



EAST AFRICAN
**CRUDE OIL
PIPELINE**

ENVIRONMENTAL & SOCIAL MANAGEMENT PLAN



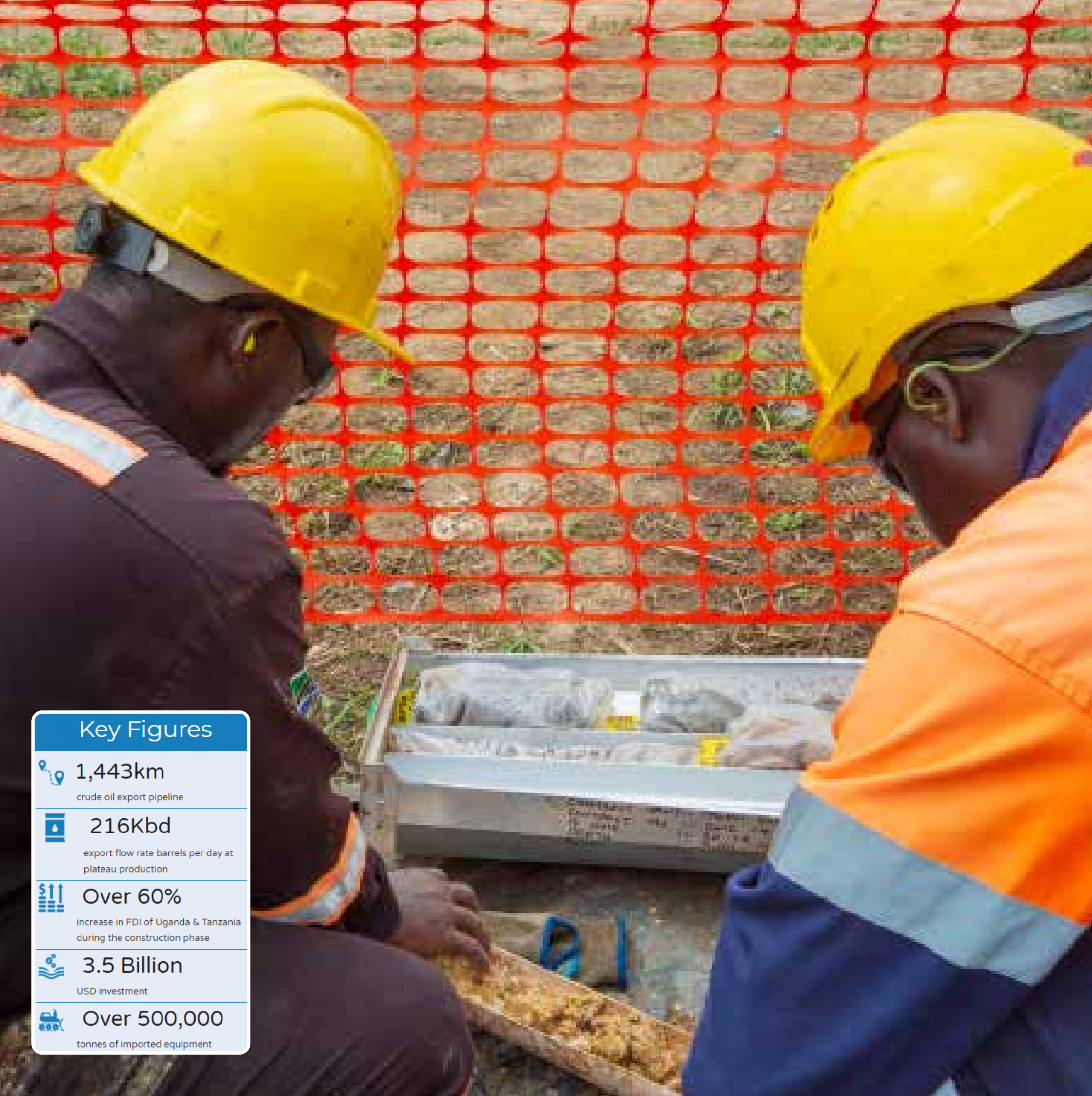
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Key Figures

	1,443km crude oil export pipeline
	216Kbd export flow rate barrels per day at plateau production
	Over 60% increase in FDI of Uganda & Tanzania during the construction phase
	3.5 Billion USD investment
	Over 500,000 tonnes of imported equipment

This Environment and Social Management Plan (ESMP) outlines the key processes implemented by EACOP to manage defined environmental, social, health, safety and security (collectively HSE) aspects and implement the commitments identified in the Environmental Social Impact Assessment (ESIA). The ESMP describes how these processes are organised into the EACOP Integrated Management System (EIMS) and includes the roles and responsibilities of EACOP as an organisation and of contractors who will undertake the construction.

Introduction

This environmental and social management plan (ESMP) demonstrates how the significant aspects identified in the East African Crude Oil Pipeline (EACOP) ESIA's are to be mitigated, managed and/or controlled by the company and its contractors.

The EACOP Project

The EACOP Project is being developed to transport crude oil from the production fields near Kabaale, Uganda for export from a Load-out facility located on the Chongoleani Peninsula located north of Tanga City, Tanzania.

