillance, active screening and treatment of workers, undertaking health awareness and education initiatives in local communities, and providing health services; and

Emergency preparedness and response – preparing Emergency Preparedness and Response plans commensurate with the risks of the facility, including provisions for communication systems, community notification, media and agency relations, medical services and government capacity and collaboration.

4.0 SCOPE OF THE FRAMEWORK PLAN

The scope of the CHSSF addresses the CTT's commitment to:

- Mitigate potential impacts of project related activities that may affect the health, safety and security of communities within the project area and along the transportation route. Figure 1 provides an outline of the proposed project area and transportation route;
- Maintain a healthy workforce and labour pool in the community; and
- Contribute to the improved health and wellbeing of the local community in the project area.

The CHSSF will be implemented at the beginning of the construction phase and continue to the end of the project life.

In accordance with the current state of project development, this management plan provides a framework which is conceptual in nature and will need to be updated as necessary, when more information becomes available as the project's front end engineering and design (FEED) programme continues. Reference is made to a CHSS Plan, as this is ultimately what this framework is guiding the Proponent to achieve and implement prior to activities commencing on the project.

5.0 ROLES AND RESPONSIBILITY

The role of the Proponent legal representative is to ensure compliance with legislation and company standards and other requirements set out in this framework. The Managing Director's responsibilities are to approve this framework and develop a plan to ensure the resources required for implementation are available and that the plan is implemented.

6.0 MITIGATION MEASURES: PROJECT COMMITMENTS AND PROGRAMMES

6.1 Summary

In terms of community health and safety, CTT's strategy is to implement programmes that contribute to the maintenance of a healthy workforce and local community. This document outlines CTT's commitment and approach to mitigating community health, safety and security risks that may arise as a direct or indirect result of the project.

Prior to commencing construction, CTT will undertake a detailed community health, safety and security assessment, to identify potential negative risks related to the different phases of the project. Some of the significant risks to be considered include:

- Possible pressure and additional demand on community health services associated with the influx of workers from outside the project area.;
- Possible pressure and additional demand on utility services including water and wastewater treatment plant associated with the influx of workers from outside the project area;



- Increased riks of GBV/SEA as a result of influx of employment and business seekers and cash income
- Possible pressure and additional demand for social services as a result of increased family stress and violence;
- Possible change in community wellness as a result of alcohol, and substance abuse associated with the influx of workers from outside the project area;
- Possible change in community health as a result of the sudden spread of communicable and non-communicable diseases, including sexually transmitted diseases associated with the influx of workers from outside the project area;
- Possible pressure on traffic and transportation network associated with construction and operations activities, including the risk of accidents; and
- Possible change in water and air quality associated with construction and operations activities.

In addition to the potential negative impacts which would require mitigation, the operation of the project also has the potential to improve community health safety and security through the following means:

- Improved access to facilities for communities due to rehabilitated and widened roads;
- Improved healthcare infrastructure;
- Improved workforce health awareness;
- Improved standards of living for direct and indirect employees due to better income in the employee's households; and
- Improved standards of living of vulnerable groups and their households, including support to the elderly within the respective households.

The comprehensive community development plan will specifty how the provision of social services and infrastructure highlighted above will be provided. The necessary control measures and Community Health, Safety and Security Plan (CHSSP) will be developed and adapted in response to the risks identified through the Social Impact Assessment. The CHSS plan will be elaborated on and implemented via the mitigation measure commitments contained in the ESMP's, prior to the commencement of the project.

6.2 Key Communities and Stakeholders

In order to give effect to the mitigation measures set out in Table 2, it is important to maintain an open line of communication with a number of key stakeholders. Key communities and other stakeholders of relevance to this framework are listed in Table 1.

