

PROJECT BRIEF REPORT

FOR THE PROPOSED PROCESSING WOOD VENEER AND STICKS PROJECT AT MLOWA WARD,
IDOFI MTA, MAKAMBAKO TOWN COUNCIL IN NJOMBE REGION.

SUBMITTED TO

MAKAMBAKO TOWN COUNCIL

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CONSULTANT:

THE NGORO CONSERVANCY

REGISTERED ENVIRONMENTAL EXPERT

P.O.BOX 228 SONGEA

JULY 2024

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LIST OF ACRONYMS

EHS	Environmental Health and Safety
EMA	Environmental Management Act
ESIA	Environmental and Social Impact Assessment
NEMC	National Environmental Management Council
PPE	Personal Protective Equipment
TANESCO	Tanzania Electricity Supply Company
WEO	Ward Executive Officer
MEO	Mtaa Executive Officer
OSHA	Occupational Safety and Health Authority
ESMP	Environmental Social Management Plan
URT	United Republic of Tanzania
TIN	Tax Identification Number
TRA	Tanzania Revenue Authority
WCF	workers Compensation Fund
NEP	National Environmental Policy
SME	Small and Medium Enterprises
HIV	Human Infection Virus

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DECLARATION

The Project brief report has been prepared by registered Environmental Expert Mr Sostenes J. Nkamo in collaboration with other registered Expert The Ngoro Conservancy. The information in this report is correct based on professional Judgment, therefore the proponent is advised to undertake the project as per the proposed mitigation measure mentioned in this environmental protection plan


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Sostenes J. Nkamo

Environmental Consultant

**THE NGORO CONSERVANCY
ENV EXPERT REGISTERED
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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background information

CHANGCHENG WOOD INDUSTRY LIMITED (herein referred as the Developer) Idofi Makambako, is this day incorporated under the companies act, 2002 and that the company is limited. This company given certificate of incorporation No 174468141 issued by Bureau of registration and licensing Agency (BRELA). The company has been given a Taxpayer identification Number 174-468-141. The company has also been complying with other different government regulatory authorities and institutions such as Fire and Rescue Force, Tanzania investment center (ITC) and occupational safety and health authority (OSHA) in her operations .The company operate at Idofi street, Mlowa ward, Makambako town council in Njombe region. The company was established with the aim of processing of wood veneer and sticks and export to international markets. As part of license application, the company was instructed to undertake initial environmental audit to ensure environmental challenges associated with the project are well known and tackled.

The company operations have always been of high quality following the standards put in place by regulative authorities within and outside the country .The overall unit operations regarding the project activities are in agreements with the required procedures and quality .During production process quality assurance and quality control protocol are assured while commitment and compliance to established legal frame works are of greater preference.

THE NGOLO CONSERVANCE Registered EIA & EA expert to undertake the initial Environmental Audit study on the project so as to examine both positive and negative impact which are and may be result from this project and propose the best remedies to overcome all discovered negative impacts .

1.2 Project Investment Cost

Company utilizes four hundred millions (400,000,000) as project investment cost for the existing processing wood veneer and sticks which include coast for leasing land, operating Equipment and machines ,Utilities cost, purchasing cost of logs and transportation cost of wood veneer.

1.3 Objective of the initial project brief

1.3.1 Main objectives

The main objective of the project is to ensure that relevant key environmental and socio economic issues are identified and all stakeholders in the process are identified and involved.

The main objectives of the initial environmental audits are:

- a. Determine how far activities and programs of activities and processes of a project undertaking environmental management practices and environmental quality standards.
- b. Provide a mechanism to learn from experiences and to refine design and implement procedures of a project or undertaking so as mitigate adverse in environmental impacts.
- c. Provide regulatory bodies with a framework for checking compliance with and the performance of an Environmental and social Management plan.

For purposes of achieving the objectives stipulated under sub regulation the principle functions of an initial environmental Audit shall be to

- Improve an organization or activity's compliance with environmental legislation and regulations such as Air emission standards, Effluents standards, waste management standards and standards operating procedures.
- Document an operation or activity's current environmental performance and environmental management procedures including emergency response planning monitoring and reporting system and planning for future environmental performance.
- Prevent damage and the tendency for environmental damage.
- Confirm predicted impacts and implementation of initial environmental Audit recommendations as basis for improving the performance of environmental social and management plan and initial environmental Audit process.
- Improve resources use through reduction in materials use to minimize wastes and to identify recycling opportunities
- Increase actions undertaken or needing to be undertaken by an organization or activity to meet environmental goals such as sustainable development recycling and efficient use of resources.

1.3.2 Specific Objectives

In addition to the above main objective Auditing exercise enables

- Identification of EA study boundaries
- Identification of information requirements

- Development of effective methods of approaching the EA study
- Ensuring that environmental consequences are identified as early as possible and taken into consideration during the facility operation phase of the project
- The identification of project alternatives
- Definition of the terms of reference for the EA study

1.4 Scope of the Auditing

The initial environmental audit covered a wide range of the project site premises and facilities which may be potentially causing impacts to the workers and the surrounding environment. The auditing generally focused on all systems and structures existing at the processing wood veneer and sticks facility so that to clearly identify the impacts and objects that are vulnerable to be affected by routine operations.

Audit report shall be prepared through various collaboration including observation, testing and analysis from the various parameter of the project operations, interview and stakeholders participation .Report to be submitted to Makambako TC for review and approval according to the compliance satisfactory level

1.5 Methodology of Auditing

- Pre Visit activities
- On site activities
- Audit process

1.6 AUDIT PROTOCOL CRITERIA AND METHODOLOGY USED

1.6.1 Methodology of the Audit

The methodology used in this audit study is in line with the environmental management (Environmental Impact assessment and Audit Regulations)(Amendment)Regulations 2018 .The methodology used in this study included review of literature ,historical performance collecting of performance data and site visit. Environmental impact were analyzed using simple matrix methodology and expert judgment, the study adopted the following approach.

A.PRE VISIT ACTIVITIES

(i.) Audit schedule

The team of consultants in consultation with the CHANGCHENG WOOD INDUSTRY LIMITED management particularly Project Manager and other staffs as Human resource manager prepared an audit schedule.

(ii.) Background Review

In order to develop the audit protocol and perform a proper audit the consultant reviewed different document namely site receiving of logs and transported records of wood veneer, environmental health and safety manual etc. Other documents that were reviewed are the compliance records and certificate. Interviews with key stakeholders were conducted during the month of June and July 2024.

A pre Audit checklist was used to provide insight into the environmental issues commonly encountered in project of similar nature –setup a small facility for processing wood veneer. This enabled the consultant to.

- ❖ Understand the project wide environmental issues prior to the site visit.
- ❖ Understand the power production processes of wood veneer, the services offered resources and raw materials used, wastes generated and key stakeholders to be consulted.
- ❖ Identify sensitive environments in close proximity to the project.
- ❖ Clarify technical and compliance issues prior to field visit.
- ❖ Identify an appropriate times to conduct the Audit that was representative of operations
- ❖ Identify a list of documents to be reviewed during the audit.

(iii). Audit protocol

The consultant used a project wide audit protocol that involved the below on site activities while noting new information.

B.ON- SITE ACTIVITIES

(i.) Briefing meeting

An opening conference was held between the consultants and appropriate members of the project staffs to review the consultant's agenda to enable all participants understand

- Roles of the consultant and project personnel
- Audit protocol and objectives

- Project activities and locations
- Any changes made in the operations since the processing of wood veneer factory was commissioned.
- Schedule of interviews with the appropriate factory personnel
- Issues needing clarification or verification

Other topics that were addressed during the briefing meeting included facility history, boundaries significant operations and perceived key environmental issues personnel functions and responsibilities work schedules and required safety measures while on site.

(ii.) Facility inspection

The consultant inspected project operations, maintenance, materials handling procedures and standby power generation. During this exercise questions were raised and in most cases answers were provided by the accompanying staffs involved. The topic covered include

- Processes of producing wood veneer
- Emergency response
- Management operation and maintenance plans
- Workers health and safety issue
- Handling of complaints
- Waste management
- Staff welfare including operations procedures or practices eg shifts

iii.) Interview of personnel

The consultant(s) discussed with the appropriate factory personnel. The topics covered include the facility's process operations routine internal inspections of the process areas and supporting activities including waste management operations and maintenance activities both routine and resulting from malfunction /non compliance in the audited process areas staff welfare and any applicable training permitting or licensing that facility staff are required to maintain.

iv.) Records and documents review

The consultants review all record and documents necessary to assess environmental performance and compliance and to verify previously provide information of project operations.

Developer's, management keeps various records concerning safety and health issue and general company legal document .The reviewed documents were.

- ❖ OSHA compliance certificate
- ❖ Fire and rescue certificate

- ❖ Certificate of incorporation
- ❖ TIN -NO
- ❖ Business licenses
- ❖ Tax clearance certificate

1.6.2 Post audit meeting

A closing meeting was held later in which meeting briefed the project facility managers and departments' supervisor on the preliminary outcome of the audit exercise where the consultants highlighted areas that need immediate attention.