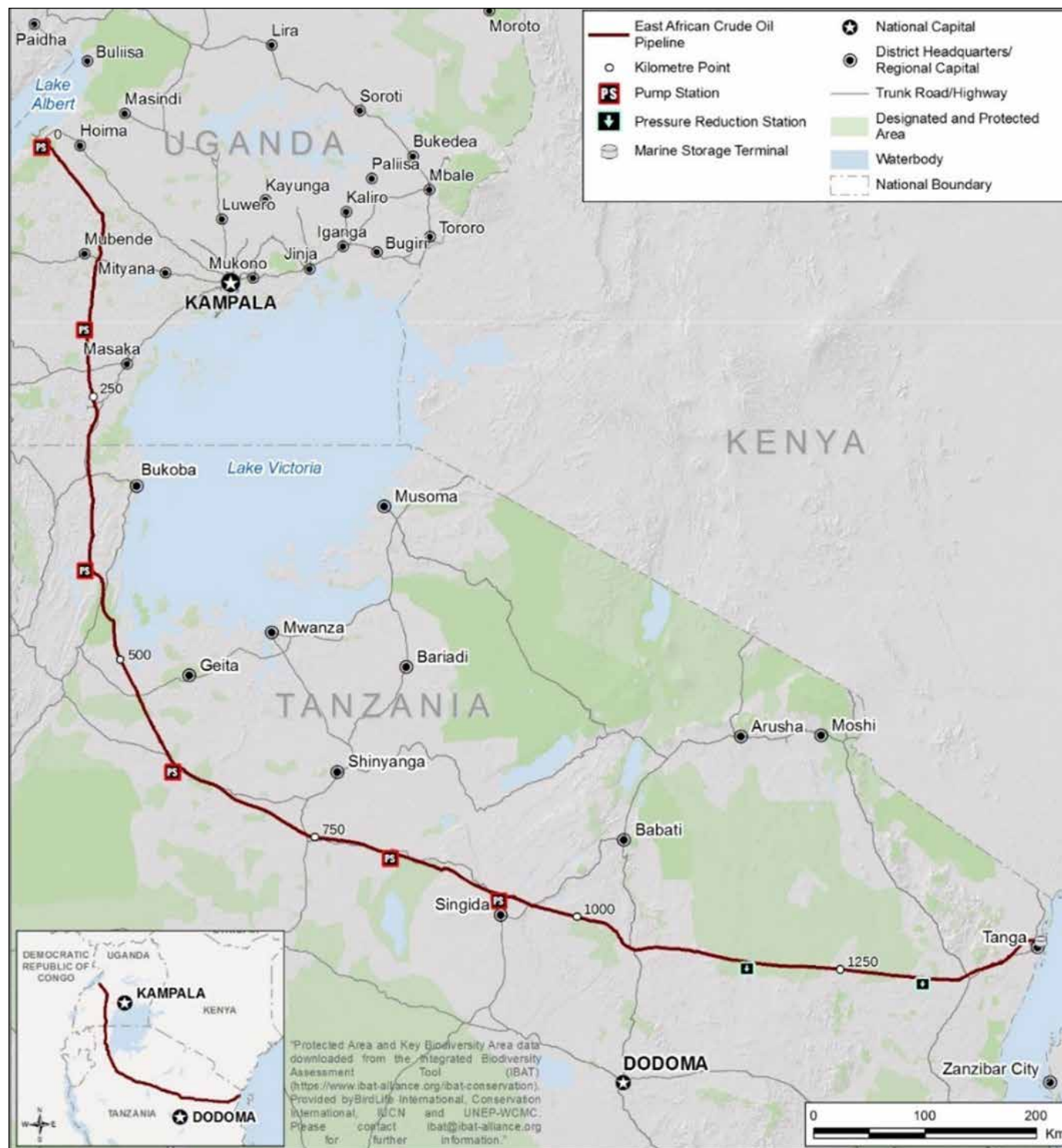


Figure 1: EACOP Route



Project Description

This high-level project description serves to provide standalone information on the EACOP Project in its entirety (Uganda and Tanzania). The project description is presented in two parts; a land-based component and a marine component. Detailed project description including country-specific requirements is presented in the ESIA for each country (Uganda and Tanzania).

Land-based Components

The land component of the EACOP System comprises the crude oil export system and the marine storage terminal (MST) as illustrated in Figure 2: EACOP System Components below.

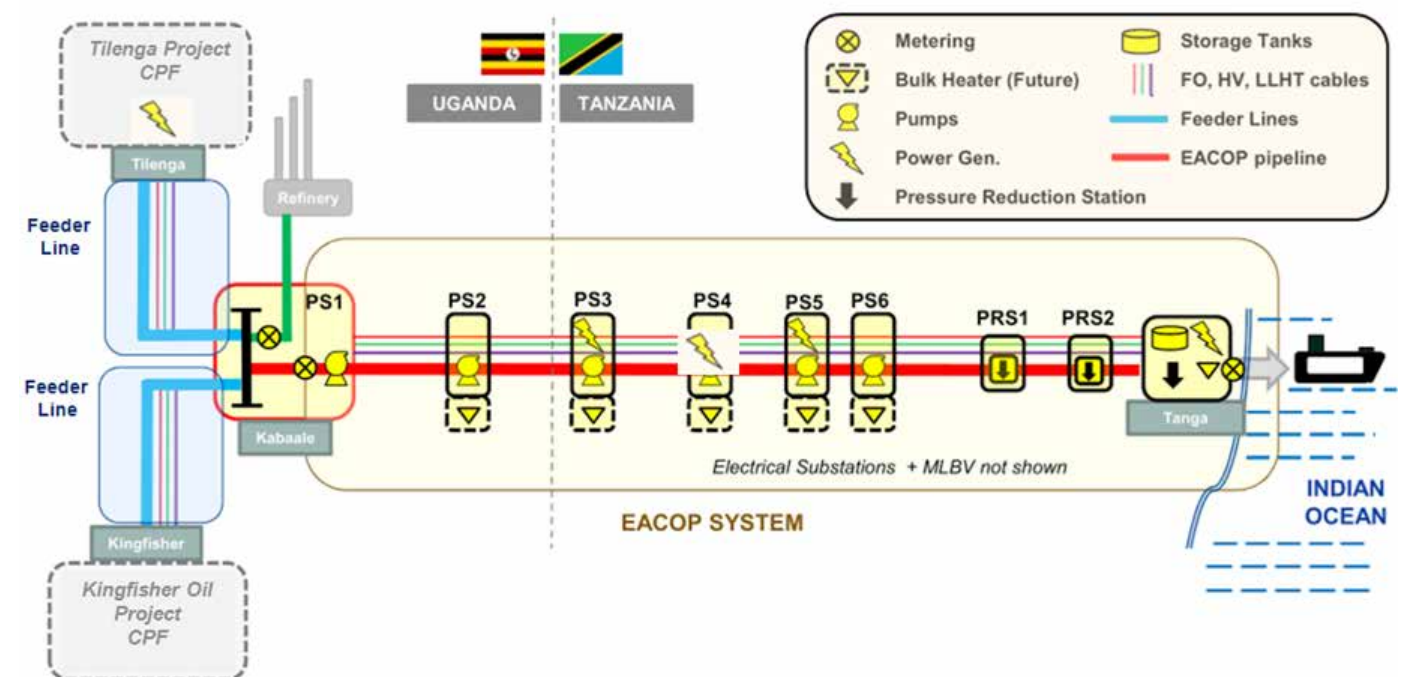


Figure 2: EACOP System Components

The key land-based project components as indicated in Figure 3: Typical EACOP Pipeline Cross-section include:

- **Export pipeline:** 1443 km of insulated, electric heat-traced, 24-inch pipeline originating in Hoima district in Uganda ending at the export Marine Storage Terminal (MST) in Chongoleani, Tanga district.
- Above Ground Installations (AGI), including Pumping Stations (PS), Pressure Reduction Stations (PRS), electric substations and Main-Line Block Valves (MLBV).

