

ENVIRONMENTAL MANAGEMENT PLAN (EMP)

FOR THE CHARCOAL AND BRIQUETTE PROCESSING AND PACKING FACILITY
AT FARM RUGBY, OTJIWARONGO, OTJOZONDJUPA REGION

ECC APPLICATION REFERENCE: APP-3684

DOCUMENT VERSION : **DRAFT**

Author(s): Mr. Mandume Leonard	Prepared for: Roepersfontein Charcoal cc
Reviewer: Nerson Tjelos	
Company: Excel Dynamic Solutions (Pty) Ltd	
Telephone: +264 (0) 61 259 530	
Email: info@edsnamibia.com	

TABLE OF CONTENTS

LIST OF FIGURES	ii
LIST OF TABLES	ii
LIST OF ABBREVIATIONS	iii
1 INTRODUCTION	1
1.1 Project Background.....	1
1.2 Ownership of the Facility.....	3
1.3 The Aim of the Environmental Management Plan (EMP)	3
2 LEGAL OBLIGATIONS GOVERNING THE PROPOSED ACTIVITIES	4
3 DRAFT EMP IMPLEMENTATION, ROLES & RESPONSIBILITIES	8
3.1 Competent Environmental Monitoring Authority (DEAF of the MEFT)	8
3.2 Project (Site) Manager	8
3.3 Safety, Health and Environmental or Environmental Control Officer	9
3.4 General Environmental Control Practices for Operation of the charcoal sorting and packing facility.	9
4 ENVIRONMENTAL MANAGEMENT & MITIGATION ACTION PLANS	10
4.1 Key potential Negative/ (Adverse) Impacts	10
4.2 The Management and Mitigation of Potential Key Negative Impacts	10
5 CONCLUSION	21

LIST OF FIGURES

Figure 1: Locality map of the charcoal and briquette processing and packaging facility	2
--	---

LIST OF TABLES

Table 1: Details of the Charcoal sorting and packing Facility locality.....	3
Table 2: Applicable and required permits/authorizations/licenses for the operation of the project5	
Table 3: Management and Mitigation Measures for the Operational & Maintenance Phase	12

LIST OF ABBREVIATIONS

Abbreviation	Meaning
DEAF	Department of Environmental Affairs and Forestry
EA	Environmental Assessment
ECC	Environmental Clearance Certificate
EDS	Excel Dynamic Solutions
EIA	Environmental Impact Assessment
EMA	Environmental Management Act
EMP	Environmental Management Plan
IAPs	Interested and Affected Parties
MEFT	Ministry of Environment, Forestry and Tourism
MHSS	Ministry of Health and Social Services
FSC	Forest Stewardship Council
PPE	Personal Protective Equipment
PTN	Portion
Reg, S	Regulation, Section

1 INTRODUCTION

1.1 Project Background

Roepersfontein Charcoal cc (*The proponent*) **operates a charcoal and briquette processing and packaging facility at Rugby, Farm No. 207.** The farm is situated southeast of the town of Otjiwarongo in the Otjozondjupa Region (**Figure 1**). Currently, the Proponent does the processing, packaging and storage for charcoal and briquettes for the international market exports, the proponent obtains charcoal from different local supplies.

Therefore, for the proponent to export their products they require an Environmental Clearance Certificate (ECC) to be renewed. Additionally, in terms of the Environmental Management Act (EMA) No.7 of 2007 and its 2012 EIA Regulations, the proposed project triggers listed activities that cannot be undertaken without an Environmental Clearance Certificate (ECC).

The relevant listed activities as per Environmental Impact Assessment (EIA) regulations are as follows:

2.3 The import, processing, use and recycling, temporary storage, transit or export of waste.

- The project will make use of, and process charcoal, which is a forest product.

The Proponent has appointed Excel Dynamic Solutions (Pty) Ltd (EDS Namibia / Environmental Consultant) to compile the Environmental Management Plan (EMP) for the briquettes processing and packaging as packaging of charcoal and briquettes and apply for the project ECC renewal (through the Competent Authority, Ministry of Environment, Forestry & Tourism (MEFT). The EMP is submitted for evaluation and consideration for the renewal of the ECC to the Environmental Commissioner at the MEFT Department of Environmental Affairs and Forestry (DEAF).