Table 1: Stakeholders Groups

Stakeholder group	Stakeholder
Decision Makers/Regulators	
Government – National	Ministry of Land, Environment and Rural Development; Ministry of Economy and Finance; Ministry of Agriculture and Food Security; Ministry of Public Works, Housing and Water Resources; Ministry of the Sea, Inland Waters and Fisheries; Ministry of Culture and Tourism;



Stakeholder group	Stakeholder
	Ministry of Transports and Communications; Ministry of Labour, Employment and Social Security; National Directorate of Agrarian Services; National Directorate of Land and Forestry; and National Directorate for Conservation Areas;
Inhambane Provincial Government	Office of the Provincial Governor; Provincial Directorate of Land, Environment and Rural Development; Provincial Directorate of Public Works, Housing and Water Resources; Provincial Directorate of Agriculture and Food Security; Provincial Directorate of Fisheries; Provincial Directorate of Sea, Inland Waters and Fisheries; Provincial Directorate of Labour, Job and Social Safe; Provincial Directorate of Transport and Communications; Provincial Directorate of Women and Social Action; Provincial Directorate of Health; and Provincial Directorate of Tourism; Provincial Directorate of Tourism;
District Level Government	Inhassoro District Administrator; District Services of Economic Activities; District Services of Education, Youth and Technology; District Services of Health, Woman and Social Affair; District Services of Planning and Infrastructures; District Services of police; and District Services of Economic Activities.
Interest Group	
Public, private companies, agencies and financial institutions (national and provincial level)	ENH; ENH Logistics; Petromoc; Matola Gas Company; World Bank; EDM; National Road Administration (ANE); ARA-Sul; and Beira Port companies Authority (e.g. Beira).
Environmental Interest Groups	IUCN; FNP - Forum for Nature in Danger; WWF Mozambique; Endangered Wildlife Trust; National Administration of Conservation Areas (ANAC); Centro Terra Viva; and African Parks.



Stakeholder group	Stakeholder
Locally Affected People	
Local leaders	Villages leaders appointed by the government; Traditional Authorities, chiefs and leaders; Religious or educational leaders; Religious leaders; and Influential people.
Affected individuals	Men, women, children, youth and elderlywithin the project area, including vulnerable groups
Local institutions and service providers in the project area of influence	Educational, health and policeservices.
Local business/companies	Business owners (onshore, offshore and from Bazaruto Archipelago); and Fisheries Association: Vilanculo.
Local NGOs, conservation entities and civil society organisations	Livaningo; AMAVIL (Associação dos Amigos de Vilankulo); Forum Turismo de Vilankulo; Plataforma dos Recursos Naturais e Indústria Extractiva; Associação para Investigação Costeira e Marinha; and Associação Tomba Yedo (Ilha de Bazaruto).
Community Based Organisations	Local organisations representing key interest groups within the community.



Table 2: CHSSF Intervention Matrix

	Mitigation Measure	Action/ Timing	Responsibility	Monitoring and Reporting	Means of Verification	Key Performance Indicators
Impact Category	: Community Health, Safety and Security Impacts: Construction and Operation	onal Phases of the Pi	roject			
Community health, safety and security impacts: General	For purposes of the construction and operational phases of the project, develop a CHSSP as required to meet WB OP 4.03 Performance Standard 4. For purposes of the construction and operational phases of the project, develop an induction programme, including a code of conduct, for all workers directly related to the project. As part of the CHSSP, the following will also need to be developed and implented: Develop and implement SEA/GBV Prevention and Response Plan Health Management plans (STI, STD, Malaria, Communicable Diseases, etc); Community Health Information System; Security Management Plan; Contractors Code of Conduct; Community Awareness Program; Environmental Health Programs (to reduce dust and other pollutants that could pose a risk to community health); and Accident Prevention and Response Procedure Have all employees of contractors (including sub-contractors), supervision consultants and other consultants with a footprint on the ground in the project area sign CoCs; A copy of the code of conduct is to be presented and explained to all workers and signed by each person Additionally, a copy of the code shall be displayed in a location easily accessible to the community and project affected people. It shall be provided in languages comprehensible to the local community, Contractor's Personnel, Employer's Personnel and affected persons. The code of conduct must address the following aspects: Respect for local residents and customs; Non-Discrimination (for example on the basis of family status, ethnicity, race, gender, religion, language, marital status, birth, age, disability, or political conviction) Compliance with applicable laws, rules, and regulations of the jurisdiction Zero tolerance of bribery or corruption; Zero tolerance of illegal activities by construction and plant personnel, including prostitution, illegal sale or purchase of alcohol, sale, purchase or consumption of drugs, illegal gambling or fighting:	Construction/Operations	 CTT Management; OHS division; Contractors; Supervisors; and Community liaison officers. 	Ongoing	 CHSSP and an Emergency Response Plan; Develop and implement SEA/GBV Prevention and Response Plan A document setting out the Induction programme and code of conduct; and Complaint reports. 	 Compliance with WB OP 4.03 Performance Standard 4; Health and safety-related incidents and/or medical attention/hospitalisation against the baseline; Implementation of the induction programme and a code of conduct as evidenced by implementation monitoring reports; Complaints/grievances register: Local residents and village councillors plus proof of feedback regarding actions taken in response to complaints lodged; and Feedback to site and management meetings with agreement on interventions to remedy deviance from plans.