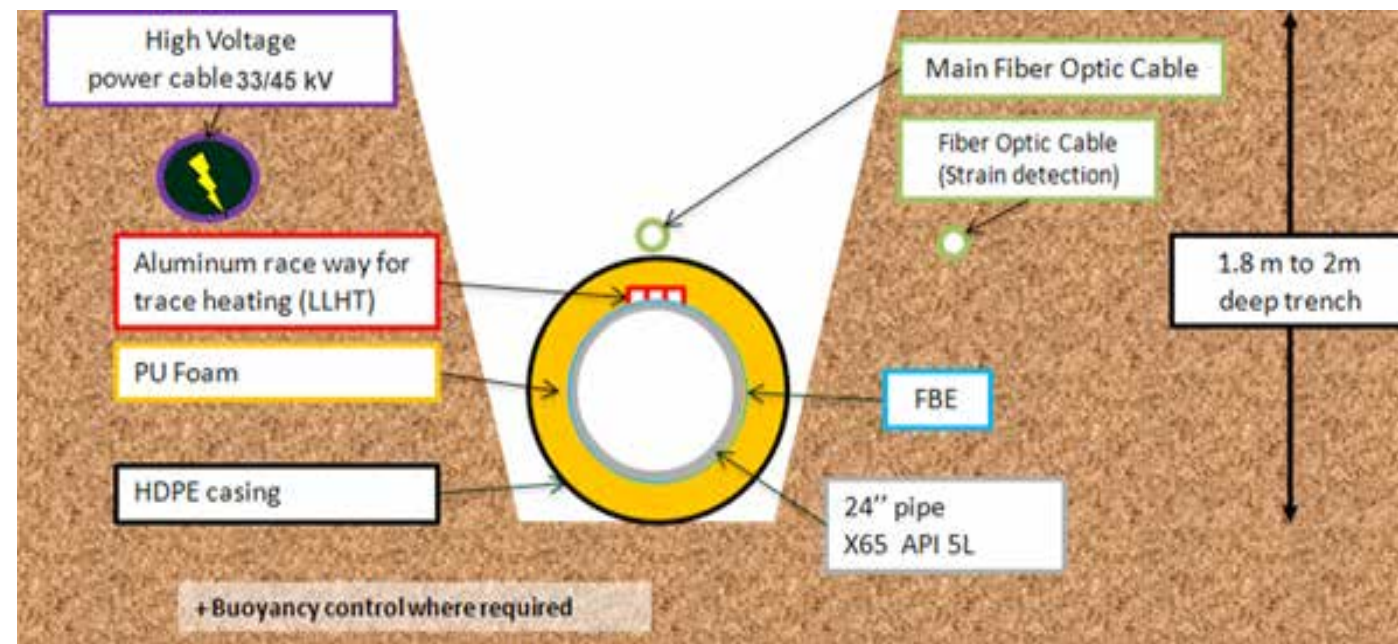


Figure 3: Typical EACOP Pipeline Cross-Section

The AGI comprises:

- 6 pumping stations
- 61 stand-alone MLBV stations in the operational right of way (RoW)
- 3 stand-alone electric substations in the operational RoW
- 15 MLBV stations co-located with electric substations in the operational RoW
- 9 electric sub-stations combined with PS and the MST
- 2 PRS and 1 PR system within the MST
- 1 MST (with approx. 2.0 MMbbls capacity)
- 53.8 km of new or upgraded permanent access roads to PSs, PRSs and the MST
- 68.3 km of new or upgraded construction facility access roads (2.4 km new access roads, 5.9 km of upgrades to existing roads)
- 1 pipe coating facility
- 16 main camps and pipe yards (MCPY).
- **Marine Storage Terminal (MST):** the pipeline terminates at the MST where crude oil is stored before transfer to tankers at the Load-out facility (LOF). The MST design is based on a minimum overall storage capacity of 2 million barrels of crude oil. This is achieved by using four 500,000 barrel, steel storage tanks. The MST is located adjacent to the coast as indicated in Figure 4: Marine Storage Terminal location.



Figure 4: Marine Storage Terminal Location

Construction facilities required to support pipeline construction including:

- 16 Main camp and pipe yard (MCPY) to be constructed along the pipeline corridor to accommodate workers and store line pipe before distribution along the RoW.
- 1 coating facility (CF) and a camp for insulation of the pipes
- access roads

Land requirements: The project will require approximately 5,200 hectares to support the construction phase followed by operation of the EACOP System.

Marine-based Components

The marine components of EACOP comprises:

- A trestle that extends approximately 1,900m from shore to a water depth deep enough to accommodate tankers at the loading platform.
- Loading platform including marine loading arms for the export operation.
- Navigation channels elements (outer and inner channels/northern and southern channels).

The selected proposed layout of the marine component is indicated in Figure 5: Trestle and Platform Loading Layout.

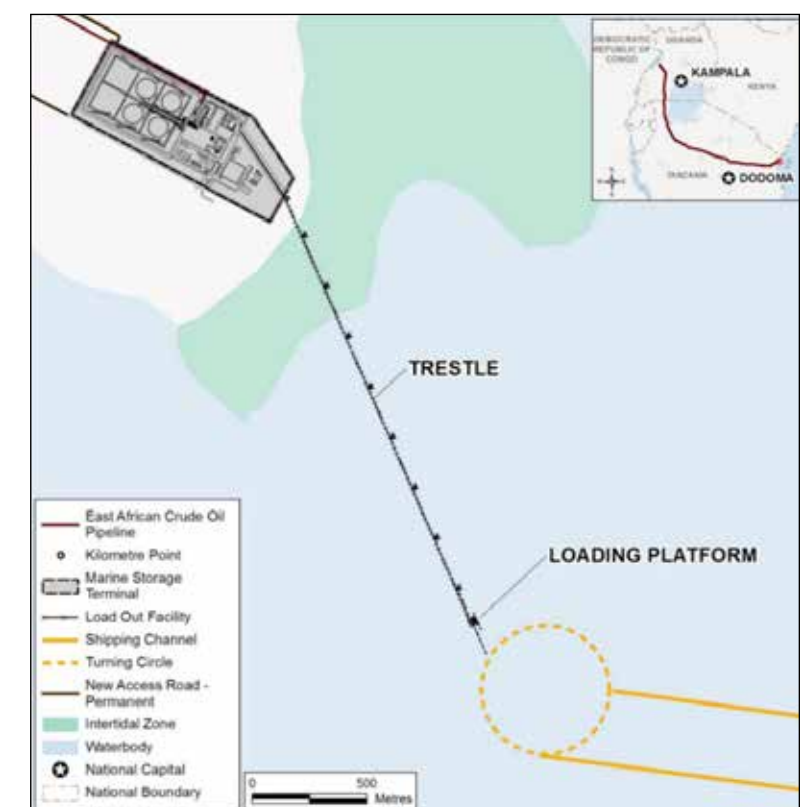


Figure 5: Trestle and Loading Platform Layout

Requirements and Standards

EACOP complies with national regulatory requirements and conforms to international standards applicable to the development, construction, operation and decommissioning of EACOP activities that have potential environmental and social impacts, beneficial and adverse. Detailed description on applicability and project compliance measure(s) to the pertinent country specific and international requirements has been presented in the EACOP Uganda ESIA Section 4 and EACOP Tanzania ESIA Volume 1 Section 4 for Uganda and Tanzania respectively.

Applicable international requirements are presented in detail in the EACOP Uganda ESIA Section 4.4 and EACOP Tanzania ESIA Volume 1 Section 4.4.

The following key standards have been adopted by EACOP:

- International conventions and agreements that Uganda and or Tanzania have signed, acceded or ratified and are implemented under the authority of specific Acts, policies, regulations and government departments or agencies
- IFC Standards as listed in the listed in [EACOP Uganda ESIA Table 4.4.2.1](#) and [EACOP Tanzania ESIA Volume 1 Table 4.4.2.1](#)
- Equator Principles IV (EPs) for assessment and management of environmental and social risk in project
- IFC/World Bank Group Environmental, Health and Safety (EHS) Guidelines
- Organisation for Economic Co-operation and Development (OECD) Common Approaches Recommendation other International Good Practice Guidance including (but not limited to):
 - World Health Organization (WHO) guidelines on air quality, noise and drinking water
 - International Petroleum Industry Environmental Conservation Association (IPIECA) guidelines
 - International Association for Impact Assessment (IAIA)
 - International Labour Organisation (ILO)
 - International Association of Oil and Gas producers (OGP)
 - International Maritime Organization, 2011
 - United Nations Environment Programme (UNEP) guidelines
 - United Nations Women's Empowerment Principles, 2010
 - Nile River Basin Action Plan and Panel of Experts (POE), 1995
 - Extractive Industries Transparency Initiative (EITI), 2007
 - United States National Marine Fisheries Service Technical Guidance
 - International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM) (2004).