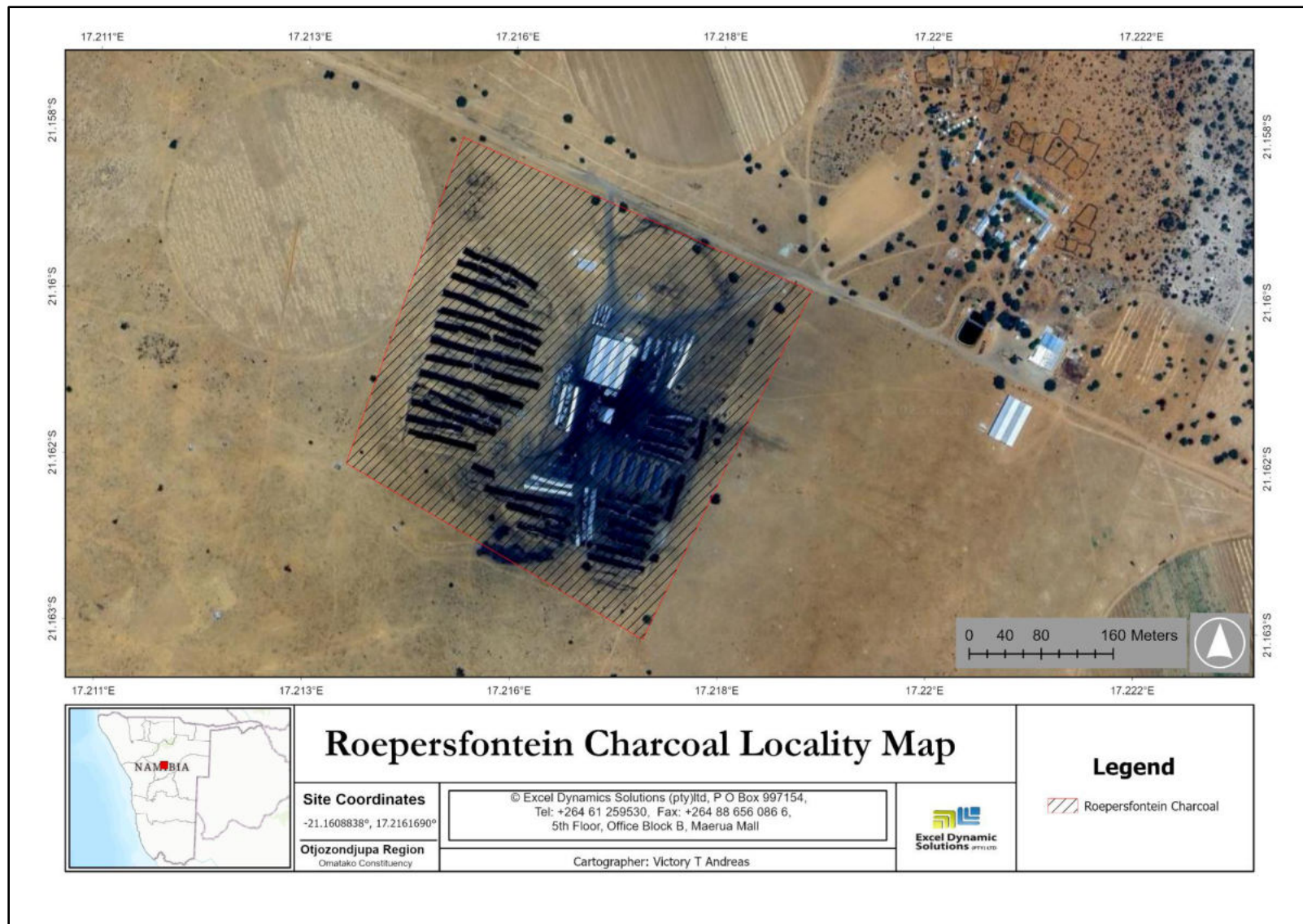


Figure 1: Locality map of the charcoal and briquette processing and packaging facility

1.2 Ownership of the Facility

Roepersfontein Charcoal cc operates a charcoal and briquette processing and packaging facility at Farm Rugby No.207, situated southeast of the town of Otjiwarongo in the Otjozondjupa Region, The locality details of the site in **Table 1** below.

Table 1: Details of the Charcoal sorting and packing Facility locality.