1.6.3 Post Visit activities

Audit report

The consultants has prepared this audit report the objectively and accurately reflects the consultant's observations finding and recommendations.

1.7. Structure of report

The consultants (s) have prepared an audit report that objectively and accurately reflects the consultant's observations findings and recommendations. The report is presented and styled in accordance to the format given in section 52(3) of the Environmental managements (Environment impact assessment and audit)amendment regulations 2018 .It is presented as follows:-

a)Executive summary b) Acknowledgement c)abbreviation d)table of contents e)project current status information f)Audit objectives and scope g)Audit protocol ,criteria and methodology used h)Findings and observations i)description of key issues j)recommended actions k)conclusions i)list of document used or cited as references and m) appendices.

CHAPTER TWO

2.0 DESCRIPTION OF THE PROJECT

2.1 Nature of the project and background

The project deals with processing of wood veneer and stiks. Under this operations the company purchases logs from out growers around Makambako and Mufindi district for processing wood veneer and exportation. The project operations starts from the offloading of logs from trucks, logs size, removing of peeling, flat slicing, separation of veneer and stick, drying, quality check and packing in to grade special for transportation.

2.2. Project location and accessibility

2.2.1 Location

The existing wood veneer processing facility is located at Idofi Street, Mlowa ward, Makambako town council in Njombe region. It is located at an altitude of 1660 meters above the sea level between latitude 8 47 31 S Longitude 34 51 56 E GPS coordinates taken at an accuracy of 4 meters.

2.2.2 Accessibility

The project site is accessible via a tarmac road from Makambako to Iringa namely TANZAM highway and an earth road that deviate from the main tarmac to the project site of about 2 kilometer. The project site is on the right hand side when moving from Makambako to Iringa.

2.3 Project zoning

The project site is bounded by MSD road facility to the west, north side council wood market, south side another wood processing industries and east side the council plots.

2.4 Existing situation and project components.

The project site is characterized by a gentle slope surface biasing to the east with developed structures under which the whole operation takes place. The site consists of a temporary structure of production area, temporary staff offices, temporary packing and grade area, and two permanent toilets.

The adjacent land uses around the area is industrial area nearest residential building is located at a distance of more than 500 meters.

2.5. Process Description

The whole process undertaken within the operation facility is as follows

Logs purchasing

The company buying logs from different farmers and not buying trees this means the company does not engaged in any business of trees harvesting. The company allows the logs different Eucalyptus and Pines species, this are some of trees that are used in the production of wood veneer in our industries. Other kind of tree species is not suitable in our company, all natural tree or forest are not allowed. We purchasing logs in different price based on the height and width of the product.

Offloading and receiving of logs.

This is the first stapes where we receive the logs from customs and we arrange it in the special area read for the production. When the trees log arriver from forest they classified by species and take it in the receive area.



Figure 1 Offloading and receiving of log. Sources consultants. 2024

Log size

In a stage there are special machinery that are used in the making sizes of the logs, the machinery cut the logs in to two parties with the some size of 128 cm. The key operation of how and where a tree logs should be cut depend on the slicing method used to produce veneer.



Figure 2 Sizing machinery of logs. Sources consultants. , 2024

Removing of peeling

In this process the machinery are used to remove all outside layer of the tree log, this stage it allow only the logs to be peel special cutting or making veneer. Ensure that the veneer logs of the same tree are not separate tags corresponding to logs barcode are carefully attached and verified.



Figure 3 Removing of peeling machinery. Sources consultants, 2024.

Flat slicing

This is the process of producing veneer by cutting of the logs in to the small shape, in this industry they provide rotary cut which means the log is centrally mounted on the lathe and turned against a sharp blade, just like unwinding a roll of paper . The cu follows the logs annual growth ring.



Figure 4 Flat slicing of wood logs. Sources consultants, 2024

Separation of veneer and stick

In this process it need to separate the veneer sheets and stick, this it allow to take veneer in another stage of drying and to take stick in their place special for transportation.



Figure 5-separation process of veneer and stick. Sources consultants, 2024

Drying process

in this stage veneer are take in the special area for drying, the veneer always remain in natural order as they emerge such like parts of the original log are kept together. They just use sun or nature light and heat for the drying process and it take not more than 10 days.



Figure 6 Drying process of wood veneer. Sources consultants, 2024

Quality check and grade

This is the process they just look at the grade of veneer, there are three grade in this process. A1 means veneer are in a very good condition, A2 means the veneer are produced in the good condition and B this means veneer are produced in the normal. All this it matter in the price making

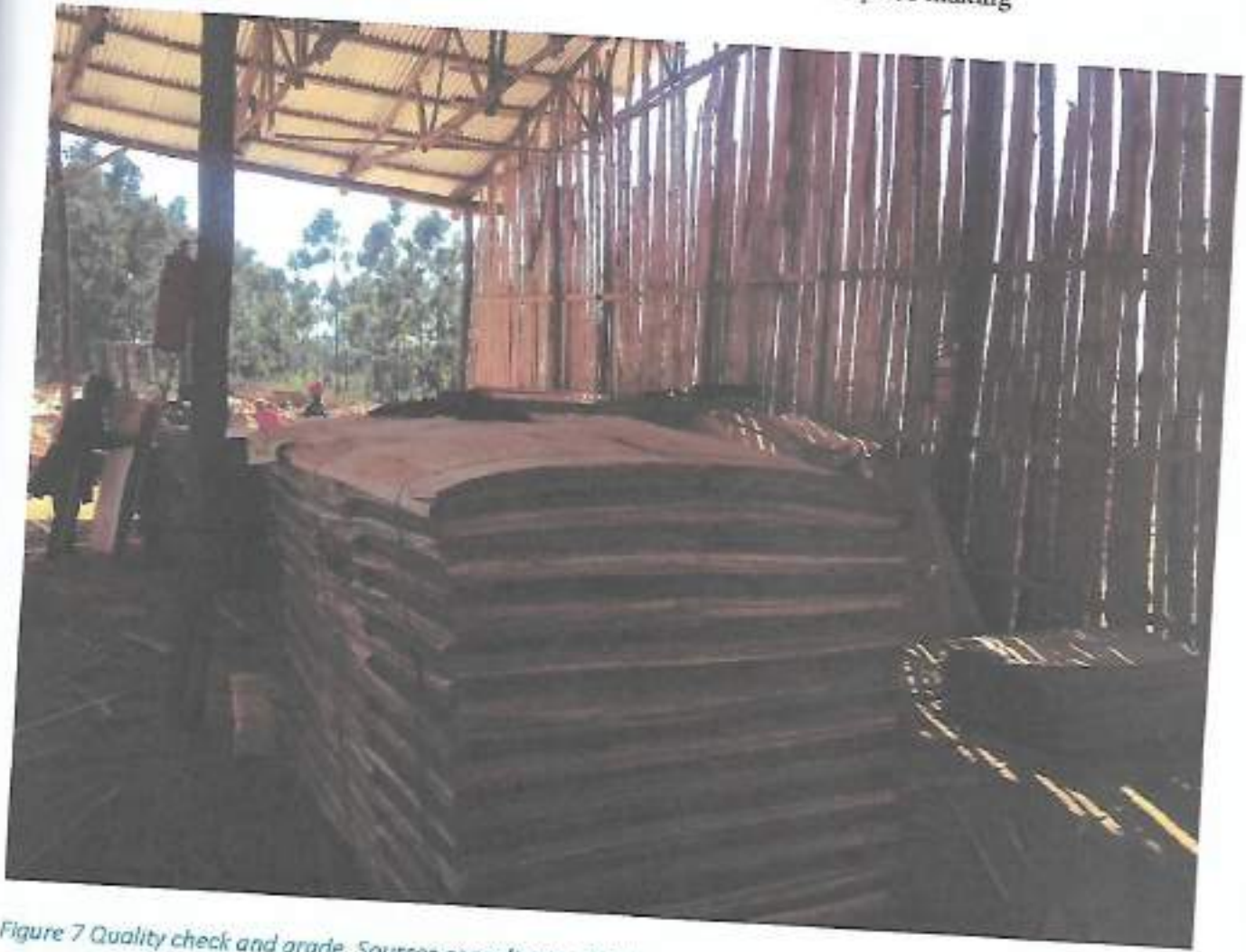


Figure 7 Quality check and grade. Sources consultants, 2024

Parking and transport

This is the last stage where the veneer are packed special for transporting from Makambako to Dar es salaam as the raw material. The company have their own transport cars and they follow all transportation rules including paying of transport permit to Tanzania Forest and service Agency(TFS).

Offloading of logs



Logs size



Removing of peeling



Flat slicing



Separation of veneer and stick



Drying



Quality checking and Grade



Packing and transporting

Flow chart: sources consultant 2024

2.6. Company's component

The company is have different machinery which used to simply work, they have tractor, lif machinery, excavator all this are used in different places so as to make process very simple.