Further, the pipeline technical design has been primarily based on the following industry standards ([EACOP Uganda ESIA Section 2.2.2](#) and [EACOP Tanzania ESIA Volume 1 Section 2.2.2](#)):

- ASME B31.4 – 2016 “Pipeline Transportation Systems for Liquids and Slurries”
- ASME B31.3 – Gas Transmission and Distribution Piping Systems (US/International Standard).

Intergovernmental Agreement and Host Government Agreement

Considering the transboundary nature of the pipeline, the EACOP Project is subject to the regimes of statutory control regulated by various bodies. In recognition of the transboundary nature of EACOP's activities, the

Permits, Licenses, Approvals and Authorisations

Original

14134

THE NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY (NEMA)

The National Environment Act, No. 5 of 2019

The Environment Impact Assessment Regulations, S.I. No. 153-I

Certificate of Approval of Environmental and Social Impact Assessment

Certificate No. NEMA/ESIA/ 14134

This is to certify that the Project Brief/Environmental and Social Impact Statement
received from

M/s. TOTAL EAST AFRICA MIDSTREAM B.V.

of P.O. BOX 34867 KAMPALA

submitted to the National Environment Management Authority (NEMA) in accordance with the National
Environment Act, No. 5 of 2019 regarding:

THE PROPOSED EAST AFRICAN CRUDE OIL PIPELINE (EACOP)
PROJECT

(Title of Project)

briefly described as THE EAST AFRICAN CRUDE OIL PIPELINE (EACOP)
PROJECT

(Nature, Purpose)

Project investment cost ~~XXX~~ USD \$750 MILLION

located at HOJIMA, KIKUBU, KAKUMIRO, KYANKWANZI, MUBENDE,
GOMBA, LWENGO, SEMBABULE, RAKAJ AND KYOTERA DISTRICTS

(District/Sub-county/City/Town/Ward)

has been reviewed and was found to:

** have significant environmental impacts and the following appropriate mitigation measures
and made a condition precedent for approval and implementation:

(The relevant conditions are attached in the subsequent pages)

Dated at KAMPALA on 30 NOVEMBER 2020

Signed

EXECUTIVE DIRECTOR (NEMA)



Requirements defined within the Ugandan and Tanzanian ESIA certificates form mandatory requirements for the EACOP Project.

Eacop Project Environmental and Social Management

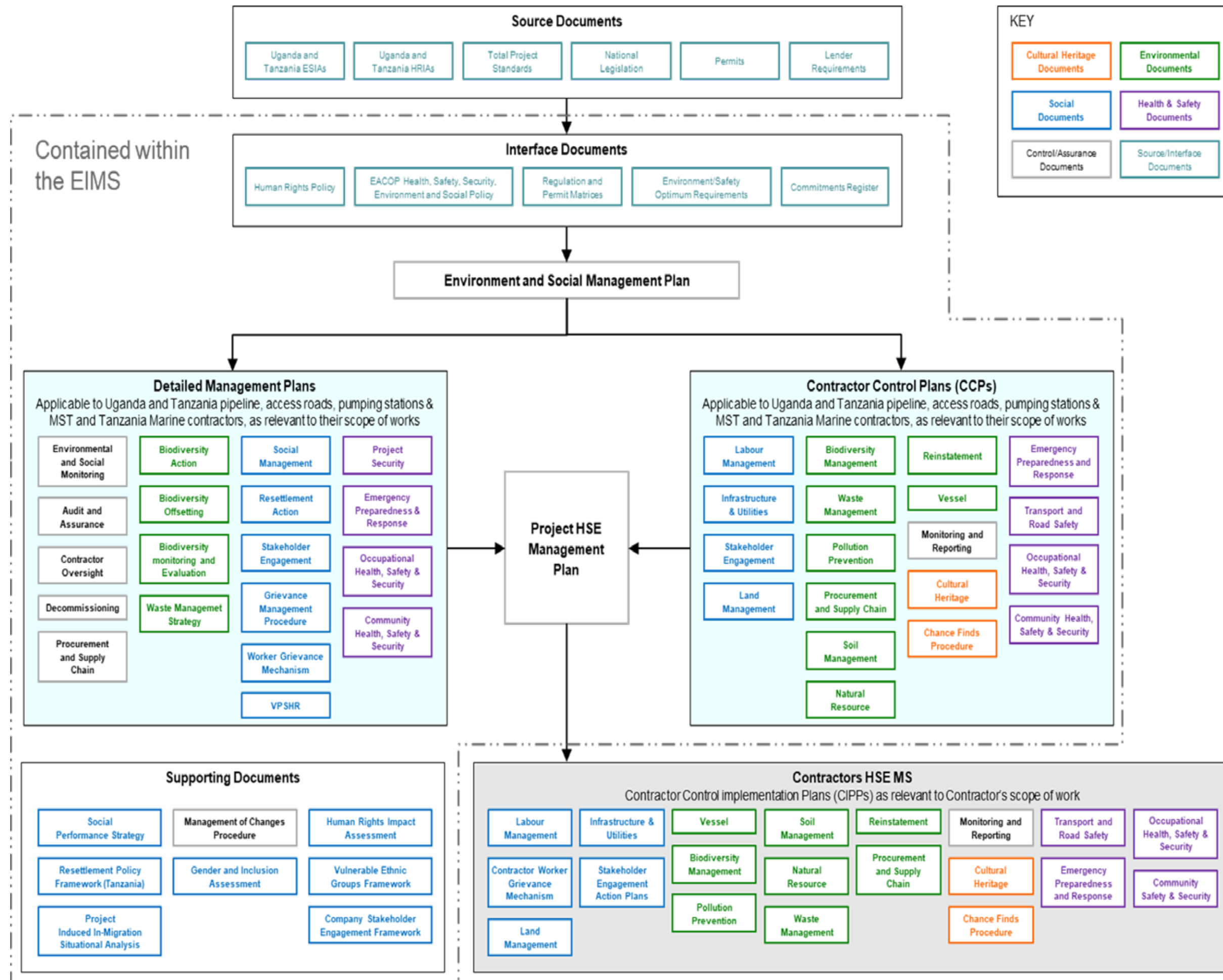


To support achievement of the commitments defined in the ESIAs, a suite of aspect specific Detailed Management Plans (DMPs) and Contractor Control Plans (CCPs) have been developed. The DMPs and CCPs define EACOP's minimum environment and social requirements. The DMPs and the CCPs are part of the EACOP Integrated Management System (EIMS)s.

Figure 6: Integrated Management System – Key Processes identifies the Projects key environmental and social controls.

Details about the process used to identify EACOP's environment and social aspects can be found in the ESIAs available on the [EACOP website](#).

Figure 6: Integrated Management System - Key Processes



EACOP Aspects, Impact and Commitments

EACOP’s objective is to design, construct and make ready for operations a pipeline and its aboveground installations. EACOP drives the package contractors and sub-contractors under its control to achieve the EACOP objective of Zero Harm – including zero harm to people, the environment including EACOP’s commitment to no net biodiversity loss / net biodiversity gain, the communities in which we work, EACOP’s assets and corporate reputation. This is done in part through the implementation of effective environment & social processes supported by competent personnel and a pro-active culture.

The environmental and social aspects and impacts of the pipeline project were identified during preparation of the ESIA’s and supported by comprehensive stakeholder engagement. This included identification and consideration of vulnerable people and groups; and incorporated the results of a human rights impact assessment (HRIA).