Location:	Farm Rugby; Farm No.207
GPS Coordinates	-21.1608838 S; 17.2161690 E
Zonation	Commercial farm area
Local Authority:	Omatako Constituency
Region Administration & Town / City:	Otjozondjupa Regional Council,
Regional Constituency:	Omatako Constituency

1.3 The Aim of the Environmental Management Plan (EMP)

Regulation 8(j) of the EIA Regulations (2012) requires that a draft Environmental Management Plan (EMP) shall be included as part of the Environmental Assessment (EA) process. A 'Management Plan' is defined as:

"...a plan that describes how activities that may have significant environments effects on the environment are to be mitigated, controlled and monitored."

An EMP is one of the most important outputs of the EA process as it synthesizes all the proposed mitigation and monitoring actions, set to a timeline and with specific assigned responsibilities. It provides a link between any impacts identified in the EA process and the required mitigation measures to be implemented during operation. It is important to note that an EMP is a statutory document and a person who contravenes the provisions of this EMP may face imprisonment and/or a fine. This EMP is a living document and can be amended to adapt to address project changes and/or environmental conditions and feedback from compliance monitoring.

The purpose of the Draft EMP is to ensure that the project activities are undertaken in an environmentally friendly and sustainable manner. This would be done through the effective implementation of recommended environmental management and mitigation measures contained in the EMP, for which the aim is to avoid and or minimize the identified adverse impacts while maximizing the positive impacts.

2 LEGAL OBLIGATIONS GOVERNING THE PROPOSED ACTIVITIES

Once the EMP is developed and ECC is issued, the Proponent will continue with the operation on site. The proponent will therefore be required to operate in accordance with the management measures provided in the EMP and adhere to the ECC conditions set by the Environmental Commissioner.

Additionally, it is a requirement for the operation as well as maintenance of the charcoal sorting and packing facility and associated activities to adhere to certain local, regional, national as well as international legal framework. The legal requirements provided in the EMP are those in terms of permitting/licensing, i.e., permits or licensing that the Proponent will need to obtain prior to commencing with construction, operations and or renewal of permits throughout the operational phase of the facility. These legal requirements are provided under **Table 2**.

Table 2: Applicable and required permits/authorizations/licenses for the operation of the project

Legislation/Policy/Guideline	Relevant Provision	Implication for the Project
Environmental Management Act (EMA) No. 7 of 2007	The Act requires that projects with significant environmental impacts are subject to an environmental assessment process (Section 27). The Act details principles that are to guide all EAs.	The EMA and its regulations should inform and guide this EA process. Should the ECC be issue to the Proponent, it may be required by the MEFT to be renewed every 3 years, counting from the date of issue.
Environmental Impact Assessment (EIA) Regulations Government Notice 28-30 (Government Gazette 4878))	Details requirements for public consultation within a given environmental assessment process (Government Notice 30 Section 21). Details the requirements for what should be included in a Scoping Report (Government Notice 30 Section 8) and an Assessment Report (Government Notice 30 Section 15).	Contact details at the Department of Environmental Affairs and Forestry (DEAF), Ministry of Environment and Tourism (MET) Office of the Environmental Commissioner Tel: +264 (0) 61 284 2701
Public and Environmental Health Act (Act 1 of 2015)	Provide a framework for a structured uniform public and environmental health system in Namibia; and to provide for incidental matters.	Section 77 (cx) elaborates on the need for keeping of clean environment and free from health nuisance so as not to endanger the public health;
Pollution Control and Waste Management Bill of 1999	Prevent and regulate discharge of pollutants in the air, water and land; regulate noise, dust and odour pollution; establish a system of waste planning and management	All disturbance, effluent and pollution resulting from the charcoal sorting and packing activities will be required to be in strict accordance with the regulations outlined in the Pollution Control and Waste Management Bill.

Legislation/Policy/Guideline	Relevant Provision	Implication for the Project
Forestry Act (Act No. 12 of 2001)	The Act provides for the management and use of forests and forest products. Section 22. (1) provides: "Unless otherwise authorized by this Act, or by a licence issued under subsection (3), no person shall on any land which is not part of a surveyed erven of a local authority area as defined in section 1 of the Local Authorities Act, 1992 (Act No. 23 of 1992) cut, destroy or remove - (a) vegetation which is on a sand dune or drifting sand or on a gully unless the cutting, destruction or removal is done for the purpose of stabilizing the sand or gully; or (b) any living tree, bush or shrub growing within 100 m of a river, stream or watercourse."	The proponent will apply for the relevant permit under this Act if it becomes necessary.
Labour Act 11 of 2007 Health and Safety Regulations (HSR) GN 156/1997 (GG 1617).	Adhere to all applicable provisions of the Labour Act and the Health and Safety regulations	Division of Labour Services at the Ministry of Labour, Industrial Relations and Employment Creation. Tel: +264 61 206 6111
Local Authorities Act No. 23 of 1992	To provide for the determination, for purposes of local government, of local authority councils; the establishment of such local authority councils; and to define the powers, duties and functions of local authority councils; and to provide for incidental matters	The Omatako constituency office is the responsible Local Authority of the area, and therefore, should be consulted and informed once the ECC is granted and nature of the factory.