Mitigation Measure	Action/ Timing	Responsibility	Monitoring and Reporting	Means of Verification	Key Performance Indicators
Zero tolerance policy of drunkenness and a no alcohol and drugs policy during working time (plant and construction personnel) or at times that will affect the ability to work or within accommodation camps or acquired from outside the camp while accommodated in the camp;					
 A programme for drug and alcohol abuse prevention and random testing that is equivalent in scope and objectives to the policies prescribed in the code of conduct; 					
 Zero tolerance of sexual harassment (for example to prohibit use of language or behavior, in particular towards women or children, that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate) 					
Compliance with applicable health and safety requirements (including wearing prescribed personal protective equipment, preventing avoidable accidents and a duty to report conditions or practices that pose a safety hazard or threaten the environment) Zero tolerance of violence or exploitation (for example the prohibition of the exchange of money, employment, goods, or services for sex, including sexual favors or other forms of humiliating, degrading or exploitative behavior)					
Protection of children (including prohibitions against abuse, defilement, or otherwise unacceptable behavior with children, limiting interactions with children, and ensuring their safety in project areas). Zero tolerance for sxual relations with anyone under the age of 18, except if married prior to employment.					
 Sanitation requirements such as workers using specified sanitary facilities provided by their employer and not open areas 					
 Avoidance of conflicts of interest (such that benefits, contracts, or employment, or any sort of preferential treatment or favors, are not provided to any person with whom there is a financial, family, or personal connection) 					
 Respecting reasonable work instructions (including regarding environmental and social norms) 					
Protection and proper use of property (for example, to prohibit theft, carelessness or waste					
Duty to report violations of this Code					
Non- retaliation against workers who report violations of the Code, if that report is made in good faith.					
■ The Code of Conduct should be written in plain language and signed by each worker to indicate that they have:					



Mitigation Measure	Action/ Timing	Responsibility	Monitoring and Reporting	Means of Verification	Key Performance Indicators
-received a copy of the code;					
- had the code explained to them;					
 acknowledged that adherence to this Code of Conduct is a condition of employment; and 					
understood that violations of the Code can result in serious - consequences, up to and including dismissal, or referral to legal authorities					
Description of disciplinary measures for infringement of the code and company rules. If workers are found to be in contravention of the code of conduct, which they signed at the commencement of their contract, they must face proportionate disciplinary procedures;					
Publicise the code of conduct in settlements potentially affected by the construction camps, as part of the community relations plan. This will help ensure that the local residents are aware of the expected behaviour of the construction staff;					
Provide entertainment facilities for workers at the construction accommodation camp as well as for operational workers and establish clear rules for conduct during leisure time as well as the need to remain within the camp boundaries during leisure time; and					
Provide appropriate sporting facilities, including organised sporting activities for workers at the permanent accommodation camp.					
For purposes of the construction and operational phases of the project, implement a grievance procedure that is easily accessible to the local community, through which complaints related to CTT contractor or employee behaviour that infringes on the health, safety or security of community members can be lodged and responded to. CTT must respond to such complaints in a considered manner, including: Circulation of contact details of community liaison officers or, if separate, of 'grievance officers' or other key contact;					
 Raising of awareness amongst the local community regarding the grievance procedure and how it will work; 					
 Establishment of a grievance register that is continuously updated and maintained by CTT; a 					
 Provision of a mechanism to provide feedback to individuals, groups and village councillors regarding actions that have been taken in response to complaints lodged; and 					
Also establish a Worker's complaint mechanism					