Figure 8 company component (machinery) sources consultant, 2024

2.7 Utilities

2.7.1. Water

Water is used in the facility for washing , drinking and sanitary uses. Water used from drillings shallow well from site and storage to water tanks. Its approximated that the company uses about 3000liters of water.



Site source of water; consultant 2024

2.7.2 Power

The company uses TANESCO power as the main source of power, also the company have a plan to buying automatic super silent standby diesel generator that provides backup power during power cut out .It is approximated that the company uses about 400 units per month.



Site source of power from TANESCO; consultant 2024

2.7.3 Labor

The company has employed 50 Workers in different department all are Tanzanian. The company has also owned by foreigner from Chinese.

All workers have been given job contracts; All workers are being trained on safety issues around the company prior to start working. Workers are given personal protectives gears such as boots, coat and gloves according to the area of specialization.

2.8 Waste production and management

The project generates both solid, noise, gases and liquid wastes the solid wastes that are generated by the operating project are logs peel, papers, plastic bottles and boxes. There some of the waste can be controlled in the waste bin, but all logs peel are collected in special area and burned fire. Liquid waste generated is from home washing which is collected in a special tank onsite and waste water from the washroom is controlled by septic tank and soak away pit onsite.

2.9. Safety Issues

The company has installed a number of emergency measures in the project site specifically to curb the fire incidence .These include fire extinguishers of various sizes placed at all critical points within the facility .Personal protective gears are also in place and workers are provided with gears while in the premises other signs like exit assembly point etc. also are placed in different places onsite. Furthermore the placement of the equipment in place is in accordance to the directives provided by OSHA.



Fire extinguisher, emergence rescue response, source: consultant, 2024

CHAPTER THREE

3.0 Policy administrative and legal framework

In Tanzania there are a number of policies and legislations which set out the legal and regulatory requirements which are relevant to the facility operational activities .Additionally there are pertinent standards governing environmental management and protection health and safety .The EA study should be conducted in compliance with the following policies legislations and standards identified during the preliminary Audit study .The following sections list the relevant policies and legislations which have been analyzed during the auditing compliance and enforcement to the company.

3.1. National Policies

3.1.1. The National Environmental Policy 1997

The national environmental policy (NEP) formulated in 1997 defines the environmental framework for various sectors to ensure among other sustainable and equitable use of natural resources without risking health and safety while preventing and controlling degradation of land water vegetation and air to conserve and enhance biological diversity of the ecosystem of Tanzania Specific objectives of NEP include sustainable and equitable use prevention of resource degradation heritage conservation public education and international co-operation instrument for implementation include the use of environmental Audit (EA) development of national standards and indicators and the preparation of appropriate legislation NEP encourage good land and water resources management to reduce undesirable environmental impacts such as soil salinity water pollution and spread of water borne diseases by undertaking environmental Audit study in order to ensure themselves their activities does not harm the environmental the developer comply with the policy.

3.1.2 The small and medium enterprises development policy (2003)

The overall objective of this policy is to foster job creation and income generation through promoting the creation of new SMEs and improve the performance and competitiveness of the existing ones to increase their participation and contribution to the Tanzania economy. Developer has adhered to this policy by creating employment to the communities around the project site and from other parts of the country.

3.1.3 The National land policy of 1997

The national land policy outline clearly that all land in Tanzania is public land vested in the president as trustees on behalf of all citizens and that land has value. The rights and interests of citizen in land shall not be taken without due process of law .Consultations and consent of village council will be required whenever alienation of village land is necessary. The sensitives areas will be protected and should not be allocated to individuals .These include water catchments areas small islands border areas beaches mountains forests national parks areas rich of biodiversity the developer has adhered to the policy by following the legal

Requirements in getting land for project establishment and there are no any sensitive bio- physical parameters adjacent to project site.

3.1.4 The National Health policy 2003

The National Health Policy describes the provision of community needs like infrastructure safe drinking water supplies sewage treatment and waste disposal services promotion of other health related programs including separation of toxic or hazardous wastes and pollution control at the household level and HIV/AIDS campaigns. The developer therefore adhered to the policy requirement by put appropriate measures that ensure workers health and safety

Ensuring that their workers are subjected to a safe and healthy working environment Also the developer is working to ensure the workers health is checked regularly and for new employees to be subjected to checkups before employment.

3.1.5 The National Investment promotion policy 1996

The National Investment Promotion policy describes incentives framework that encourage or promote investment in various economic activities in the country . ,Developer is committed to this Act as the project qualifies for incentives under the National Investment Promotion policy as it brings income to the nation through taxes employment opportunities and reduction of poverty level at the communities due to availability of jobs in Makambako town Council and Njombe at large.

3.1.6 The sustainable Industrial development policy 1996 – 2020

The sustainable industrial development Policy refers to sound environmental management in order to ensure promotion of environment friendly and ecologically sustainable industrial development. The policy underscores the importance of carrying out EA. Also the government among other things pledges to promote the continuous application of an integrated preventive environmental strategy to industrial processes products and services. This strategy includes propagating efficient use of raw materials and energy elimination of toxic or dangerous materials as well as reduction of emissions and wastes at sources. Developer is committed to comply with the provisions of this policy as she embraces the cleaner production philosophy.

3.1.7 The National Human Settlements Development Policy 2000

Among the objectives of this policy to improve the level of the provision of infrastructure and social services for the development of sustainable human settlements and to make serviced land available for shelter to all sections of the community such infrastructure and services constitute the backbone of urban/rural economic activities. All weather roads and reliable and efficient transport system drainage channels reliable permanent river crossings etc. are essential to increase productivity and the establishment of industries development as per national vision 2025. To implement the policy in urban growth through establishment of industries and small investment like factories it boosts the well-being of urban people commercial buildings road networks and other facilities in urban areas.

3.1.8 The National Employment policy 2008

The major aim of this policy is to promote employment mainly of Tanzania Nationals. Relevant sections of this policy are (i) 10 which lays down strategies for promoting employment and section 10 is particularly focusing on industry /factory and trade sectors (ii) 10.6 which deals with employment of special groups i.e women youth persons with expatriate where there are equally competent nationals developer is complying with the policy by employment the youths which are in legal age of being employed.

3.1.9 The national trade policy 2003

The policy addresses issues of tariffs quantitative restrictions and changes in relative prices. It also captures the deeper transformational and production issues .It emphasizes the role of the government as implementer of trade policy and that of the private sector as the engine of growth as well as partners in the information and implementation process .It sets new and modern rules on how to increase international competitiveness establishes how these rules are made and implemented elevates the role of the private sector and creates opportunities for its development and promotes a new philosophy of economic management based on serious commitment to openness .The major goal of trade policy is that of raising efficiency and widening linkages in domestic production and building a diversified competitive export sector as the means of stimulating higher rates of growth and development .This Audit is undertaken to ensure that project site is abiding to the relevant provisions of the policy.

3.1.10 The national women and gender development policy 2000

This policy aims to improve opportunities for women and men to play their full roles in society recognizing specific gender requirements .The policy aims to minimize shortcomings related to limited participation of women in most economic development activities and focuses on using available resources to increase incomes eradicate poverty and improve living standards .The policy also recognizes and emphasis on creating awareness on how environmental degradation increases poverty burden especially to women .The policy aims for full participation of women in natural resources management and encourages the rational use of natural resources to provide new income generating opportunities .The facility operates by having 80%women workers thus promoting the policy .

3.1.11 The National policy on HIV/AIDS of 2001

The policy provides a framework for leadership and coordination of the national multi –sectorial response to the HIV/AIDS epidemic .One of the major objective of the policy is to strengthen the role of all the sectors public private NGOs faith groups CBOs and other specific groups to ensure that all stakeholders are actively involved in HIV/AIDS work and to provide a framework for coordination and collaboration. The policy recognizes that HIV infection shall not be grounds for discrimination in relation to education employment health and any other social services pre employment HIV screening shall not be required for person who is already employed HIV/AIDS screening whether direct or indirect shall not be required .HIV infection alone does not limit fitness to work or provide grounds for termination .HIV /AIDS PATIENTS SHALL be entitled to the social welfare benefits like other patients among the employees and employers a like shall be part of HIV /AIDS intervention in the

workplace .Developer considers collaborating with the local government councils faith groups NGOs and CBOs in the project area to mobilized HIV/AIDS awareness campaigns and control activities.

3.1.12 The local Government policy of 1998.

The local government policy states that local government have the responsibility for social development and public services provision within their jurisdiction facilitation of maintenance of law and order and issues of national importance such as education health water roads and agriculture .Developer is closely cooperating with local government in the project area and where possible is providing support on improvements of social services and other community activities in order to provide support and maintain goods relationship with the communities and smooth undertake of a activities in the project area.