Legislation/Policy/Guideline	Relevant Provision	Implication for the Project
Water Act 54 of 1956	<ul style="list-style-type: none"> The Water Resources Management Act 11 of 2013 is presently without regulations; therefore, the Water Act No. 54 of 1956 is still in force: <ul style="list-style-type: none"> Prohibits the pollution of water and implements the principle that a person disposing of effluent or waste has a duty of care to prevent pollution (S3 (k)). Provides for control and protection of groundwater (S66 (1), (d (ii)). <p>Liability of clean-up costs after closure/abandonment of an activity (S3 (l)).</p>	The protection (both quality and quantity) of water resources should be a priority.
Soil Conservation Act (Act 76 of 1969)	The Act makes provision for the prevention and control of soil erosion and the protection, improvement and conservation of soil, vegetation and water supply sources and resources, through directives declared by the Minister	Duty of care must be applied to soil conservation and management measures must be complied with.
The Road Traffic and Transport Act No. 52 of 1999 and its 2001 Regulations	Provides for the control of traffic on public road and the regulations pertaining to road transport, including the licensing of vehicles and drivers.	(Roads Authority- specialist Road legislation), Tel: +264 (0) 61 284 7072

3 DRAFT EMP IMPLEMENTATION, ROLES & RESPONSIBILITIES

As the project Proponent, Roepersfontein Charcoal cc is ultimately responsible for the implementation of the EMP. They may, however, delegate this responsibility at any time, as they deem necessary during the operation of the facility (usually an environmental control officer (ECO) or safety, health, and environmental (SHE) officer). The roles and responsibilities of all the parties involved in the effective implementation of this EMP are as follows:

3.1 Competent Environmental Monitoring Authority (DEAF of the MEFT)

The Department of Environmental Affairs and Forestry (DEAF) of the Ministry of Environment, Forestry and Tourism (MEFT) as the environmental custodian is responsible for enforcing compliance with the Environmental Management Act, its regulations and full implementation of this EMP. The authority is also responsible for the reviewing of bi-annual reports submitted by the Proponent and grant ECC renewal following environmental audits as required and/or conditioned in the ECC issued.

3.2 Project (Site) Manager

Project or Site Manager (as appropriate) will be responsible for ensuring that project activities are completed on time, efficiently and sustainably. The manager's duties and responsibilities will include:

- Ensure that relevant commitments contained in the EMP Action Plans are adhered to.
- Ensure the relevant staff is trained in procedures entailed in their duties.
- Maintain records of all relevant environmental documentation for the project.
- Through consultations and cooperation with the ECO/SHE officer, issuing fines to individuals who may be in breach of the EMP provision and if necessary, removing such individuals from the site.
- Cooperate with all relevant interested and affected parties/stakeholders.
- Development and management of schedules for daily activities in compliance with the EMP.
- Ensuring compliance with relevant environmental and related authorizations, permit and license conditions.

- Identifying and appointing of appropriately qualified specialists (were necessary) to undertake the operation and its programmes in a timeous manner and to acceptable standards.

3.3 Safety, Health and Environmental or Environmental Control Officer

The Proponent may assign the responsibility of ensuring EMP compliance throughout the project life cycle to a designated member of staff or external qualified and experienced person, referred to in this EMP as the Environmental Control Officer (ECO) or Safety, Health & Safety (SHE) Officer. The ECO/SHE Officer will have the following responsibilities:

- Ensure that relevant commitments contained in the EMP Action Plans are adhered to.
- Planning and carrying out site inductions to the workers on-site and visitors to the work area of the site.
- Maintain records of all relevant environmental documentation for the project.
- Reviewing the EMP annually and appropriately amending the document when necessary.
- Management and facilitation of communication between the Proponent, and Interested and Affected Parties (I&APs) regarding this EMP.
- Conducting site inspections of all areas with respect to the implementation of this EMP (monitor and audit the implementation of the EMP). It is recommended that a bi – annual audits are conducted (every six month) for operation and maintenance.
- Advising the Proponent on the removal of person(s) and/or equipment not complying with the provisions of this EMP.
- Making recommendations to the Proponent with respect to the issuing of fines for contraventions of the EMP.
- Undertaking an annual review of the EMP and recommending additions and/or changes to this document.