	Mitigation Measure	Action/ Timing	Responsibility	Monitoring and Reporting	Means of Verification	Key Performance Indicators
Impact on Diseases	 For purposes of the construction and operational phases of the project: Develop a Health Management plans (STI, STD, Malaria, Communicable Diseases, etc); Develop a Community Health Information System; Develop Environmental Health Programs (to reduce dust and other pollutants that could pose a risk to community health); Develop an Employee Health Awareness Policy and ensure its implementation amongst CTT personnel and its contractors and subcontractors. The policy must provide for; HIV/AIDS related advocacy, factual data provision, awareness creation as well as behaviour change issues around the transmission and infection of HIV/AIDS that provides linkages with the Government of Mozambique HIV/AIDS related initiatives; Health awareness training for workers, including communicable diseases at induction and then periodically throughout construction; Awareness raising on communicable diseases for communities close to camps (via posters, leaflets, through health clinics, community meetings, through schools and other local organizations); Liaison with local health authorities, and Implement interventions aimed at reducing the impacts of vector borne diseases through mechanisms such as sanitary improvements and minimising areas where water is impounded because of construction and operational activities. 	Construction/Opera tions	 CTT Management; OHS division; Contractors; and Supervisors. 	Ongoing	 Documented employee health awareness policy; Documented training programmes; Documented communicable health awareness campaign; Printed posters, and leaflets; and Proven interventions to reduce impacts of vector borne diseases activities. 	 Employee Health Awareness Policy implementation; Minutes of liaison meetings with local authorities; and In-situ proof of distribution of printed posters, leaflets and leaflets at health clinics and community meetings.



	Mitigation Measure	Action/ Timing	Responsibility	Monitoring and Reporting	Means of Verification	Key Performance Indicators
General Communicable and Non- Communicable Disease Related Impacts	 Ensure that no waste whatsoever, including operational waste, is dumped in watercourses or at any site that impacts on villagers or their land use; Ensure that the CTT use of water does not disturb public water availability and that sources of water are carefully selected; Ensure the development of a water and hygiene code of conduct that prohibits open defecation/urination, stresses the proper water use, water conservation, hygiene and sanitation to prevent pollution of community water sources; Evaluate opportunities for health systems strengthening (HSS) with government and key partners for improved case detection and treatment of TB; Support community based information, education and communication (IEC) campaigns to promote improved knowledge and awareness of TB, other infectious diseases and their associated determinants; Reassess project impacts on community-dependent ecosystem services and develop corresponding mitigation measures. This includes the design and development of appropriate environmental health programmes to reduce the potential risk of airborne pollutants such as dust, which may impact on community health; Develop educational materials regarding the prevention of water, sanitation and waste related diseases; Monitor changes to footprints of animal husbandry activities adjacent to the CTT facilities; and Support the improvement of veterinary public health services in the project area, including preventative programmes such as vaccinating and sterilising dogs, vaccinating livestock and the control of the public slaughter of livestock. 	Operations	 CTT Management; OHS division; Contractors; and Supervisors. 	Ongoing	Plans and their actioning in respect of all mitigation measures, including proof of purchase of medicines and apparatus.	 Reports on water source/course quality and availability against baseline; Water and hygiene code of conduct implementation as evidenced by monitoring reports; Evidence (minutes/attendance registers of community work groups) re. mosquito source reduction in communities through environmental; Documentation (minutes; records; attendance; treatment logs; and pictures showing implementation) proving health intervention programmes on community nutrition education and health programmes; Documentary proof of community based IEC campaigns re. TB determinants; Evidence of outbreak planning, rehearsal and updating; and Using valid and reliable indicators to determine change, as a result of the above interventions, against the baseline.
Impact on Community Safety	Ensure the ongoing implementation of the CHSSP and an Emergency Response Plan as required to meet WB OP 4.03 Performance Standard 4; Traffic and Pedestrian Safety: - Ensure the adoption and implementation of the CTT driving and vehicle management plan during initial activities which will be adopted for the construction phase. Based on this, CTT must adopt the best transport safety practices with the goal of preventing traffic accidents and minimising injuries suffered by project personnel and the public, as well as creating awareness amongst the local people and villages about road safety. Other mitigation should include: Development of a Security Management Plan Development of a Contractors Code of Conduct Development of a Community Awareness Program Development of a Environmental Health Programs (to reduce dust and other pollutants that could pose a risk to community health) Development of an Accident Prevention and Response Procedure	Construction	 CTT Management; OHS division; Contractors; Supervisors; and Community liaison officers. 	Ongoing	Documentation and action plan based on mitigation measures.	 Proof of Traffic Management Plan; In respect of traffic and pedestrian safety, compliance with CTT driving and vehicle management plan, based on regular inspection and monitoring; Compliance with transport, Storage and Handling of Hazardous Materials and Waste Plan and protocol; Documented proof of implementation of violence and crime mitigation measures and monitoring; Documented proof of the implementation of fire risk management mitigation measures and monitoring;