3.2 National Legislations

3.2.1 The environment management ACT Cap 191

The environmental management act no 20 of 2004 for Tanzania providers for legal and institutional frameworks for sustainable management of environment and outlines among other principles for management impact and risk assessments prevention and control of pollution waste management compliance and enforcement .The act promotes the implementation of national environmental policy and required any person whose activity is likely to cause harm to human health or the environment to take measures to protect the environment or human health.

The act also spells out to investors or project developer where applicable the obligations to undertake environmental audit to have management and monitoring plan after the commencement of project undertaking and observe the environmental management (Environmental impact assessment and audit) (amendment) regulations of 2018 .The Act gives power to the national environment management council (NEMC)to monitor environmental audit (EA) compliance and enforcement .To adhere to this Act the developer is undertaking the environmental audit study as instructed by national environment management council (NEMC) to comply with national environmental act (EMA 2004).

3.2.2 The occupational health and safety act No of 2003.

The occupational safety and health act no 5 of 2003 (OSHA) make provisions for safety health and welfare of persons at work in factories and other places of works also provides for the protection of persons other than at work against hazards to health and safety arising out of or in connection with

activities of persons at work and to provide for connected matters .The project entails the skilled labour working on the premises however the undertaking composes of various risks which in one way or another may cause disasters like fire eruption and deaths of people if there are no prior measures undertaken .Therefore the manager and workers at the project site have to take into consideration the occupational health and safety procedures to its work so as to prevent the occasion occurrence of health and safety related risks to the project site and surrounding community .

3.2.3 The land Act (cap 113 R.E 2002)

The land act cap 113 (R.E.2002) provides for the legal framework for ensuring that land is used productively and that any such use complies with the principles of sustainable development. Land tenure and rights of legitimate land users shall be considered and respected. Land sensitivity and potential environment impacts of the seismic data acquisition operations shall be considered in order to ensure that the land is left in the state where other could use it when the project activities comes to completion and to allow for natural and rapid restoration of cleared vegetation or disturbed land. The land act no 4 of 1999 also provides legal framework as regards to compensation of land and properties. The project did not and does not distort any bio physical parameters on the land during its establishment and operation and the land has been acquired by following all legal procedures.

3.2.4 The land use planning act no 6 of 2007

The act providers for the procedures for preparation administration and enforcement of land use plans to repeal the national land use planning commission and to provide for related matters clearly the act has distinctive authorities of land use planning in Tanzania laid down with their function and powers. The power vested to authorities which give them teeth to bite to enforce approved land use plan including taking defaulters to court of law .The project developer is committed to observe the provisions of this Act and the project site is established in accordance with the requirement of this Act.

3.2.5 The business activities registrations Act no 17 of 2017

An act to provide for the establishment of a business activities registration system business registration center and to provide for matter related there to .This act may be cited as the business activities registration act 2007 and shall come into operation on such a date as the minister may by notice published in the gazette appoint .The act establishes BRELA as the authority responsible for

an exclusive prospective license granted under the natural resources Act may within the area specified in such license subject to all other rights to the use of water abstract and use water for prospecting purposes sinking or enlarge any well or borehole and abstract water therefrom not exceeding 22,700 liter per day .The developer is complying with the provisions by utilizing water lawful as the main sources of water at the moment is only water from town water supply and sanitation authority.

3.2.8 Water supply and sanitation Act no 5 of 2019

An act to provide for sustainable management and adequate operation and transparent regulations of water supply and sanitation services with a view for give effect to national water policy 2002 to provide for establishment of water supply and sanitation authorities as well as community owned water supply organization to provide for appointment of services providers repeal of waterworks act to provide for related matters. Developer is complying with the act by operating the project with the adherence to this act by making sure water is used only when needed.

3.2.9 The Tanzania Investment Act cap 38.

The Tanzania investment Act cap 38 (R.E 2002) provides legal framework for promotion and facilitating investment in Tanzania through the one stop facilitative center for foreign investors that promote foreign and local investment activities grant certificates of incentives investment guarantees and sort out administrative barriers confronting local and foreign investment among others. The developer is adhering to this act since the investment is done in Tanzania and has acquired a certificate of incentives from Tanzania investment center.

3.2.10 The worker Compensation Act No 20 of 2008

An Act to provide for compensation to employees for disablement or death caused by or resulting from injuries or diseases sustained or contracted in the course of employment to establish the Fund for a administration and regulation of worker's compensation and to provide for related matter .It applies to both workers in the private and public sector. For one to be compensated the injury must either cause permanent incapacity or make the worker unable to earn full wages for at least three consecutive days .The employer is obliged to pay compensation irrespective of the cause of accident .It does not

matter whether the incapacity or death was due to recklessness of the worker .Where injury occurs an employee is entitled to recover medical expenses and lost wages resulting from the disability be it temporary or permanent .The law allows for compensation to dependents or personal representatives where the worker is dead .Developer respects the provisions of the workers compensation Act by providing compensation to workers also company has registered all permanent workers to workers compensation fund.

3.2.11 The National Health Insurance Act cap 395.

An Act to established the National health insurance fund and to provide for contributions to and payments of health care benefits to certain government employees and provide for related matters developer comply with this act by providing health insurance to workers of the project.

3.2.12 The National social security fund act cap 222

An act to provide for the establishment of a national social security fund and to provide for its membership the payment of contributions to and the payment of benefits out of the fund and for other purposes connected therewith. The provision of this act establishes the board of directors as the core administrative unit for the management of the fund. Also the Act elaborated about the Eligible employee compulsory registration of employers and eligible employees excepted employment what is required for the cancellation of registration and voluntary membership. The Act Also providers for description of benefits based on age the conditions for withdrawal of benefit invalidity of benefit survivor benefit and regulations regarding benefits. The employer is obliged to make sure the employee are registered to the fund and getting all services provided by fund .Developer respected to the provisions of the national social security fund act by making sure all permanent workers working at the project site registered on social security funds.

3.2.13 The energy and water utilities regulatory authority act No 11 of 2011

The energy and water utilities regulatory authority (EWURA)was established under the EWURA act no 11 of 2011 with responsibility inter alia for regulation of the water and sewerage services section 28 of the water supply and sanitation act confers EWURA other powers to exercise licensing and regulatory functions in respect of water supply and sanitations services establishment of guidelines on tariffs chargeable for provision of water and sanitations services monitoring water quality and standards of performance for provision of water supply and sanitation services .Developer is making sure to comply with the act by increasing efficiency in the use of energy and water utilization.

3.2.14 The employment and labor relations act no 6 of 2004

Employment and labour relations act no 6 of 2004 make provisions for core labour rights to establish basic employment standards to provide frameworks for collective bargaining to provide for the prevention and settlement of disputes and to provide for related matters .The Act prohibits child labour forced labour discrimination at work place and trade unions associations for operations carried out at the project site the developer has ensured that there is no engagement in child labour forced or discrimination of any kind. In addition the employers are observing rights of employees as applicable and in structured in Tanzania.

3.2.15 The HIV and AIDS (prevention and control) Act No 28 of 2008

All health practitioner's worker's employee's recruitments agencies insurance companies sign language interpreter's data recorders legal guardians and other custodians of any medical records files data or test results shall observe confidentiality in the handling of medical information and documents particularly the identity and status of persons living with HIV/AIDS Developer complies with this act by observing confidentiality in handling medical information.

3.2.16 The local government (District Authorities) Act cap 287

The district council is the highest authority of the local government as provided by local government (District Authorities)Act cap 287 (R.E 2002) and its subsequent amendments .The council is empowered to formulate by law with the approval of the minister responsible for local government authority .In the respect developer is liaised with the local government authorities in the project area specifically the district environmental management officer and district natural resources officer to ensure that all aspects guided by the authorities are observed and that there is close co -operation with the authorities and the communities in monitoring the project operations.

3.2.17 The fire and rescue force act cap 427

The act established a fire and rescue force (National fire Brigade) for the mainland Tanzania general duties of the force shall be to prevent and minimize death rates injury to the people and damage to property and people arising from fire floods earthquakes road traffic accident and other disasters. Under the act the fire and rescues are mandated to plan inspection and security of the construction and operation industrial facilities petro chemical facilities and petroleum and gas pipelines. Also it is

mandated to issue certificate and raise public awareness on fire prevention and services and provide training.

The certificate issued by the fire and Rescue force shall be valid for the period of one year from the date of issue, there after the property premises vehicle vessel who fails to renew his fire and rescue certificate within one-month after its expiry will be required to pay the principal amount payable in respect of the property plus penalty of twenty five per centum (25%) for late payment .The developer has complied with this act for acquiring the fire and Rescue force certificate and has all the firefighting equipment on site.

3.2.18 The Income Tax Act cap 332

Income tax shall be charge and is payable for each year of income in accordance with the procedure in part VII by every person 4(b) who has domestic's permanent establishment that has repatriated income for the year of income or (c) who receives a final withholding payment during the year of income.

(2)The amount of income tax payable by a person for a year of income shall be equal to the sum of the income tax payable with respect to subsection (1) (a), (b) and (c)

4)The income tax payable with respect to subsection (1) (a)by a resident individual who is not required to file a return of income under section 92 a ii and who does not elect to file a return shall be equal to the sum of the amounts to be withheld under section 81 by the individuals .