Mitigation measures appropriate to the level of risk were developed in accordance with the mitigation hierarchy (which prioritises in order avoidance, reduction, mitigation and compensation/off-set). These mitigation measures have been incorporated into the ESIA’s and transferred into commitments registers for each country. The commitments registers ([EACOP Uganda ESIA Appendix E4](#) and [EACOP Tanzania ESIA Volume 1 Appendix E4](#)) list the management plans and their associated mitigation measures.

The commitments are further organised in [Appendix J of the EACOP Uganda ESIA](#), and in the [Appendix K of the EACOP Tanzania ESIA Volume 1](#) which propose monitoring parameters, associated performance indicators and targets that EACOP Project will employ to steer environment and social performance toward the desired outcomes and to meet EACOP Project commitments for continual improvement.

Key Components of the EIMS

Key components of the EIMS include:

- Environmental and Social Management Plan (ESMP)
- Detailed Management Plans (DMPs), which describe the processes EACOP will follow to achieve EACOP’s commitments with regards to environmental and social management
- Contractor Control Plans (CCPs), which:
 - details the activities the Contractor is required to complete
 - provide the information Contractors need to translate project commitments, that have been developed during the ESIA’s and contracting processes into contractor actions
 - serve as a key tool by which EACOP can follow up and check the contractor plans and procedures that specify how the activities described in the CCPs and other contractual documents will be carried out to ensure fulfilment of project commitments

Project HSE Management Plan, which:

- provides detailed roles and responsibilities of both the EACOP Project and the Contractor
- provides specific direction to the Contractors as to the minimum requirements necessary to be reflected in the Contractor’s management systems and practices.

DMPs and CCPs

The DMPs and CCPs set the minimum requirements necessary to achieve the commitments made by EACOP and where appropriate, provide additional information on how best to accomplish.

The DMPs define EACOP’s process to meet policy, regulatory requirements, performance monitoring, corrective action and continual improvement. This includes specific requirements to conduct oversight of Contractor performance against EACOP’s commitments.

The CCPs define the minimum requirements for EACOP’s contractors related E&S aspects, and collectively (all the CCPs) form the criteria for EACOP’s contractor oversight program.

- Additional management plans will be developed as the project evolves including, but not limited to:
- Location-specific biodiversity management plans
 - Location-specific plans for erosion and sediment control and reinstatement
 - Occupational health safety and security plans

The DMPs, CCPs and applicable management plans are reviewed regularly to ensure continued adequacy and are updated accordingly.

Table 2: E&S Plans and Content

Document Topic (Type)	Content ¹
Pollution Prevention (DMP, CCP)	<p>Defines the approach to prevent pollution and will specify minimum requirements for:</p> <ul style="list-style-type: none">• Good international industry practice that will be used in project activities to attenuate impacts resulting from noise, light, dust, nuisances and other sources of pollution• Management of vessels’ bilge water and ballast water• Selection, safe management, use and disposal of chemicals• Handling and disposal of contaminated soil (from chance finds as well as potential project incidents)• Watercourse crossings addressing issues such as fuel and chemical handling and storage, surface run-off into watercourses at crossing points and management of potential project-related sediment loading of the watercourse• Management of wash water from vehicles and concrete delivery trucks• Control of suspended sediment and sedimentation including sediment release control, scour management and demobilisation surveys• Planned maintenance of vessels, facilities and equipment.• Prevention of pollution from vessels will be in accordance with the requirements of the marine pollution (marpol) convention.

Table 2: E&S Plans and Content

Document Topic (Type)	Content ¹
Biodiversity Management (CCP)	<p>Defines the approach to reduce impacts on terrestrial and marine biodiversity and addresses:</p> <ul style="list-style-type: none"> • pre-construction surveys and pre-clearance surveys • construction biodiversity considerations, such as signage, marine mammal observation, reducing habitat disturbance, habitat and species protection and an Alien Invasive Species plan • mitigation measures to be applied immediately before the onset of construction, such as translocation plan for flora and fauna and immediate pre-clearance checks.
Biodiversity Action Plans (DMP)	<p>Biodiversity Action Plan contains further enhancement and conservation measures for specific areas where the need arises. This plan consists of marine and terrestrial components and include requirements for monitoring and evaluation and off-setting.</p>
Procurement and Supply Chain Management (DMP)	<p>Defines the approach to supply chain management including environmental, social and quality considerations, maximise the purchase of local goods and services, and will address:</p> <ul style="list-style-type: none"> • procurement and supply standards • local content policy for local business and community development • third-party vendors of services, materials and products • third-party aggregate extraction and batching facilities • capacity development • ring-fencing contracts workers' rights compliance
Waste Management (DMP, CCP)	<p>Defines the approach to reduce potential waste related impacts and address:</p> <ul style="list-style-type: none"> • development of a waste management hierarchy • identification and classification of waste streams • requirements for waste collection, segregation, treatment, storage and transportation • final disposal options • waste management documentation to demonstrate compliance with duty of care. <p>Waste management on-board vessels will be in accordance with the requirements of the MARPOL convention.</p>

¹ Content of the plan will be tailored to the audience and relevant activity. e.g. the marine CCP will only include requirements relevant to marine activities and will exclude those relevant to terrestrial activities only.

Document Topic (Type)	Content
Natural Resource Management (CCP)	<p>Defines the approach to manage natural resource use and address:</p> <ul style="list-style-type: none"> • aggregates management (sourcing, storage, use, re-use and disposal) • water management including potable water and sharing community resources • energy efficiency • timber management.
Soil Management (CCP)	<p>Defines the approach to soil management and temporary erosion control and address:</p> <ul style="list-style-type: none"> • construction planning surveys and assessments • soil handling, including topsoil stripping and segregation of soil types during temporary soil storage • Management of surplus excavated materials • disturbance of contaminated land • temporary erosion control.
Cultural Heritage (CCP)	<p>Defines the approach to the identification, assessment and mitigation of potential impacts on tangible and intangible cultural heritage and address:</p> <ul style="list-style-type: none"> • pre-construction surveys and assessments avoidance or preservation of known archaeological or cultural heritage assets • chance finds procedure for tangible cultural heritage • interface meetings.
Social Management (DMP)	<p>Defines separately for both Uganda and Tanzania, the approach and procedures to be followed by EACOP to manage social impacts during the construction phase of the Project and to manage both EACOP and Contractor performance.</p> <ul style="list-style-type: none"> • The technical scope of the SMP includes: <ul style="list-style-type: none"> • Cultural Heritage Management • Stakeholder engagement. • Community health, safety and security (CHSS). • Labour and working conditions, including within the Project supply chain, except for Occupational Health and Safety (OHS). Coverage does include incidental overlap with community health and safety, such as control of disease vectors where these could impact the community. • Project Induced in-Migration (PIIM) • Temporary land access. • The Social Management Plan describes EACOP led actions that: <ul style="list-style-type: none"> • identify, assess and mitigate potential impacts on tangible and intangible cultural heritage • protect community health, safety and security • ensure EACOP recruitment practices and working conditions comply with legal requirements and project standards