Mitigation Measure	Action/ Timing	Responsibility	Monitoring and Reporting	Means of Verification	Key Performance Indicators
 Emphasising safety aspects amongst project drivers, explicitly ensuring that drivers respect speed limits through busy and built up areas; Ensuring the roster and shifts structure for the project allows employees plenty of opportunity for sleep and rest between shifts and on their days off; Adopting a proactive approach to managing driver fatigue, based on adequate hours of rest to avoid overtiredness; Avoiding dangerous routes and times of day to reduce the risk of accidents; Positioning traffic guides at children's crossings to control driver speeds and seeking cooperation with local educational facilities (schoot teachers) for road safety campaigns; Implementing safe traffic control measures, including road signs and flag persons to warn of dangerous conditions and children's crossings; Provision of alternative transport (bus) for the construction workforce; Ensuring contractors maintain vehicles to minimise potentially serious accidents such as those caused by brake failure commonly associated with loaded construction vehicles; Ensuring contractors compile a list of service schedules of all equipment deployed on site; Minimising interaction of pedestrians with construction vehicles through collaboration with local communities and responsible authorities (e.g., police) to improve signage, visibility, and overall safety of roads, particularly along stretches located near schools or through busy areas; Considering additional warning tape at accident-prone stretches and sensitive locations (schools and hospitals) if identified as required; and Collaborating with local communities on education about traffic and pedestrian safety (e.g. one road safety campaign at a nearby location once a month). Prepare a Traffic Management Plan: This is to be based on CTTs existing driving and updated to accommodate specific aspects related to the operational phase of the project. The final plan should include pro					 Site and management meeting minutes and directives to improve performance in respect of community safety, generally; and Reported community safety and fire related incidents against the baseline to gauge intervention efficacy and impact.



Mitigation Measure	Action/ Timing	Responsibility	Monitoring and Reporting	Means of Verification	Key Performance Indicators
Transport and Storage of Hazardous Materials and Waste: - Ensure that appropriate management plans are in place and implemented in respect of the Transport, Storage and Handling of Hazardous Materials and Waste;					
Ensure that there is timely public notification of planned transport of hazardous materials and suitable arrangements for support vehicles.					
 Ensure that transport and storage of hazardous materials and wastes are comprehensively aligned with regulatory and community health and safety compliance requirements; 					
 Ensure that relevant personnel are trained in safe transport, storage, use and handling of hazardous materials as well as the use of spill kits and disposal practices; and 					
Ensure that any hazardous material storage areas are provided with containment measures as per regulatory and community health and safety compliance requirements.					
Violence and Crime: - Sensitise and build the capacity of local governance systems (village chairperson and councillors at the settlement level), including the establishment of checks and balances for maintaining individual rights and responsibilities and for managing crime;					
 Identify mechanisms for constructively incorporating traditional (clan) leaders into processes for promoting stability and moral 'regeneration' at village level; 					
 Promote the development of a disciplined policing forum for the area, in collaboration with appropriate civil society organisations as well as the Police Department; and 					
Ensure the development of appropriate mechanisms as part of the CHSSP.					
Fires: - Manage the risks of fire through specific management requirements for hot works and through education of personnel about careless behaviour in respect of cigarette smoking;					
 Promote the establishment of village level fire-fighting and emergency preparedness capacity, including the sourcing of fire-fighting equipment capacity; 					
 Promote awareness amongst members of the settlements about potential fire hazards and mechanisms for promoting household safety from fires; and 					