5)The total income of person of a person shall be the sum of the person's chargeable income for the years of income from each employment business and investment less any reduction allowed for the year of income under section 61 relating to retirement contributions to approved retirement funds 2
The total income of each person shall be determine separately .The developer adheres to this act by paying taxes and turnovers to relevant institutions

3.2.19 industrial and consumer chemicals management control act of 2003

The industrial and consumer chemicals management & control act of 2003 and its regulations provide for management and control of various chemicals listed in the 3rd ,6th ,7th and 8th schedules of the Act .It also stipulates requirements for registrations of chemicals ,facilities and processes .The developer has adhered to this act by making sure to purchase chemical from authorized dealers.

3.3 Nation Regulations

3.3.1 The environmental management (Environmental impact Assessment and Audit amendment regulations) 2018

These regulations set procedures for conducting environmental impact assessment and environmental audit in the country. The regulations are made from section 82 and 230 of the EMA (2004) and prescribe that the Minister responsible for environment shall formulate regulations and guidelines on how EIA shall be conducted. The EIA regulations are applicable to all projects contained in the third schedule of the EMA (2004) and first schedule of the EIA, thus audit regulations. Industrial development projects are contained in both schedules. It is thus a legally binding requirement to undertake the ESIA of this project. This regulation also prescribes the stages and or the EIA processes which are in principle managed by the NEMC. Developer has complied with these regulations by undertaking the Audit study.

3.3.2 The environmental (registration of environmental experts) Regulations G.N No 348 of 2005.

The objectives of the regulations are to establish a system for registration of environmental experts provide for a system of nurturing competence knowledge professional conduct consistency integrity and ethics in the carrying out of environmental impact studies and environmental audit ensure that the conduct of environmental impact assessments or environmental audits is carried out in an independent professional objectives and impartial manner and provide for a code of conduct discipline and control of environmental experts

The NEMC maintain a registry of EA and EIA experts, These regulations also set code of practice of the experts for which the environmental audit experts for this project subscribes developers are required to use registered experts under the law. Developer has complied with the regulations by employing registered EA experts (THE NGOLO CONSERVANCY) to carry out the EA study.

3.3.3 The environmental a management (Hazardous waste control and management) regulation 2009

No person shall pack or store wastes in a container or package, unless the container or package in which that waste is to be contained, package or stored is UN approved container that is capable of containing or storing the waste in environmental sound manner without any risks to human health and the environmental.

1) The container or packaging material provided for under sub regulation.

2) Shall be suitable for the storage of wastes for which the application for storage has been made and shall.

a) Not be reactive with the waste in question

b) Be free from the possibility of leakage

c) Be capable of protecting the health of persons involved in handling the wastes the neighboring community and the environmental in general.

3) Every container which is used in the storage of hazardous wastes shall be labeled and after use be puncture and disposed of in accordance with these regulations .The developer is adhering with the regulations since all the hazardous wastes from the project site are handled to hazardous waste handlers.

3.3.4 The environmental management (Fees and charges) Regulations 2019

The national environmental management council (NEMC) is a body corporate established by environmental management Act cap 191 to undertake enforcement compliance and review and monitoring of environmental audits ,environmental research raising awareness and collecting and disseminating environmental information section 99 1 b and 101 1 of the co EMA and regulations 46 (4) and 57 (1) of the EIA and Audit regulations 2005 mandate the council to monitor operation of industry /factory project undertaking with a view to determining its immediate and long term effects on the environment. In order to enforce this requirement the environmental management (Fees and charges)regulations 2008 stipulates annual charges for environmental compliance monitoring and audit payable to the council by all developer whose project have been issued with environmental certificate developer is complying with provision of this regulations by paying annual fees on time.

3.3.5 The fire and rescue force safety inspection and certificate regulations 2008

Any person who is an owner or operator of the premises vehicle vessel or any other conveyance facility which has not been inspected and issue with fire authority shall apply for conduct of inspection in his premises vehicle vessels or any other conveyance facility, Developer is complying with this regulation by having fire safety equipment's regular inspections on premises and having compliance certificate from fire authority.

3.3.6 The fire and rescue force precautions in building regulations 2015

The provisions of this part shall apply in determining the design construction protection location arrangement and maintenance of exit facilities to provide safe means of escape for occupants from all buildings hereafter erected altered or changed in occupancy .Developer is complying with this regulation for having precaution plan and exit route in their production building.

3.3.7 The environmental Management Air quality standards regulations 2007

The objective of the air quality standards regulations are to set baseline parameters on air and emissions based on a number of practical consideration and acceptable limits enforce minimum air quality standards prescribed by the national environmental standards committee help developer such as industrialists to keep abreast with environmental friendly technologies and ensure protection of human and health and the environment from various sources developer is committed to abide to the provisions of these regulations.

3.3.8 The environmental Management (Soil quality standards regulations 2007

The objective of the soil quality standards regulations are to set baseline parameters on soil limits for soil contaminations in agriculture and habitat enforce minimum soil quality standards prescribed by the National Environmental standards committee prescribe measures designed to minimum soil quality standards to maintain restore and enhance the inherent productivity of the soil in the long term enforce minimum soil standards prescribed by the National environmental standards committee for such purposes developer is committed to abide to the provisions of these regulations.

3.3.9 The environmental management (control of ozone depleting substances regulations 2007

The objectives of the control of ozone depleting substances are to eliminate the production and consumption of ozone depleting substances in accordance with the phase out schedule of the Montreal protocol regulate the production import export trade disposal and use of ozone depleting substances and in products control and monitor the amount of ozone depleting substances entering or leaving the united republic of Tanzania and provide a system of data collection that will facilities compliance with relevant reporting requirement under the protocol promote measures strategies programs incentives equipment's and technologies in favors of the use of ozone friendly substances products and equipment in line with national obligation specified by the Montreal protocol and facilities the link between National ozone unit and the ozone secretariat of the protocol ,developer is committed to abide to the provisions of these regulations.

3.3.10 The environmental management (standards for the control of noise and vibration pollution) regulations

1. The executive director may in consultation with a local council by notice in the gazette designate any area as a noise control zone for the purpose of controlling the emission of noise in that area.
2. A notice issued under sub regulations 1 shall describe and delimit the area to which it applies including the radius of the Noise control zone and shall define the period and time of the day during which person are subject to control or a particular building which is subject to control
3. Where the area in respect of which a Noise control zone notice is issue is within a specified radius of any specified building the notice shall describe and delimit the area by reference to that area building and radius.
4. A person who fails to comply with a notice issued under this regulation commits an offence and is liable on conviction to a fine not exceeding on hundred currency points or imprisonment not exceeding one year or both and in case of a continuing offence to an additional fine not exceeding on thousand currency points for every day or part of the day during which the offence continues .The developer has installed various machines that have standards amount of noise so as to reduce and control amount of noise from the project site.

3.4. Administrative Framework

3.4.1 The Vice President's office

The vice president's is the overall custodian on environmental issue in Tanzania .There is a National environmental advisory committee which serves as an advisory body to the minister responsible for environment or sector ministry on environmental matters referred to it .There is a director of environment heading the division of environment .The director for environment is responsible on all matters pertaining to the management of the environment.

3.4.2 The national environment management council

The National environment management council (NEMC) was established in 1983 as a cording body on environmental affairs. NEMC is a corporate body mandated by the environmental management Act No 20 of 2004 to undertake enforcement compliance and review and monitoring of environmental audit and facilitates public participation in environmental decision –making among other NEMC advices the government and sector Ministries to ensure compliance with the requirements of the environmental management Act,

3.4.3 Ward level institutions

Ward play a significant role in the government structure .The overall functions of the Ward development committee (WDC) are to

- Ensure the implementation of decision and policies of the district council
- Ensure the implementation of the Ward development plan
- Developer and or unities tasks designed to ensure the welfare and wellbeing of residents
- Super vices and co-ordinate the implementation of District council project and programs
- Assist in the formulation of village and Mtaa by laws
- Monitor revenue collection
- Initiate and promote participatory development and manage disaster and environmental related activities

In the present local government reform structure wards are basic linkage between communities and the district ,Ward are made up of 3 to 7 villages depending on the population and graphical distance .The most influential institution in the ward are ward development committee (WDC) Ward executive officer (WEO)and the ward councilors WDC is composed of the Ward councilors who act as the chair ,the WEO as the secretary and the village chairpersons from the village making up the ward as members, WEO is the functional officer at the ward level other function of WEO include among others to collect revenue for the district and supervise the implementation of all planned activities at ward level WEO is the most prominent government officer in the ward who is responsible for coordinating the functions of the WDC.