3.4 General Environmental Control Practices for Operation of the charcoal sorting and packing facility.

The parties holding duties and responsibilities for environmental compliance during operation of the facility must ensure to maintain environmental control practices for the operation of the charcoal sorting and packing facility. The environmental control practices include:

- Proper operation and maintenance procedures of the relevant facilities that can affect the environmental performance of packing and sorting charcoals during operation, e.g., charcoal shaking machine, air pollution control system.
- Procedures for proper handling, storage, transportation and use of materials
- Procedures to avoid wastage of energy, water or materials
- Procedures for proper management of waste material
- Response procedures to deal with emergency incidents with environmental implications (e.g., accidental breakdown or malfunction of the air pollution control system, fire outbreak etc.)
- Environmental complaint handling procedures.

4 ENVIRONMENTAL MANAGEMENT & MITIGATION ACTION PLANS

The environmental management and mitigations measures (management action plan) provided to the potential adverse impacts associated with the proposed operation and its activities are presented under this section. The aim of this management action plan is to avoid these potential impacts where possible, and where impacts cannot be avoided, measures are provided to reduce the significance of the impacts.

4.1 Key potential Negative/ (Adverse) Impacts

The summary of key identified potential adverse impacts for which the measures have been developed are as follows:

- **Potential air and noise pollution** from the machinery.
- **Potential occupational health and safety** risks associated with mishandling of operational equipment.
- **Environmental (waste generation) pollution** from improper disposal of waste.

4.2 The Management and Mitigation of Potential Key Negative Impacts

The management and mitigation measures (action plans) for the potential negative impacts for the operational and maintenance phase are presented in **Table 3**.

The required management and mitigation plan actions have been presented together with key performance indicators, responsible person(s), resources and the timeline of such actions. These aspects form the headings of **Table 3**, and they are as follows:

- Environmental aspect and issues for which management actions are required.
- Proposed impact mitigation measures.
- Key performance indicator (KPI) for monitoring success levels of management actions.
- Responsible person(s) for implementing the proposed management actions.
- Resources required for implementing management actions and monitoring.
- Implementation timeframes for the proposed management actions.

Table 3: Management and Mitigation Measures for the Operational & Maintenance Phase

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
OPERATION & MAINTENANCE PHASE						
EMP implementation and training	Lack of EMP awareness and implications thereof	<p>-A Comprehensive Health and Safety Plan for the operation activities should be compiled. This will include all the necessary health, safety, and environmental considerations applicable to respective works on site.</p> <p>-An EMP non-compliance penalty system should be implemented on site.</p> <p>-The Proponent should appoint a SHE Officer to be responsible for managing the EMP implementation and monitoring.</p> <p>-EMP training should be provided to all new workers on site as part of introductory induction.</p> <p>-All site personnel should be aware of necessary health, safety, and environmental considerations applicable to their respective work</p>	<p>-All required Plans and systems are compiled and in place</p> <p>Safety, Health and Environmental (SHE) Officer is appointed.</p> <p>-Records of EMP implementation Plans and Systems</p> <p>-Safety, health and environmental inspections conducted daily</p> <p>-Bi-annual environmental compliance for operations (bi-annually)</p> <p>-Timely renewal of the Environmental Clearance Certificate (ECC) as required or conditioned by the MEFT</p>	<p>-Proponent</p> <p>-SHE officer</p> <p>-External Environmental Consultant</p>	<p>-Independent Environmental Consultant: EMP compliance and auditing</p> <p>-DEAF: site inspections for compliance</p> <p>-Identification of all persons involved in the implementation of the EMP</p> <p>-Compliance Monitoring reports</p> <p>-Timely renewal of ECC as required.</p> <p>-Records of EMP and SHE</p>	Throughout the Operation phase