Document Topic (Type)	Content
	<ul style="list-style-type: none"> prevent and manage PIIM and associated impacts support and manage Contractor temporary land access requirements ensure training of EACOP staff on the Social Management Plan requirements Social Management Plans also outline how Contractor monitoring and evaluation will apply a human rights lens as well as the key elements of the EACOP approach to engaging with, avoiding and mitigating impacts upon vulnerable ethnic groups that may self-identify as indigenous peoples.
Reinstatement (DMP, CCP)	<p>Defines the approach to manage reinstatement incorporating permanent erosion/scour control and bio-restoration, and will address:</p> <ul style="list-style-type: none"> permanent erosion/scour control bio-restoration, revegetation and reseedling site reinstatement, including decommissioning of temporary work sites, structures and facilities watercourse and wetland crossings reinstatement including vegetation removal and bank stabilisation the procedure to identify where location-specific reinstatement plans are required as per the findings of the ESIA post-construction survey's to document site condition on construction completion
Stakeholder Engagement (DMP, CCP)	Defines processes developed to ensure thorough and effective stakeholder engagement (see section 7).
Grievance Management Procedure (DMP)	<p>The community grievance management procedure provides a proportionate and context-specific process for treating complainants with dignity and seriousness, at no cost to Complainants. It provides confidentiality of the dialogue between parties and of individuals' identities where necessary, protects all parties from retaliation and builds trust as an integral component of broader stakeholder relations activities. It ensures proper documentation of grievances and any corrective actions taken.</p> <p>It defines how grievances will be:</p> <ul style="list-style-type: none"> received and recorded assigned acknowledged investigated responded to resolved and identifies the appeal and escalation processes.

Document Topic (Type)	Content
Worker Grievance Mechanism (DMP)	<p>The worker grievance mechanism aims to achieve the same outcomes as the community grievance management procedure but focusing on workers.</p> <p>EACOP worker grievance mechanism applies automatically to workers with a direct employment contract with EACOP i.e., those workers where EACOP has a clear employment relationship and complete control over the working conditions and treatment of these workers. This will also include those workers that are part of EACOP team but employed through personnel or manpower companies. EACOP will include these workers as Direct Workers for the purpose of EACOP grievance mechanism. All Project workers including employees of contractors may lodge their grievance through the EACOP mechanism where they are concerned that CONTRACTOR worker grievance mechanism will not function effectively in their case.</p>
Resettlement Action Plans (DMP)	<p>The following RAP details below are found in the EACOP Uganda RAP Final and the nine EACOP Tanzania RAPs:</p> <ul style="list-style-type: none"> a summary of the legal framework; the individuals and households who will experience physical and / or economic displacement, and the communities who will experience impacts associated with the land acquisition process; the way that compensation rates for lost assets were determined; eligibility criteria and the entitlements for affected individuals, households and institutions the process used to identify affected vulnerable individuals and groups; levels of assistance for resettlement of affected households measures to reinstate livelihoods of affected persons and households; roles and responsibilities to undertake and implement the RAP; the Project's approach to stakeholder engagement and consultation with PAPs and other interested parties, activities required to implement, and monitor land acquisition, compensation and livelihood restoration commitments.
Labour Management (CCP)	<p>Sets out the mitigation measures to protect labour and working conditions during construction of the EACOP Project and ensures that recruitment practices and working conditions comply with legal requirements and project standards.</p> <p>The Labour Management plan requires that the contractor respects the requirements listed below:</p> <ul style="list-style-type: none"> comply with international labour standards, national labour laws and regulations concerning transparency, accountability, anticorruption and human rights recognise workers' right to trade union representations and organise collective bargaining provide suitable working conditions including rest facilities and breaks provide a mechanism for compliance with the International Labour Organisation Maternity Protection Convention (2000)

Document Topic (Type)	Content
	<ul style="list-style-type: none"> respect workers' rights to privacy including data protection requirements. Include: <ul style="list-style-type: none"> recruitment policies and process including guidance for local recruitment provision for local content, development of local enterprise and capacity development location and operation of recruitment centres labour contracts, including workers' rights and conduct, camp rules and workers' grievance procedure disciplinary procedures a retrenchment plan to manage retrenchment at the end of the construction phase workforce environmental and social training and awareness programmes, and local skills development training to ensure workforce have the skills to perform their responsibilities.
Land Management (CCP)	<p>The Land Management CCP describes the approach and procedures to be followed by CONTRACTOR for Temporary Land Access during the construction phase of the Project covering additional temporary land requests that fall outside the already anticipated EACOP footprint.</p> <ul style="list-style-type: none"> requires the CONTRACTOR to ensure that Temporary Land Access does not result in Permanent or temporary physical displacement, permanent or temporary loss or relocation of business structures, permanent or temporary loss or relocation of community or institutional structures / facilities, permanent or temporary loss or relocation of other cultural assets, removal of trees or entry into Reserved Land including Forest Reserves, Game Reserves and Game Controlled Areas etc. it defines the approach to eligibility for payment of rental and damages, the pre-use assessment, preservation of land condition, post assessment of damages and the stakeholder engagement requirements including for vulnerable groups.
Security and Voluntary Principles on Security and Human Rights (VPSHR) (DMPs)	<p>Define the approach in place to provide security for the Project. The plans will:</p> <ul style="list-style-type: none"> include requirements for both EACOP Project security personnel and third-party security providers describe the measures in place to ensure security measures for the Project to respect human rights and fundamental freedoms as per the Voluntary Principles on Security and Human Rights (VPSHR).

Document Topic (Type)	Content
Community Health, Safety and Security (DMP, CCP)	<p>Defines the minimum requirements for contractors engaged in EACOP activities that can have an impact on safety, security and/or health in communities nearest to these activities. It sets out requirements for:</p> <ul style="list-style-type: none"> community security traffic and transport management Construction activities and machinery Trench and excavation hazard management Site access control Occupational health management PIIM prevention and management Stakeholder engagement related to Community health safety and security Training requirements
Occupational Health, Safety and Security (OHSS) (DMP, CCP)	<p>Defines the management of workforce occupational health, safety and security and will address:</p> <ul style="list-style-type: none"> camp / workforce health and wellbeing drug and alcohol policy camp /shipboard facilities, including health clinics and potable water provision workforce fitness for work, sexual and communicable diseases prevention plan, vaccine preventable diseases management plan and vector control plan pest control and appropriate measures to reduce workforce interactions with wildlife.
Transport and Road Safety (DMP, CCP)	<p>Guides project logistics and support community and driver road safety during transportation activities and will address:</p> <ul style="list-style-type: none"> definition of project transport routes local road upgrades notification of over-sized loads journey management including convoys and scheduling of traffic movements suitable diversions routes during temporary closure of roads safety-awareness education for local communities signage of hazards.