Ward councilors are very influential in the villages, Unlike WEOs who are employed and are salaries councilors are elected and are not salaries, they are expected to represent the community member who elected them into power at the district council and thus sustain their services through allowances given in the district council meetings and monthly basics

Councilors play a key role in wetland management since their mandate is persuasive some have used their influence to attain admirable output in various sectors for example they mobilize funds for domestic water supply both local and external to the ward repair and digging of feeder roads school and dispensaries etc. councilors may also mobilize community members towards formation of community based organizations (CBOs) and setting of by law.

Table 1. Policy and legal regime compliance

Policy and legislation	Requirement	Compliance measures	Deficiency	Corrective measures
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The national environmental policy 1997	Environmental audit should be carried out during project operation .The project should be planned in a manner that minimizes adverse effects on the environment at all stages i.e. location effluent discharge waste disposal use and disposal of products	The project site is planned in a manner that contain enough infrastructure for controlling solid and other wastes however the developer is advised to improve solid waste management by separating wastes	No solid waste separation	Coding of waste bins to ensure waste separation
The national water policy 2002	In stream flows or environmental flows and level are necessary for riparian biodiversity wetland systems freshwater seawater balance in deltas and estuaries. reduction of water volume affects aquatic life by reducing dissolved oxygen and supply of nutrients The effluents created by urban water use if not treated pollute surface and groundwater resources .Additional overexploitation of	The project site is supplied with water from Makambako Town Water supply and sanitation Authority and uses the permitted amount of water	None	None

	water resources which does not consider other uses is also a source of environmental degradation.			
The energy policy of Tanzania 2003	Sustainable and environmentally friendly utilization of energy resources	The developer utilize energy proper supplied by TANESCO and has a standby diesel that supply energy during power outage	None	None
The national investment promotion policy of 1996	Promote the growth of exports by strategically utilizing the scares natural social and capital resources to accomplish it	The developer is promoting the policy by utilizing social and capital resources available as possible	None	None
The environmental management Act No 20 of 2004	Pollution prevention and control measures towards any pollutants that can be resulted from the project operation	The developer is management waste well at the project site however more emphasis is required on waste sorting and liquid waste management	Poor waste sorting at the project site	The developer should make sure before wastes are taken by the waste handlers there should be proper sorting
The water resources Act No 11 of 2009	The act defines that all water in Tanzania is vested in the united republic .The Act provides among others for the holders of a prospecting right or of an exclusive	Company uses water from Makambako town water supply and sanitation authority and has installed several tanks for storing water at the project site.	None	None

	prospecting license granted under the natural resources Act may within the area specified in such license subject to all other rights to the use of water abstract and use water for prospecting purposes sinking or enlarge any well or borehole and abstract water there from not exceeding 22,700 liters per day.			
The environmental impact Assessment and Audit regulations 2005 (R.E 2018)	Determine how far activities and program of activities and processes of a project of undertaking conform with the approved environmental and social management plan	The developer determine and will continue to learn and adhere to the assessment and regulations of the environmental impacts of 2005 and its amendments of 2018	NO EIA /EA certificate	The company should ensure conduction of annual audit after obtaining an audit certificate observes the relevant laws and regulations pertaining to the project operations
The occupational	Provisions of safety gear and regular health check ups	Developer should provide safety gears such as hard hand gloves	Some of the workers are	Developer should provide the fumes masks

Health and safety act no 5,2023		Helmets air respirations overalls and safety boots to the workers in the risky areas and emphasize on their uses	Working without safety gears	Which allow good inhalation and exhalation of air when a person working but also the air respiration for the packaging's preparation room's attendant Also the company should ensure that workers put on their PPE as required.
The workers compensation Act no 20 of 2008	Provide for compensation to employees for disablement or death caused by or resulting from injuries or diseases sustained or contacted in the courses of employment	The developer complies with the Act by ensuring the workers are compensated as the result of injuries or diseases from the job	None	The company should continue to register to the workers compensation fund (WCF0
Fire and rescue force act of 2007 revised edition	Plan inspection and security of operation of the project site .Issue certificate and raise public awareness on fire prevention and fire service and provide	The developer through fire and rescue force should provide awareness training to the workers on firefighting techniques and fire drills	None	The developer should continue have a sufficient number of fire extinguishers and have a

	training			trained firefighting team at the project site
The employment and labor relations Act No 6 of 2004	Provides broad protection against discrimination	The developer will not discriminate workers or customers in many ways rather it will fight away all discrimination elements to people	None	The discrimination elements should be fought away one appears to the workers at the company.

3.4.4 Institutional framework

The Tanzania EA procedure confers different roles and responsibilities to various parties involved in the EA process of any existing development undertaking to which EA is obligatory important institution to the existing project are as summarized in table below

Table 2. Key institution to the EA process

Level	Institutions	Role and responsibility
National level	Vice president's office NEMC division of environment	<ul style="list-style-type: none"> ❖ Co-ordinate environmental management policy Act and EA Guidelines ❖ Approval of ToR review of EA ❖ Issuing an environmental certificate ❖ Environmental monitoring and compliance auditing ❖ Advices government on all environmental matters
	Ministry of land housing and	<ul style="list-style-type: none"> ❖ Policy guidance on land issues

	human settlement development	<ul style="list-style-type: none"> ❖ Issuance of certificate of titles for plots of land
	Occupational safety and health authority (OSHA)	<ul style="list-style-type: none"> ❖ Issuing certificate of compliance and oversees occupational safety and health issues ❖ Designated authority for occupational safety issues
Project developer	M/S CHANGCHENG WOOD INDUSTRY LIMITED	<ul style="list-style-type: none"> ❖ EA study ❖ Project investment ❖ Project implementation ❖ Consultation with stakeholders ❖ Project monitoring and internal auditing
District /local level	Executive director's office district planning office districts land and natural resources environment department agriculture officer	<ul style="list-style-type: none"> ❖ Land use approval ❖ Day to day environmental management and monitoring ❖ Issuance of various endorsements for approval at higher levels ❖ By laws and directives from district
Local authorities Idofi mtaa, Mlowa ward	Ward and Mtaa offices	<ul style="list-style-type: none"> ❖ Project monitoring ❖ Monitoring developments /activities in vicinity of the project

CHAPTER FIVE

5.0 STAKEOLDERS CONSULTION AND PUBLIC PARTICIPATION

This chapter describes the process that was followed during stakeholders' consultation and public participation to identify the key issues and impact of the undertaken project brief. Views from the general public, local leaders and different expertise that in one way or another would be affected or rather interested in the ongoing project were sought through interviews and public meeting as stipulated in Environment Management Act , Cap 191.

From the field work, it was apparent that the majority of the stakeholders consulted appreciated the project operations as it is of paramount important to them. Since the project can have some negative affects to the environment and the socio- economic spheres of the people, it is recommended that the project should operate following the country regulations.

One of the essential components of consultation exercise is to ensure that interested and affected parties are well informed and are aware of the project. This will enable them present their views either in support or rejecting the project. It is important that stakeholder's views and preferences are well recorded in order to draw effective mitigation measures. Thus, the following emerged as the key stakeholders for project and their signatures are shown in appendix.

Table 3. Key stakeholders

STAKEHOLDER	JUSTIFICATION
Project developer	As client for the project are responsible for provision of all necessary information with regard to the existing project for EA purposes
Ministry of Labour and Employment Occupation safety and Health Authority (OSHA)	Are responsible with health and safety aspects of the workers at workplace
Ministry of Home Affairs- Fire and Rescue	These are statutory body with regard to EA approval process and thus were automatically involved. Also to know the legality of their present in Tanzania
Local Government Authorities: The Makambako Council staffs and key	These are daily responsible for overseeing social economic activities and
Personnel such as: District Environmental Management , MLOWA ward Executive	Developmental activities are undertaken in harmony with the community, environment and the legal aspects of the

Officers, and Idofi mtaa officers	area and the development within their area of jurisdiction.
The neighboring community and institutions within the project are	These could be affected parties with respect to the project development due to their closeness to the project site.

Source: Consultant 2024

5.1 Objectives of the Consultation and Public Participation

The Objectives of the consultation were to:

- Disseminate and inform the stakeholders about the project with special reference to its key components and location.
- Gather comments, suggestions and concerns of the interested and affected parties.
- Incorporate the information collected in the EA STUDY.
- The establishment of a communication channel between the public and the team of consultants, the project developers and the Government.

Table 4: Issues/ concerns raised by the stakeholder.