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		<p>-The implementation of this EMP should be monitored.</p> <p>-The site should be inspected regularly, and a compliance audit done throughout the life of the operational facility as recommended below:</p> <ul style="list-style-type: none"> ○ Daily – by in-house SHE officer ○ Bi-annually – by an independent external environmental compliance auditor 			training conducted	
Authorizations	Lack of Permits/ Licenses	<p>-All the required agreements and licenses or permits required for operations to occur should be applied for and obtained</p> <p>The permits, agreements referred to herein include:</p> <ul style="list-style-type: none"> ○ Environmental Clearance Certificate (ECC) ○ Any necessary service delivery (water, power, waste disposal etc) agreements from the Local Authority of Omatako. ○ Transport, export permit from the Directorate of Forestry 	-Applicable permits and licenses to be obtained from relevant authorities and kept on site for records keeping and future inspections	-Proponent	-Record of permits and authorizations obtained	During the Operation phase

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		<p>(DoF) within the Ministry of Environment Forest and Tourism.</p> <ul style="list-style-type: none"> Forest Stewardship Council (FSC) certification. 				
Facility design	Facility design failure during operations and public exposure	<p>-The design standards to be applied for the charcoal sorting and packing facility and its supporting functions and structures should comply with the nationally and internationally accepted public exposure guidelines.</p> <p>-The facility design must be able to adequately accommodate easy circulation of staff to any part of the facility</p>	-Facility design according to the international approved standards	Planning & Design Engineer	Not applicable	During the operation and incase there are some adjustments upon the issuing of the Environmental Clearance Certificate
Communication between the Proponent and surrounding land users	Lack of communication (proper liaison) between surrounding land users)	-The Proponent should appoint a Public Relations Officer (PRO) to liaise with neighboring land users (property owners), when needed and required.	-A PRO is appointed	-Proponent -PRO	-Grievance logbook -PRO appointment -PRO contact details to be	throughout the operation phase

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
	(communities) and Proponent	-A clear communication procedure/plan which should include a grievance mechanism should be compiled to.			provided to the affected residents -Local land users/ communities	
Employment	Creation of employment opportunities	-Priority for any non-skilled labour should be given to people from around the respective site, in accordance with procedures approved by the relevant authorities. -Equal opportunity should be provided for both men and women.	-Number and residence of locals employed	-All staff member -Manager	-Record of employees -Constituency Council office may assist in identifying required unemployed workers for jobs requiring no skills. -Notification via the Constituency Office	Throughout the operation phase
Soils	Site soils (land) disturbance	-All possible trenches excavated for renovation on site should be backfilled. -Avoid disposal or spillage of any type of waste (hazardous, non-hazardous, fuels etc.) on the ground	- No visible oil spills on the ground or contaminated/pollution spots owing to	-SHE Officer -Proponent	-Backfilling equipment Adequate disposal site for	Throughout the operation phase

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		-In an event that any of the substances mentioned above, spill on the soil, the contaminated soil should be cleaned up immediately and dispose of in designated hazardous waste bins and then to an approved landfill site.	construction/operation activities.		contaminated soils	
Air Quality	Air quality (dust, flue gas emissions)	<p>-Dust masks, eye protective glasses and other respiratory personal protective equipment (PPE) such as face masks should be provided to the workers carrying out potential dust/smoke generating activities, where they are exposed to smoke or dust.</p> <p>-The operations should keep below the standard flue gas emissions permitted and may not exceed the standard emissions as provided for by the equipment manufacturer.</p>	-Visible efforts to curb dust	-Proponent -SHE Officer	-Grievance logbook	Throughout the Operation phase

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		-The facility must be fitted with air pollution control equipment to minimize emission of carbon-monoxide, volatile organic compounds, particulate matter and persistent organic pollutants with adsorbents such as lime and organic carbon, if required, and as per design standards.				
Waste management	Environmental pollution	<p>-Biodegradable and non-biodegradable wastes must be stored in separate containers and collected regularly for disposal at the nearest recognized landfill/dump site</p> <p>-Any hazardous waste that may have an impact on the physical and social environment should be handled cautiously and disposed of carefully at the nearest approved waste management facilities of the Town.</p> <p>-Workers should be sensitized to dispose of waste in a responsible manner.</p> <p>-There should be separate waste bins for hazardous and general/domestic waste at the facility, until such that time it will</p>	<p>-A register of all waste and waste types generated on site is kept on site.</p> <p>-All waste disposal permits from relevant authorities are available on site.</p> <p>-No littering on and around the facility.</p>	<p>-Proponent</p> <p>-Site Manager</p> <p>-SHE Officer</p>	<p>-waste storage bins/ drums; and transport all waste from the site.</p> <p>-Waste storage containers</p>	Throughout the operation phase