Mitigation Measure	Action/ Timing	Responsibility	Monitoring and Reporting	Means of Verification	Key Performance Indicators
 Manage the risks of fire through specific management requirements for hot works and through education of personnel about careless behaviour in respect of cigarette smoking; 					
Security:- Mechanisms for ensuring site security and associated access management onto CTT property;					
 Rights and responsibilities regarding movement within the concession area; 					
Specific 'no-go' areas as well as interaction with security guards and risks to those within and outside the project site posed by its security arrangements;					
Engagement and consultation:-					
Incorporate and integrate the Voluntary Principles on Security and Human Rights into CTT operational related security management policies, awareness creation and training materials and procedures and assessment processes;					
Communicate regularly with stakeholders about the CTT operations as well as plans in support of community initiatives, as a means of reducing local unease or resistance. It is a critical requirement that CTT builds trust with its stakeholders in respect of the continuing safe operation of all facilities; and					
Ensure the ongoing functionality and accessibility of the grievance procedure that has been implemented in the local community, and that complaints related to CTT contractor or employee behaviour that infringes on the health, safety or security of community members that are lodged are responded to satisfactorily. The grievance procedure must include ongoing efforts in respect of:					
 Circulation of contact details of community liaison officers or, if separate, of 'grievance officers' or another key contact; 					
 Circulation of the details of the Witness NGO as well as the mechanisms to access the NGO; 					
 Raising of awareness amongst the local community regarding the grievance procedure and how it will work; 					
 Establishment of a grievance register that is continuously updated and maintained by CTT; and 					
 Provision of a mechanism to provide feedback to individuals, groups and village councillors regarding actions that have been taken in response to complaints lodged; 					



	Mitigation Measure	Action/ Timing	Responsibility	Monitoring and Reporting	Means of Verification	Key Performance Indicators
Management of Security personnel	The proposed CTT project will require security personell to monitor project infrastructure and movements with the project are. Consequently, local communities will be made aware of the presence of the Security personnel on site and of their roles and responsibilities. Additionally, a grievance mechanism will be in place for members of the communities to express their concerns or grievances regarding security conduct. Security staff shall be trained adequately in the appropriate conduct towards the local communities, security personnel will undergo the following trainings:	Pre construction and operation	CTT Management;CTT HR;Contractors; andSupervisors.	Ongoing	Scheduled training and induction sessions/s	Evidence of training attendance
	 Healthy working conditions and Safety Knowledge of rules for healthy and safety; and 					
	Induction - Introduction to the working environment, policies and practices organizational structure, and Introduction to the company mission, vision, values and goals					
	To promote the security of communities, the client shall ensure they following key aspects:					
	security personnel are unarmed;					
	 all security personnel receive training on Project expectations and procedures for security behaviour and practices on induction and annually; 					
	Screening of security personnel prior to employment to avoid hiring those who have previously been involved in abuse or violation of human rights;					
	Appropriate supervision is provided to ensure that established procedures are being applied by security personnel;					
	 security arrangements are communicated to relevant stakeholders including workers and communities, without compromising the security of the Project; 					
	 community grievances in relation to the conduct of security personnel or activities are addressed in accordance with the Project's established Grievance Procedure; 					
	if unlawful or abusive acts are committed by security personnel immediate action is taken to prevent recurrence and report unlawful and abusive acts to public authorities;					
	 monitor the performance of security personnel through the use of a range of indicators including grievances; and 					
	there is agreement with government authorities on the principles to be followed in use of government forces, and on an appropriate response prior to any incident being attended by government forces					