Authority/ Institution	Name of Consulted Person	Position/ Designation	Issues raised	Response
Makambako Town Council	Gift .h. kiwia	EMO - Makambako Town Council	<p>The project is good as has opportunities such that more than 50 Workers have been employed some in temporary and some in permanent basis.</p> <p>The project location is appropriate for the industrial activities as there is no risk of serious environmental damage in general</p> <p>The developer must ensure that she adheres to operation of the facility including environmental Laws and regulation</p> <p>The company has been advised to ensure effective management of all Waste produced both liquid and solid west</p>	<p>Positive</p> <p>Positive</p> <p>The developer (CHANGCHENG WOOD INDUSTRY LIMITED) has been working by adhering to all environmental laws and regulations and currently has initiated an audit exercise to comply with environmental act and regulations</p> <p>The company has both effective measure of managing waste bins for solid waste and septic tanks and soak away pit for liquid waste</p>
	Prowin Safari	TPO& TLO	The site own by Makambako town council, all lease process are followed	<p>Positive</p> <p>positive</p>

	Askyulike Anania	B	Mtaa Executive officer (MEO) IDOFI	They are aware of the project at the area No claim received from the people around the area The developer should help the community by contribute financial and employment opportunity	Positive Positive The project developer has promised to work close by
	Happy Ngailo		Ward executive Officer- MLOWA Ward	Support to the social services around the Mtaa and ward area The developer should consider continue follow the regulation and other standard in order to have sustainable development	Supporting development on the area Noted
Occupation Safety and health Authority(OSHA)	Eng Kihombo	Daniel	Ag ZM- SHE	Enforcement on the use of personal PROTECTIVE GEARS Preparation and displaying of occupational safety and health policy First aid facilities must be there in case of any accident occurred Trainings on first aid Medical Examinations for workers should be done during employment, routine and exit period.	The developer shall emphasize The developer is working hard to ensure compliance with all government laws and regulation including OSHA The developer shall put First aid kit and first aider Person at the facility The developer shall ensure all workers undergo trainings and medical examination prior to employment

Occupation Safety and health Authority(OSHA)				
	JOEL MWAKANYASA	Fire Constable	System of fire control Should be active in case of any danger occurred Training on firefighting to the employees must be provided Should indicate escaping route in case of any accident occurred The site must have different tools, Equipment' and infrastructures like tanks of water, fire extinguisher, and horse heel to prevent fire Provide Fire hazard signs such as 'No Smoking' signs, Direction to exit case of any fire incidence and emergence contact numbers should be provided.	Developer shall ensure this at all the time Trainings have been given to workers prior to employment contracts. Escaping route are available The developer complies With Fire safety regulations with Fire safety regulations The proper signs for fire hazards are placed accordingly.

CHAPTER SIX

6.0 FINDINGS AND OBSERVATIONS

This chapter provides environmental performance overview of the project site. It reviews the historical performance of the project site records being kept (quality assurance and control) procedures, environmental management practices, environment management structure, emergency response security and safety plans, company community interaction programs and handling of complaints.

- ❖ It provides an overview of the records concerning the project site kept by developer
- ❖ It reviews all matters related to safety and health which included: summary of accidents reporting, reporting and investigation, health and safety management , site safety procedures, air quality, chemical and material handling if any, temperature exposure, personal protective equipment, emergency response capability, fire protection, and training programs.
- ❖ It provides the information from interview carried out by the consultants to a selected number of employees.
- ❖ It provides information on site inspection carried out by the consultants.
- ❖ It provides information on environmental performance data for, project site which include liquid effluents, solid (Non- hazardous) waste treatment, hazardous materials and management, groundwater and soil contamination.
- ❖ It assesses environmental enhancement opportunities including water and energy conservation, waste minimization training etc.

6.1 Interviews.

The consultants prior conducted interviews with the company's manager, and other facility staffs where issues related to the general operation of the facility in relation to environmental and safety performances were discussed, the interviews were conducted with other relevant stakeholders to obtain in- depth information on same aspects . The issue of interest was the company daily operation in relation to environmental conservation.

6.2 SITE INSPECTION.

The Site inspection was done throughout the Audit study which assisted the consultant and the developer's representatives, and stakeholders to discuss issues of key environmental importance, safety and health issues on spot. All necessary modifications for the mitigation of environmental impacts were discussed directly.

6.3 Audit Findings and Observations

6.3.1 Review on Environmental, Health and safety Management.

6.3.2 Environmental Management and Monitoring Plan.

The project site does not have a written Environmental policy and it doesn't have monitoring plan and it monitors environmental related measures for workers like sanitation and hygiene during operation based on general knowledge and guide. Therefore, through this Auditing process, the company will be provided with the environmental policy and EMP.

6.3.3. Allocation of Fund for Environmental Management.

The company does not have a specific budget for environmental management issues but rather environmental matters are addressed through the overall company budget.

6.3.4 General Cleanness and Solid Waste Management.

The company does insist on the general cleanness of the environmental to its workers , especially on waste management from the area of operation wastes such as paper, boxes and plastic bottles to be collected and kept in a proper way before taken by the waste collectors for disposal or recycle.

6.3.5 Emergency response

The Company has various emergency response facilities in case of any dangerous occasions happen: the project site has firefighting equipment such as portable fire extinguishers which are about 8 number, sand bucket.

The project site is protected by security guards, where security is ensured all day night by shifts where 2 guard to patrol during the day time and 2 guard doing patrol during night time

The guards are also provided with security equipment. There is no fire emergency evacuation plan at the project site and the developer has been advised to put it in pace.

6.3.6 Company – Community interactions Programs.

The project site provides employment opportunities to the neighbors around the project. Company interactions with communities in community and development activities are good as it contributes to the development activities of ward and surrounding communities.

6.3.7 Workers Health Plans.

The company has health programs that include conducting medical exams and mandatory regular health checks as per the OSHA Requirement. It has been recommended that health checkups shall be conducted to workers by OSHA once per year at the project site.

6.3.8 Handling of Complaints.

The project site doesn't experience complains from the surrounding areas however the company has system to handle both external and internal complaints. The internal Complaints are handled through the management whereas the complaint is discussed and solved with the company management system. The company has not experienced any complaints from the neighboring community.

6.4 Occupational Health and Safety Plans

6.4.1 Safety and Environmental Management policy.

The project site does not have safety policy in which safety and health matters would have been dealt by its guidance. The developer shall have this policy and the environmental monitoring plan. The guidance shall contain the following.

- Quality methods and proper handling of wastes
- How to provide first aid in case of accidents.
- Minimize the impacts on the local community and environment by ensuring positive relationship with the community.
- Ensuring workers safety when are working the project site by putting on their appropriate protective equipment all the time.

6.4.2 Occupational Health and Safety Committee

The project site has no occupational health and safety committee as stipulated by section 13 of the Occupational Health and Safety Act of 2003. The main function of the committee is to report to the management on all issues relating to workers, safety so that effective actions can be taken No records of previous findings of the committee were noted during the audit study. The developer is advised to have occupational Health and safety committee that will deal with occupation safety issues immediately.

6.4.3 Summary of Accidental Reporting

The project site has never experienced accident that serious since its establishment. Record shows that a project site does not experience accidents and there is appropriate system for accidents reporting and recording.

6.4.4 Sanitary convenience

The project site consists of four-pit latrines for males and female. The company adheres to the provision of this Act by allocating one latrine for every twenty workers. The general cleanliness of the toilets was observed to be satisfactory which goes along with section 55 (1) of the Act of OSHA

6.4.5 Noise Level Exposure

The maximum noise levels recorded in the premises are 35 DB, and 45DB this has been recorded from offloading and loading area mostly from the car engine, machine and workers sounds. These noise levels are within standards based on the TZS 932:200.

6.4.6 Personal Protective

Protective gears provided in all workers includes coats, Masks, Rubbed boots, head caps and Gloves. These safety gears are provided whenever necessary and when they are damaged.

6.4.7 Workers Health Provision

The project site has no general trained occupational health and safety officer responsible for workers' occupational health and safety neither they don't have first aid trained personnel trained by OSHA who would be responsible to provide first aid to workers whenever necessary. However, developer is also running a mandatory regular health checks as stated by OSHA Act. Workers are normally taken to nearby hospitals when they get sick. Those having serious cases are normally referred to big hospitals under developers cost as stated by OSHA Act. Workers are normally taken to nearby hospitals when they get sick. Those having serious cases are normally referred to big hospitals under developers cost as stipulated in the Occupational health and safety act of 2003.

Workers are also provides with dirking water which is safe and clean.