Document Topic (Type)	Content
Vessel Management (CCP)	<p>Guide logistics and support navigation safety related to transportation and construction activities and will address:</p> <ul style="list-style-type: none"> • definition of navigation lanes • notification to mariners • scheduling of vessel movements • vessel anchoring and lighting • signage of hazards.
Emergency Preparedness and Response (DMP, Contractor Bridging Documents)	<p>Defines the approach to emergency preparedness and response and will address:</p> <ul style="list-style-type: none"> • emergency risk analysis, emergency preparedness and response planning and the definition of the relationships with contractors' emergency response plans • incident management, including spill response planning, location of emergency response equipment and personal protective equipment (PPE), material recovery and remediation techniques • the type and content of emergency response exercises and the minimum personnel participation in these exercises • the location of emergency response equipment; minimum equipment and PPE at these locations • roles and responsibilities and specify communication and notification requirements (according to tier 1, 2,3 thresholds). • Emergency preparedness and response on board vessels will be in accordance with the requirements of the MARPOL convention where applicable.
Environmental and Social Monitoring and Reporting (DMP, CCP)	<p>Defines the approach to ensure that:</p> <ul style="list-style-type: none"> • monitoring, inspections and audits are undertaken in a systematic way • the implementation of the environmental and social mitigation measures is monitored • data on environmental and social conformance is gathered • investigation of non-conforming monitoring results • internal and external reporting requirements are met. <p>The monitoring approach for potential impacts is described in the EACOP Uganda ESIA Appendix J and EACOP Tanzania ESIA Volume 1 Appendix K ESMoP, with monitoring parameter(s), target criteria and monitoring frequency. The plan address:</p> <ul style="list-style-type: none"> • a monitoring programme identifying monitoring locations (based on sensitive valued environmental and social components and receptors) and monitoring methodologies • environmental and social inspections and audit programme • non-compliance management • monitoring results tracking system • responsibilities for reporting, content, level of detail and format of reports and reporting deadlines • internal and external notifications and reporting.

Document Topic (Type)	Content
Audit and Assurance (DMP)	<p>Details the activities EACOP will undertake to confirm that environmental and social performance is as per expectations and will include:</p> <ul style="list-style-type: none"> • planning requirements for audits, inspections and safety observation tours / visits including frequency, responsibility and scope • defining sources for audit criteria • defining auditor training and competency requirements • report preparation • management review • corrective action management.
Contractor Oversight Plan (DMP)	<p>Details the activities EACOP Project will undertake to provide oversight of Contractors' operations and will include:</p> <p>verification of contractor mobilisation requirements for example medical checks, equipment specifications and certification</p> <ul style="list-style-type: none"> • verification of contractor mobilisation requirements for example medical checks, equipment specifications and certification • control and validation • review of Contractors' management systems and practices • inspections and audits including audits of Contractor documentation and site practices • joint management tours & regular site visits • setting and review of performance against defined environment & social targets for example on training, emergency response drills completed, grievances responded to within the timeframe specified • regular reporting and progress meetings • review of incidents and near misses • corrective actions follow up.
Decommissioning (when needed) (DMP)	<p>Defines the decommissioning of operation infrastructure at the end of the life of the pipeline and I:</p> <ul style="list-style-type: none"> • identify applicable laws and standards that will guide the decommissioning process • define a schedule during the pipeline life for developing a decommissioning process, including financing arrangements • outline the approvals process for decommissioning • define the environmental and social evaluation process.



Contractor Environmental and Social Management

Contractors' environment & social management processes and capabilities are evaluated as part of the contractor selection process to ensure that they can meet the defined minimum requirements of the project.

Tender and contract documents contain specific environment & social clauses and requirements that enable Contractors to understand the level of management required to conduct the scope of work. These clauses consider EACOP Project's environment and social commitments and are amended as these commitments evolve. These require Contractors to have a management systems and practices in place appropriate to undertake their contracted activities.

The EIMS requires that all contractor implementation plans are reviewed and approved by EACOP E&S departments before their implementation on site. Regular communication between EACOP and contractors is critical to the success of the project and will be achieved through a variety of measures including meetings (including regular progress meetings), joint management tours, contractor reporting including progress reports, monitoring reports, reports of audits and inspections, and stakeholder engagement and grievance reports.

Contractors will operate an open book system with EACOP regarding all project documentation and communications.



Communication and Engagement

Stakeholder Engagement

Meaningful engagement with stakeholders, and the associated feedback, underpins the execution of the Environment and Social Management Plan, providing an essential input to the management of risk during Project planning and execution.

Stakeholder Engagement is guided by ten principles described in the stakeholder engagement plan (SEP) for each country among them being open and transparent, based on listening and dialogue, being impact focused, safe and effective.

The SEPs:

- identify stakeholders, prioritizes engagement activities, and provides the framework for the engagement process;
- provides a structured plan for sharing information and consulting with each stakeholder group, in accordance with Project commitments.
- describes resources and responsibilities for implementing stakeholder engagement activities
- describes how stakeholder engagement activities will be incorporated into the Project's management system, including monitoring and reporting requirements.

The SEP identifies vulnerable groups that may require specific considerations and stakeholder engagement methods and approaches to ensure they are reached and able to meaningfully participate. The Vulnerable Ethnic Groups framework document describes the specify approach to engagement with vulnerable ethnic groups that may self-identify as indigenous peoples.

The SEPs are complemented by specific stakeholder engagement requirements during the land acquisition process including resettlement implementation as set out in the ten project Resettlement Actions Plans.

The Project engages with civil society including NGOs proactively on a regular basis in one to one meetings with certain organizations and through town hall type meetings held on a quarterly basis. In addition, EACOP develops disclosure materials for environment and social aspects and distributes throughout affected communities on notice boards, during townhall meetings and one-to-one NGO meetings. These materials include project leaflets, non-technical summary of ESIA's, RAP leaflets and posters, Grievance mechanism leaflets, animated films, website and radio announcements in multiple languages in Uganda and Tanzania.

The Project has established a nonjudicial community grievance procedure to ensure any complaint raised by a stakeholder will be registered and managed to achieve resolution. The grievance procedure aligns with the United Nations Guiding Principles on Business and Human Rights effectiveness criteria. The grievance procedure is the process available to stakeholders for lodging a grievance during pre-construction, construction and project operations. The grievance procedure is readily accessible to all stakeholders at no cost and without retribution and does not impede access to judicial or administrative remedies. The project's grievance procedure has been presented to stakeholders during each project phase and is managed by the EACOP stakeholder engagement team.

Grievance Mechanism

There are several methods to report grievances to ensure the process is inclusive and culturally appropriate. Figure 8: outlines the key steps of the grievance management procedure that EACOP has developed for the project.





Training

EACOP implements a training & development plan to ensure that required competencies are available and appropriate to the defined risks. Both EACOP and Contractors implement environmental and social training programmes that include a system for assessing the competence and training needs of all personnel.

The training programme is updated in accordance with changes made in scope, incident statistics and/or regulatory requirements.

An Information Education and Communication (IEC) programme is developed for workers addressing social conduct and including topics such as: gender-based violence, drug and alcohol misuse.

Capacity Building

Capacity building includes the process of equipping individuals with the understanding, skills and access to information, knowledge and training to enable them to perform effectively. It is recognised that some project staff may not have experience in managing environmental and social impacts in the manner required by the project. To help bridge the gap, the Labour Management Plan, the procurement and supply chain management plan and local content plan will identify priorities for capacity development and measures to increase the capacity of the project workforce, contractors and subcontractors.



Monitoring, Oversight and Continual Improvement

Environmental and Social Monitoring and Reporting

The development of the Project ESIAs resulted in the identification of mitigation measures that will be implemented to ameliorate Project environmental and social impacts to a level that is not considered significant. The implementation of these measures and the effectiveness in achieving a reduction of impacts will be monitored, evaluated and reported.

The purpose of this section is to outline the key monitoring requirements developed during the ESIA process to monitor the environmental and social performance of the project. These requirements will be incorporated into the Environmental and Social Monitoring and Reporting Plan.

