# Annexure A

# ENVIRONMENTAL MANAGEMENT PLAN FOR THE ESTABLISHMENT, OPERATION AND DECOMMISSIONING OF A LANDFILL SITE IN LISELO AREA, KATIMA MULILO, ZAMBEZI REGION

**PREPARED** 

FOR

**KATIMA MULILO TOWN COUNCIL** 



#### COMPILED BY



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#### 1. Introduction

#### 1.1 Background

The Katima Mulilo Town Council (KMTC) intends to establish a new landfill site that will serve the Katima Mulilo Town and surrounding areas. The proponent has committed to implement a new waste management approach geared towards implementing an integrated solid waste management system premised on its principles and contemporary practices. Therefore, this environmental management plan is for the project, "the establishment and operation of a waste management facility in the Liselo area" by the Proponent.

#### 1.2 Objective of the EMP

Environmental management plans are developed to set a framework upon which to manage identified significant impacts from envisaged activities. An EMP outlines measures towards environmental protection from adverse impacts whilst enhance the positive outcomes throughout the phases of the project from planning to closure. Therefore, the objective of this document is to outline a plan of action to mitigate and manage significant impacts on the surrounding environment and communities from the implementation of the envisaged activity of establishing and operating a landfill site in the Liselo area.

#### 2. Format of the of EMP

There is no specific format for an environmental management plan, however the following are necessary components;

- A description of the roles and responsibilities critical to the implementation of the EMP
- o Applicable legislation and specific requirements
- All the environmental activities, mitigation and control measures that will be used to prevent or minimise negative impacts and enhance beneficial impacts
- $\circ$   $\,$  Mechanisms for monitoring compliance with the EMP and reporting
- Method of monitoring and auditing environmental management practices during all phases of development

## 3. Roles and Responsibilities

The overall responsibility for full implementation of the EMP rests with the Proponent who shall appoint key personnel for the implementation of the EMP. Therefore, the following roles and responsibilities are obligatory to implementation of this EMP;

- > The Proponent Representative (PR)
- Environmental Compliance Officer (ECO)
- Site Manager
- Site workers (waste pickers/sorters and guards)
- Contractors and subcontractors

### 3.1 Proponent Representative (PR)

The Proponent is custodian of the entire EMP and its full implementation, however, an institution such as a local authority comprises several departments led by managers under their accounting officer, it is therefore, ambiguous to generally place this responsibility under reference of the title proponent as such place no accountability to the implementation of the EMP. It is imperative that a department is identified and appointed as the custodian of the EMP within the existing structures of the Proponent.

Since waste management services are under the Community Development Division, the manager of the department is the suitable appointee as the Proponents Representative (PR). Their role shall be to administer the overall implementation, monitoring, review and updating of the EMP.

The representative is at a level of management to enable bring about attention to critical matters related to the implementation of the EMP, whilst plan and secure resources required to comprehensively implement the EMP. The following responsibilities rests on the PR;

- $\circ~$  Ensure the implementation of all requirements of the EMP
- Source and secure resources required from the proponent for the implementation of the EMP.
- Keep the entire management constantly informed of the implementation of the EMP and all matters relating to its monitoring, review and update.

## 3.2 Environmental Compliance Officer (ECO)

The ECO is the implementing arm of PR position. This position is a requirement in the implementation of an integrated waste management system. It requires specific knowledge in the field of environmental management to comprehensively ensure implementation of the EMP and compliance to established environmental requirements set. Specific responsibilities will include;

- Monitor the entire waste management process to ensure that established protocols and standards are adhered by contractors, subcontractors and other parties involved in the waste management chain.
- Establishing and maintaining an information record system for the entire waste management system.
- Liaise with relevant authorities and contractors regarding compliance to legislation
- In collaboration with the EHO ensure compliance to health and safety standards.
- Conduct environmental audits and monitoring of environmental factors as established in EMP and reporting.
- Providing recommendations for remedial action in the event of any noncompliances.
- o Assist in the assessment and review of Contractor's performance
- $\circ~$  Ensure adherence to the site layout plan and design.
- Ensure that contractors, subcontractors and workers and even official visitors to the site are aware of the environmental and health and safety conduct required.
- Ensure that the site is utilised as per set out layout plan
- Implementation of the rehabilitation or decommissioning plan.
- o Develop training and awareness programs on waste management
- Engage media, and public institutions and publicise environmental information related to waste in and around the town.

## 3.3 Site Manager

The daily operation of the site requires that there is constant coordination of the operations to align with the site utilization plan and implementation of the EMP. It is required that a position of 'Site Overseer' also referred as site manager is appointed to coordinate and

oversee operations on day to day basis. This role is required throughout the process of establishing, operation and decommissioning of the site although it may be fulfilled by different individuals at each progressive phase envisaged for the site.

Should site management resort under a contractor on behalf of the Proponent, the Site Manager/Overseer shall be appointed by the respective contractor at each phase. The appointee shall;

- Ensure that all staff remain within the boundaries of the site, and that all works align with the site layout plan.
- All operational activities onsite relating to the handling and treatment of waste are in accordance to EMP.
- All site staff or workers conduct their activities in accordance with specifications set out in the EMP.
- Ensure that any subcontractors or visitors to the site are made aware of the requirements set in the EMP at all times.
- Ensure records are kept as required and continuously updated.
- All site incidents are recorded, appropriate measures taken and progressive actions put in place to ensure non-recurrence.