	Mitigation Measure	Action/ Timing	Responsibility	Monitoring and Reporting	Means of Verification	Key Performance Indicators
Nuisance Impacts	During the construction and operational phases of the project, implement all mitigation measures recommended by specialist studies related to, e.g. noise and air quality.	Construction/Opera tions	CTT Management;OHS division;Contractors; andSupervisors.	Ongoing	Reports reflecting noise and air quality interventions.	Compliance with noise and air quality legislation and regulations as reflected in noise and air quality specialist studies.
Crime	 For purposes of the construction and operational phases of the project: Provide support for the establishment of a crime prevention and policing forum in collaboration with role-players from central, district as well as local levels; Provide all stakeholders with contact details of maintenance and emergency staff at the production facility and ensure that this information remains updated. Local inhabitants will be CTTs eyes and ears in this regard and can be of assistance in day to day monitoring of any events that should be noted or acted upon in relation to the safety and maintenance of CTT infrastructure and facilities; and Establish reliable systems to monitor violence and crime at the community level, and Establish protocols with the appropriate authorities regarding the management of incidents. Support traiing for local law enforcement agents and community safety patrols 	Construction/Opera tions	 CTT Management; Supply chain; OHS division; Contractors; Supervisors; Grievance officers (where applicable); and Community liaison officers. 	Ongoing	 Documentation regarding support actions; Mechanisms (Forums); Information; Expenditure reports; Safety attire; and Policies and crime statistics database. 	Documentary evidence (minutes; plans) of support to Crime Prevention and Policing Forum establishment. Proof (e.g. photographs) of posting of contact details of maintenance and emergency staff and procedure for local inhabitants to make reports on safety and maintenance. Documentary evidence (monitoring reports; pictures; procurement records) regarding the use of branded safety vests and vehicles. Site and management meeting minutes and directives to improve performance in respect of crime management.
Impact of In- Migration	 For purposes of the construction and operational phases of the project to implement the strategy for minimising in-migration. Ensure that the influx management and labour recruitment plans limit in-migration to the project area and prevent the mushrooming of "camp followers" settlements near the accommodation or work areas of the project; and Undertake a regular census in the area and, in collaboration with all relevant central, district and local authorities and develop strategic plans to ensure adequate provision of basic services such as housing, water and sanitation, power, education and health care 	Construction/Opera tions	 CTT Management; HS division; Contractors; and Supervisors. 	Ongoing	Documented strategies; plans with mechanisms	Compliance with Influx Management Plan. Documented proof (minutes) of engagement with government and all partners on Influx Management Strategy plan implementation.
GBV/SAE prevention/respo nse action plan	 Develop and implement a GBV Action Plan' which outlines: How the project will put in place the necessary protocols and mechanisms to address the GBV risks; and, How to address any GBV incidents that may arise. The GBV action plan should include: A GBV/SAE zero tolerance policy (including a CoC) including agreed sanctions for the Accountability and Response Framework. These should be provided by the contractor and consultants as part of the C-ESMP Specific arrangements for the project by which GBV risks will be addressed, including: 	Pre construction and operation	CTT Management;HS division;Contractors; andSupervisors	Ongoing	Documented strategies; plans with mechanisms	Compliance with GBV action plan. Documented proof (minutes) of engagement with government and all partners on GBV action plan implementation.



Mitigation Measure	Action/ Timing	Responsibility	Monitoring and Reporting	Means of Verification	Key Performance Indicators
 Awareness Raising Strategy, which describes how workers and local communities will be sensitized to GBV risks, and the worker's responsibilities under the CoC; Referral Pathway: Identification of qualified GBV service providers and setting up a referral pathway so GBV survivors will be referred, and the services which will be available (helth, legal, psychosocial, etc.) Establishe a GBV Accountability and Response Framework, to be finalized with input from the contractor, should include at minimum: Set up GBV Allegation Procedures: How the project will provide information to employees and the community on how to report cases of GBV CoC breaches to the GRM. GBV Allegation Procedures to report GBV issues to service providers, and internally for case accountability procedures which should clearly lay out confidentiality requirements for dealing with cases; and, Mechanisms to hold accountable alleged perpetrators associated to the project; The GRM process for capturing disclosure of GBV; and, a referral pathway to refer survivors to appropriate support services. Disciplinary action for violation of the CoC by workers. It is essential that such actions be determined and carried out in a manner that is consistent with local labor legislation and applicable industrial agreements.¹ The supervision consultant should monitor and report on the effectiveness of the implementation of the GBV Action Plan to prevent and mitigate GBV risks associated with the project. Reporting should be done on a monthly basis 					

¹ It is important to note that, for each case, disciplinary sanctions are intended to be part of a process that is entirely internal to the employer, is placed under the full control and responsibility of its managers and is conducted in accordance with the applicable national labor legislation and the individual worker's employment contract. It is key that the proposed sanctions will be in line with local law as these may prohibit certain types of disciplinary measures, including termination of employee.