The overall objectives of the monitoring are to:

- Ensure regulatory requirements are met
- Check that impacts do not exceed project standards
- Verify predictions made during the ESIA process
- Verify the implementation and effectiveness of mitigation measures
- Provide early warning of potential environmental impacts
- Inform future operations and contribute to continuous improvement in management of environmental and social issues

Monitoring Approach

The of EACOP environmental and social monitoring activities will be conducted by EACOP E&S departments, its contractors pursuant to their contractual obligations to undertake inspections, monitoring and reporting. The following are four types of inspections, monitoring and reporting.

- **Inspections:** Inspections are planned and conducted on a regular basis to ensure that mitigation measures and EACOP commitments are properly implemented and maintained and specific management procedures are being followed
- **VEC Monitoring:** Monitoring of Valued Environmental Social Components is undertaken to evaluate the effectiveness of the mitigation measures against the prediction made in the ESIA
- **Compliance Monitoring:** Monitoring for compliance involves periodic or continuous sampling dependent on the specific regulatory requirements for the component being measured. This normally requires the acquisition of a sample for quantitative analysis and evaluated against regulatory criteria such as the measurement of air emission parameters, water chemistry parameters for discharge water, potable water.
- **Auditing:** Auditing can include either internal audits were EACOP conducts an audit to assess compliance to Project criteria or external audits often conducted by Government departments to assess compliance to regulatory conditions.

The frequency of inspections, monitoring, auditing and reporting is based on Project risks and regulatory requirements. The outputs will be used to provide early warning for asset/site management and allow EACOP to adjust mitigation measures to suit evolving conditions. These actions will also enable Contractors to demonstrate that mitigation measures and procedures are being followed and operations are conducted within compliance limits.

Monitoring Plan for Generic and Specific Mitigation Measures

Monitoring type and monitoring frequency is described in Appendix J of the Uganda ESIA and the Tanzania ESIA (Volumes 1 and Volume 2).

Performance Management

EACOP will implement an audit & assurance process aimed to confirm that EACOP and its contractors are living up to the commitments made during the execution of EACOP activities. This is described in the EACOP Audit and Assurance Plan, DMP and the Contractor Oversight Plan. During execution of the project the contractual requirements (for example the specifications of the CCPs, environmental and safety optimum requirements) will be implemented, controlled and self-verified (e.g. by contractor conducting their own inspections and audits of their processes) by the contractors. Performance of contractors is permanently evaluated and monitored by the EACOP Project management team (throughout the duration of the project, and appropriate corrective actions are taken when non-compliances are detected.

Non-Conformance Management

Where monitoring, audit or oversight activities identify non-compliances or non-conformities corrective action plans are prepared and tracked through to closure. The status of corrective actions are discussed during planned EACOP Project - Contractor progress meetings.

Performance Reporting

EACOP Project has developed a comprehensive reporting system which describes:

- Internal reporting of environmental and social performance including the outcome of compliance assurance activities and Contractors performance against KPIs
- External reporting to government relating to:
 - permitting and licensing requirements, e.g., notification before starting an activity
 - monitoring results in accordance with the terms and conditions of any licences or consents
 - annual environmental and social audits
 - environmental and social incidents as required by legal requirements.





Management of Change

A management of change procedure has been developed to ensure that the impacts of any changes to the project as described in the ESIA are adequately assessed and appropriate management and mitigation activities identified, implemented and tracked through to closure. Examples of changes include changes to the project activities, project design, pipeline route, project footprint, technical specifications.

Appendix

Revision History

Revision	Reason for Modification
0	First Issue

Reference documents

Document Reference	Document Title
L0-PO-HSE-UT-0001	EACOP Health, Safety, Security, Environment & Social Policy
L0-MA-LEAD-UT-0001	EACOP Integrated Management System Manual
L2-SD-HSE-0900	EACOP HSE Organisational Charter
	EACOP Uganda ESIA
	EACOP Tanzania ESIA
TZ-MID-60-0120-200264	Permit Matrix - Tanzania
UG-MID-60-0120-200489	Permit Matrix - Uganda
PG-P15-00-PMGT- 000010	Management of Changes Procedure

Definitions-Abbreviations

Abbreviation	Explanation
A	
AGI	Aboveground Installation
AOI	Area of Influence
ASME	American Society of Mechanical Engineers
ATS	Action Tracking System
B	
BLAC	Biodiversity and Livelihood Advisory Committee
BSI	British Standards Institution
BWM	International Convention for the Control and Management of Ships' Ballast Water and Sediments
C	
CCP	Contractor Control Plan
CF	Coating Facility

Abbreviation	Explanation
CLOs	Community Liaison Officers
CPF	Central Production Facilities
CR	Company Representative
CRC	Community Relations Coordinator
CUL	CNOOC Uganda Limited
D	
DGM	Deputy General Manager
DMP	Detailed Management Plan
DSA	Designated Site Authority
E	
EACOP	East African Crude Oil Pipeline
EHT	Electrical Heat Tracing
EHS	Environmental, Health and Safety
EIMS	EACOP Integrated Management System
EITI	Extractive Industries Transparency Initiative
EMA	Environmental Management Act, No. 20, 2004 of Tanzania
EP	Equator Principles III (EPs) for assessment and management of environmental and social risk in project
EPCM	Engineer, Procure, Construct Manage
EPcmC	Engineer, Procure, Construct Manage Contractor
ERC	Emergency Response Centre
ERM	Emergency Response Manager
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESMoP	Environmental and Social Monitoring Plan
G	
GHG	Greenhouse Gas
GM	General Manager
H	
HAZID	Hazard Identification
HAZOP	Hazard and Operability
HGA	Host Government Agreement
HRIA	Human Rights Impact Assessment
HSE	Health, Safety, Security, Societal and Environment
HSE-MS	Health Safety and Environment Management System
I	
IAIA	International Association for Impact Assessment
IFC	International Finance Corporation
IGA	Inter-Governmental Agreement
ILO	International Labour Organisation
IMS	Integrated Management System
IPIECA	International Petroleum Industry Environmental Conservation Association
ISO	International Organization for Standardization
K	
KPIs	key performance indicators

Abbreviation	Explanation
L	
LMP	Labour Management Plan
LOF	Load-out Facility
M	
MARPOL	International Convention for the Prevention of Pollution from Ships (MARPOL 73/78), February 1973, amended 1978
MCPY	Main Camps and Pipe Yards
MLBV	Mainline Block Valves
MMbbls	Million Barrels
MP	Management Plan
MST	Marine Storage Terminal
N	
NEMA	National Environment Management Authority (Uganda)
NEMC	National Environment Management Council (Tanzania)
NGO	Non-governmental Organisation
O	
OECD	Organisation for Economic Co-operation and Development
OHSAS	Occupational Health and Safety Assessment Standard
OHSS	Occupational Health Safety and Security
OPG	International Association of Oil and Gas producers
P	
PACs	Project Affected Communities
PAPs	Project Affected Persons
PGM	Project General Manager
PIIM	Project Induced In-Migration
POE	Panel of Experts
PPE	Personal Protective Equipment
PS	Pressure Reduction Stations
PUF	Pumping Station
PRS	Polyurethane Foam
R	
RAP	Resettlement Action Plan
RoW	Right of Way
S	
SIL	Safety Integrity Level
SLT	Senior Leadership Team
T	
TEAM	Total East Africa Midstream
U	
UNEP	United Nations Environment Programme
V	
VECs	Valued Environmental and Social Components
VPSHR	Voluntary Principles on Security and Human Rights
W	
WHO	World Health Organization

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