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		be transported to designated waste sites.				
Health, Safety and Security	General health and safety associated with project activities	<p>-The Labour Act's Health and Safety Regulations should be complied with.</p> <p>-All items for treatment as specified in the material safety data sheets (MSDS) for hazardous materials shall be available in (a) first aid kit(s) on the premises.</p> <p>-Establish an emergency rescue system for the evacuation of staff in case of an emergency.</p> <p>-Emergency procedures for accidents/incidents shall be communicated to all workers.</p> <p>-Ensure that all workers know where the first aid kits are located and who is trained in administering in first aid.</p> <p>-As part of their induction, the project workers should be provided with an awareness training of the risks of mishandling equipment and material on site as well as health and safety risk associated with their respective jobs.</p>	-Compilation of Comprehensive Health and Safety Plan.	<p>-Proponent</p> <p>-Site Manager</p> <p>-SHE Officer</p>	-Health and Safety Policies/plan	throughout the facility operation

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		<p>-Equipment and fuel storage site should be properly secured, and appropriate warning signage placed where visible.</p> <p>-An emergency preparedness plan should be compiled, and all personnel appropriately trained.</p> <p>-Workers should not be allowed to consume alcohol or any other intoxicants prior to and during working hours as this may lead to mishandling of equipment which results in injuries and other health and safety risks.</p> <p>-The site to be equipped with "danger" or "cautionary" signs for any potential danger or risk area identified.</p> <p>-Security services should be provided to look after the premises and vehicles.</p>				

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
	Occupational Health and Safety	<ul style="list-style-type: none"> - Employees and visitors should be properly equipped with adequate personal protective equipment (PPE) during operation. -The Proponent must avail adequate and appropriate PPE to all staff. -Timeously recording and reporting of all health and safety incidences. 	<ul style="list-style-type: none"> -Regular health screening of workers. -Bi-annual environment, health and safety audits done. -All onsite workers and visitors equipped with PPE. 	<ul style="list-style-type: none"> -Manager (holds overall responsibility) -SHE Officer 	<ul style="list-style-type: none"> -Health and safety-related equipment and necessary medical services for employees. -First Aid training for at least 1 personnel at each work site 	Throughout facility operation phase
Health and safety	Accidental fire outbreak	<ul style="list-style-type: none"> -Portable fire extinguishers should be provided on site. -Potential flammable areas and structures should be marked as such with clearly visible signage. 	-No Fires outbreaks recorded (due to presence of workers)	<ul style="list-style-type: none"> -Site Manager -SHE Officer 	-Fire extinguishers on the premises and project vehicles	Throughout facility operation
Social conflicts	Job seeking, private property intrusion or damage	The Proponent should inform their workers about the importance of respecting the locals' and neighbouring private properties by not trespassing or damaging their property.	<ul style="list-style-type: none"> -No complaints of neighbouring property trespassing or damage related to project workers - 	<ul style="list-style-type: none"> -Site Manager -SHE Officer 	<ul style="list-style-type: none"> -Grievance logbook -Employment Code of Conduct 	Throughout the facility operation phase

5 CONCLUSION

Potential positive and negative impacts stemming from the operation of the charcoal and briquette processing and packaging facility were identified and mitigation measures taken thereof. The mitigation measures and recommendations provided in this draft Environmental Management Plan can be deemed sufficient to avoid and/or reduce (where impact avoidance is impossible) the risks identified to acceptable levels.

The Consultant is, therefore, confident that these measures are sufficient, and issuance of an Environmental Clearance Certificate (ECC) to the Proponent to enable the operation of the charcoal and briquette processing and packaging facility at Rugby, Farm No. 207 and exportation of product, would be appropriate under the suggested mitigation and monitoring measures. However, the ECC should be issued on condition that the provided management measures and action plans are effectively implemented and monitored on-site. Monitoring of the environmental components described in the EMP is to be facilitated by the Proponent and/or applicable Competent Authority. This is to ensure that all potential impacts identified in this study and other impacts that might arise during the operations implementation are properly identified and addressed. Lastly, should the ECC be issued, the Proponent will be expected to be compliant with the ECC conditions as well as legal requirements governing charcoal sorting and packing facility operation and related activities.