7.0 IMPLEMENTATION SCHEDULE

7.1 Review and Revision of the management plan

The management plan will be reviewed on an annual basis and any necessary revisions made to reflect the changing circumstances or operational needs of the project. Revision of this management plan will be the responsibility of the Operations Director, who is the custodian of this plan.

If material changes to operating procedures are required, this management plan may be updated on an "as required" basis.

8.0 MONITORING

8.1 Overview of monitoring requirements

The monitoring measures to be implemented during all project phases, to assess compliance with the outlined required project standards, are described in this section.

9.0 TRAINING

The head Community Liaison Officer (CLO) will undergo the following training:

- Introduction to the company mission, vision, values and goals;
- Introduction to the organisational structure, working environment, policies and practices;
- Knowledge of rules for health and safety;
- Development of skills for managing the effectiveness and efficiency of company processes;
- Understanding leadership styles, managing conflicts and introduction to motivational techniques necessary for the effective organisation of people;
- Development of skills for problem solving and decision making; and
- Introduction to the communication channels of the company, development of methods for giving feedback and managing the performance of employees.

The Community Liaison Junior officers will undergo the following training:

- Introduction to the company mission, vision, values and goals;
- Introduction to the organisational structure, working environment, policies and practices;
- Knowledge of rules for health and safety;
- Improvement of skills for better efficiency in work;
- Development of team effectiveness and cooperation in the work process; and
- Improvement of Presentation and Communication skills.

Security personnel will undergo the following training:

- Healthy working conditions and Safety Knowledge of rules for health and safety; and
- Induction Introduction to the working environment, policies and practices, organisational structure, and Introduction to the company mission, vision, values and goals.



CTT will communicate to the relevant public authorities its intent that the security personnel employed by them shall follow the guidelines and the Voluntary Principles on Security and Human Rights. CTT will ensure the security staff are trained adequately in the appropriate conduct towards the local communities, and required to act under the applicable law. CTT will not sanction any use of force unless it is used for preventative and defensive purposes in proportion to the nature and extent of the threat. Local communities will be made aware of the presence of the security personnel on site and their roles and responsibilities. CTT will ensure a grievance mechanism is in place for members of the communities to express their concerns or grievances regarding security conduct. The communities will be trained in how to lodge grievances and to whom.

10.0 REPORTING

10.1 Auditing

Daily inspections will be carried out by operational area superintendents and supervisors covering a broad range of operational aspects, including community health, safety and security issues as appropriate to activities outside the project area.

Any incidents identified during these inspections will be reported through CTT Incident Report Form.

Conformance will be monitored via an annual internal audit programme in accordance with other audit programmes via the Integrated Management System (IMS) or Environmental and Social Management System (ESMS). This will be undertaken to assess broad compliance with the requirements of the HSE management system (including ESIA and management plans).

All incidents and non-conformances identified during these inspections are reported as per the requirements of the CTT Management System.

10.2 Record keeping

Records of audits, inspections and incidents will be managed in accordance with CTT's Data and Records Management System.

11.0 REFERENCES

- 1) https://www.ifc.org/wps/wcm/connect/a40bc60049a78f49b80efaa8c6a8312a/PS4_English_2012.pdf?MO D=AJPERES
- 2) http://www.who.int/hac/techguidance/tools/WHO_strategy_safety_risk_management.pdf
- 3) http://www.oacp.on.ca/Userfiles/StandingCommittees/CommunityPolicing/ResourceDocs/1%20-%20Framework%20for%20Community%20Safety%20PlanningJune20.pdf
- http://www.monash.vic.gov.au/files/assets/public/about-us/council/publications/community-safetyframework-2015-2020.pdf



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APPENDIX A

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