6.5 ENVIRONMENTAL IMPACT ASSOCIATED WITH THE PROJECT SITE

This section presents environmental impacts associated with the project site operations. Impacts have been identified after conducting site visit, Inspections, review of environmental records and interviews with workers working at the project site. Assessment of significance of impacts was done based on Qualitative and quantitative analysis and expert judgment. Impacts were regarded as of high significance if they have bearing to human health and ecosystem and they have low significance where the duration of impact is of short period. The following sections present the detailed assessment of the impact

6.5.1 Operation impact

6.5.1.1 Environmental pollution

The project is dealing in purchasing of Tree logs and processing wood veneer, reject of logs, log peel, plastic bottles are common solid waste, also food remnants, reject logs ,box picces and papers which can pollute the environment and if they are not handled properly, the can affect human health and environment as well

6.5.1.2 Health and safety risk

Due to enforcement of PPEs especially operations workers; there is great chance to inhale fumes which can be detrimental to human health especially the respiratory system. The company has been working hard to comply with government laws and regulation such as to comply with the occupational safety and Health Act,no.5 of 2023,the facility has been registered to OSHA and has certificate of registration of workplace. The company has been certified by OSHA. Safety gears are provided to workers including masks, coasts boots and gloves although are not eat satisfactory lever and the enforcement on the uses in minimum

6.5.1.3 Noise emission

Noise at the project site emanate from the movement of vehicles especially during the loading and offloading of tree logs from the truck and the operation of generator. Noise may have both physiological effects on human health. Physiological effects include nausea, unusual blood pressure, physical fatigue, dizziness and loss of healing capacity. According to Tanzania bureau of standard the maximum allowable limit for noise level exposure is 85 dB for 8 hours of the working day. The maximum noise level recorded in the facility was 35 to45 dB due to absence of operating machines

which could be the source of noise. This maximum noise level is within the required level by TBS and does not cause potential impact to workers and surrounding community

6.5.1.4 Loss of lives and property as a result of fire break out

project site operations has installed a high voltage power and its operation depend a lot on the uses of electricity in case of any fault fire outbreak is likely to occur thus require special precaution so as to avoid fire outbreak. However, fire accident do happen, thus causing huge financial losses and even death to human being, at the project site no any case related to fire accident has been occurred but this does not discourage developer to act in case of fire emergency by being prepared with fire emergency preparedness plan and enough firefighting equipment.

CHAPTER SEVEN

7.0 ENVIRONMENTAL ENHANCEMENT STRATEGIES AND MITIGATIONS MEASURES

This chapter present corrective measures to the weakness identified as well as mitigation measures that are already in place each recommendation has been developed and worked out on the basic of existing situation. This environmental audit study plays a crucial role in increasing the efficiency of any facility or operation and reducing or minimizing deterioration of the environmental. It is a proactive activity where a part from finding faults weak areas in the system are identified and measures are undertaken for improving overall operations efficiency, Some recommendations for an overall improvement in the processes which would subsequently improve efficiency in resources use are discussed below.

7.1 Overall environmental management structures

7.1.1 Environmental management and monitoring plan

Since the project site does not have an environmental policy developer is supposed to prepare an environmental policy so as to express company's commitment towards environmental management. The following are environmental management issues that should be considered during formulation of environmental policy for the project site.

- a) Health and safety issues
- b) Solid and liquid waste management
- c) Compliance with applicable laws and regulations
- d) The policy should be reviewed at least after every five years

7.1.2 Allocation of fund for environmental management

Since the company does not have a specific budget for environmental management issues but rather environmental matters are addressed through the overall company budget. It is recommended that developer to work on setting a specific budget which will take care of environmental issues such as waste management, measurement of parameters environmental management, establishment of tree nursery and monitoring plan and annual environmental audit especially in the future were the company is in process of improving its efficiency by establishing machines for operation.

7.1.3 General Cleanness liquid and solid waste management

The developer needs to work sorting solid waste before is taken for disposal, proper sorting of waste will ensure proper collection and disposal methods for collection since each solid waste has its appropriate disposal method

7.1.4 Emergency response

It is recommended that the developer should consult fire and rescue force so that they can work together to prepare fire emergency evacuation plan as its important to make sure all fire response system and equipment are in place

7.1.5 Workers health plans

The developer is advices to make sure to conduct checkups according to OSHA law and regulations and there should be regular checkups to workers who are working in section with fumes exposure.

7.1.6 Handling of Complaints

The project site doesn't experience complains from the surrounding areas however the company has system to handle both external and internal complaint. The internal complaints are handled through the management whereas the complaint is discussed and solved with the company management system; The Company has not experienced any complaints from the neighboring community.

7.2 Occupational health and safety

7.2.1. Accidental Reporting

Accident record do not show bad image of the company but helps to manage and avoid future accidents. It is therefore recommended that the company should prepare an accident recording system includes the following issues.

- a) Type of accident
- b) Date of accident
- c) Causes of accident
- d) Number of occurrences of such accident
- e) Magnitudes of the accident and other losses associated with the accident

7.2.2. Sanitary convenience

Cleanliness in the toilets and working places should be done daily this can be maintained through inspiration in all place in the project site by the head of environmental health and safety committee.

7.2.3 Noise level exposure

Although the noise level is lower than the recommended decibel value it is recommended that

- ❖ The developer should endeavor to keep the noise generating activities to a minimum by doing regular maintenance and using more environmental friendly technology.

7.2.4 Personal protective equipment

- a) Sensitization and where necessary enforcement on the use of protective gears should be put in place. One way of promoting usage of PPE to workers includes provision of motivation to workers.
- b) The schedule for provision of PPE to workers should be three or six months depending on the lifespan of the protective gear.

7.2.5 Workers health provision

- a) More cups for drinking water should be in place. The cup storage place should also be covered to prevent the cups from being contaminated with dust and bacteria
- b) The company should train other workers of first aid issues in order to assist them in charge of first aid room to serve the workers in case of this absence
- c) The result of medical checkups should be communicated to all examined workers

7.2.6 Emergency preparedness and response

- a) Sensitization on the emergency response need to be practiced to enhance effective communication during an emergency situation
- b) Environmental health and safety committee should assist all workers on how to avoid accidents in the project site.

7.2.7 Staff awareness's and training

- a) The developer should make sure that all workers are instructed in simple language on the hazards prevailing in their work place and safety measures are taken to avoid injuries
- b) Training to new staff should be given instantly also when there is changes in structure processes or technology.

CHAPTER EIGHT

8.0 ENVIRONMENTAL MANAGEMENT AND MONITORING PLAN

8.1 Environmental management plan

Environmental management plan (EMP) for developer is usually to provide a logical framework within which identified negative environmental impacts can be mitigated and monitored. In addition, the EMP assigns responsibility of action to various actor and provides a period within which mitigation measure and monitoring can be done. The EMP is a vital output of a project as it provides a checklist for project monitoring and evaluation. The EMP outlined has addressed the identified potential negative impact and mitigation measure of the project based on the section of environmental impact and mitigation measure of the negative impact.

8.2. Environmental monitoring plan

Monitoring is a long-term process, which normally begins at the start of the project and continues throughout the life of the project. Its purpose is to establish bench marks so that the nature and magnitude anticipated environmental and social impact could be continually assessed. Monitoring involves the continuous or periodic review of construction operation and maintenance activities to determine the effectiveness of recommended mitigation measures, Consequently trends in environmental degradation or improvement can be established and previously unforeseen impact can be identified or pre-empted. This project did not undergo environmental impact assessment (EIA) and therefore this plan will be the first step to correct any degradation, which has been going on and set standards for going future environmental studies.

Simple monitoring system is normally set during construction by the supervising engineer and contractor and during operation by the developer so that potentially environmentally problematic areas can be detected well in advance and the appropriate remedial action taken. This could be a checklist of items that need to be inspected as matter of routine or periodically depending on the nature of the aspect.

The types of parameters the can be monitored may include mitigation measures or design features or actual impact in some cases monitoring is straightforward and can be done as part routine or periodic maintenance.

However the other parameters, particularly those related to social economic and ecological issues can only be effectively assessed over a more prolonged period can be 3 to 5 years.

Table below summarizes the EMP for this project. it describes parameters that can be monitoring and suggests how monitoring should be done how frequently and who should be responsible for monitoring and action.

CHAPTER NINE

9.0 CONCLUSION AND RECOMMENDATION

9.1 CONCLUSION

The project brief Report for CHANGCHENG WOOD INDUSTRY LIMITED'S processing of wood veneer and stick facility at, Mlowa ward, Makambako town council in Njombe region has been performed according to the environment management (EIA and Audit) (Amendment) regulation, 2018

Generally, based on the physical observations, analysis of environmental parameters and stakeholders' consultation, the issues/impacts have been described and assessed in detail to gain adequate understanding of the environment effect of the project, in order to formulate mitigation measure in response to negative aspect that have emerged.

Several environment impacts were identified which were classified into two group i.e. Direct and indirect impact due to nature of the project currently, the facility is operating in high observance of health and environment aspect at the project must comply not only with national standards but also with international standard as the veneer are being transported to different European.

9.2 Recommendation

In order for the processing of wood veneer and stick facility to keep its current environment performance to acceptable level it is strongly recommended that environment management plan and environment monitoring plan should be implemented. Furthermore, it is recommended that company should improve its environmental managements system in order to have a sustained system for improving environmental performance. Nevertheless, the companies need to critically look at the following issues while on operation

- ❖ A facility must have personnel for Environment, Health and safety issues who will be responsible for all environment and compliance issues
- ❖ Testing firefighting equipment's such as fire extinguishers regularly
- ❖ Environmental training program should be initiated to the workers
- ❖ Company must have the trees nursery because they deal with cutting off trees
- ❖ Company must have the registry book for logs harvesting
- ❖ A facility must know the amount of tree log peel which are produced per day and all solid waste produced
- ❖ Support the initiatives to sensitize and educate the workers on the HIV/AIDS pandemic.

- ❖ Company must have translator personnel
- ❖ Company must reducing dust in the operation area by wetting land