#### 3.4 Employees/Site workers

Employees expected onsite include guards, pickers/sorters of waste, machine operator. Site employees retain responsibility to adhere to operating protocols related to safety and healthy, whilst also ensuring that their activities align to the implementation of the measures in the EMP.

#### 3.5 Contractors and subcontractors

Contractors and subcontractors comprise those that will provide a certain service to the proponent that may be managing in part or whole of the entire waste management process.

# 4. Review of Legal Framework

The following legislative instruments are relevant to the project

Legal Instrument	Specific Reference	Applicability
Namibian Constitution (1990)	Article 95 (i) on maintenance of ecosystems, essential	Resonances a high level of environmental
	ecological processes and biological diversity of Namibia and	sensitivity
	utilization of living natural resources in a sustainable way	
	for the benefit of all Namibians, both present and future.	
Environmental Management Act No. 7	The Act and its regulations provides for a process of	EIA process, public consultation,
Of 2007 And Environmental Impact	assessment and control of activities which may have	environmental management plans.
Assessment Regulations GN 30 of 2012	significant effects on the environment.	
Water Act No. 54 Of 1956 (The Water	The Acts provides for the overall protection of surface and	Wastewater handling and treatment requires a
Resources Management Act No 11 of	groundwater resources from unsustainable uses and	permit.
2013)	potential pollution.	Take necessary measures to
		prevent the pollution of the groundwater
		resources
Labour Act of 2007	The objectives of the Act are to ensure the health, safety and	The health and safety of workers throughout
	welfare of employees but also outlines the rights and	the waste management chain is to be assured by
	obligation of employers.	proponent, contractors and subcontractors.
The National Heritage Act (No. 24 Of	Provides for prohibition on removing or demolish, destroy	If a heritage site or archaeological site during
2004)	or despoil, develop or excavate all or part of a protected	operations, (e.g. a grave or stone markings) is

	place. Such can be only conducted under provisions of an	uncovered or discovered the prescribed
	exemption or under a permit issued by the council.	procedures need be adhered to
Soil Conservation Act 76 of 1969	Provides for combating and preventing soil erosion, and for	Ensure project designs consider soil stability to
	the conservation, protection and improvement of the soil,	prevent erosion processes.
	the vegetation and protection of water sources.	
Atmospheric Pollution Prevention	Provides for prevention of noxious gases and excessive dust,	necessary measures need be taken to ensure
Ordinance 11 of 1976	where steps are prescribed or (where no steps have been	release of noxious gases and dust is minimized
	prescribed) adopt the best practicable means for preventing	in proximity to human settlement areas and
	dust from becoming so dispersed or causing nuisance.	prevent pollution
Hazardous Substances Ordinance 14 of	The Act provide for the control of substances which may	Restriction on import, storage and sale of
1974	cause injury or ill-health to or death of human beings by	certain groups of substances declared
	reason of their toxic, corrosive, irritant, strongly sensitizing	hazardous without a permit.
	or flammable nature or the generation of pressure.	
Public and Environmental Health Act	Provides a framework for a structured uniform public and	Gives powers to local authorities to handle
(No.1 Of 2015)	environmental health system	waste management functions but also provides
		from ensuring public health
National Solid Waste Management	Strengthen institutional and legal framework for	A guide to align waste management activities
Strategy	management of solid waste serving as a guide to institutions	
	such as local authorities on sound waste management	
	practices.	

Nature Conservation Ordinance (No. 4 Of 1975) and It Amendment Act of 1996	Prescribes specially protected and protected wildlife and requirements and provisions for dealing with wildlife matters.	, and the second s
Forest Act of 2001	Provides prohibition on cutting or removal of vegetation within specified zones and lists protected plants.	determine plants of the area and accord prescribed requirements
Pollution Control and Waste Management Bill	This Bill serves to regulate and prevent the discharge of pollutants to air and water as well as providing for general waste management. This Bill will license discharge into watercourses and emissions into the air. The Bill also provides for noise, dust or odour control that may be considered a nuisance.	requirements on the envisaged activity and

## 5. Environmental Management Program

The EMP is divided into phases; Pre-construction, Construction, Operation and Decommissioning in the management of all identified significant aspects or impacts. The table below provides specifications throughout the phases of the establishment, operation and decommissioning of the new landfill site in the Liselo area for the Katima Mulilo Town Council.

Aspect/Impact	Management Objective	Management/Mitigation Action	Frequency	Indicator	Responsible Party
Pre-construction					
Final Site layout	All envisaged phases align to	• Ensure that site layout plan is approved.	Once off	Approved final site	EIA Consultants
Plan	the site layout plan			layout	
Site layout	All site layout areas are	• Delineate the areas as per site layout plan	Once off	Site markings &	ECO &
demarcation	clearly marked out.	• Place signage to mark demarcated areas as per		signage as per	Site Manager
		final site layout plan		layout plan	
<b>Construction Phase</b>					
Clearing of	Minimal removal of	o Identify healthy protected trees and mark them	Throughout	Marked trees	ECO
sensitive/protected	protected plant species	to avoid removal	construction phase		
vegetation		• Fence perimeter path to consider the location			
		of healthy protected trees to avoid their			
		removal.			
		• Ensure that all trees marked for avoidance are			
		known to site workers.			
Site surroundings	The surroundings are kept	o Designate specific points for disposal of	Daily clean-up of	Designated	ECO/Site
littered with	free of any litter	construction waste materials and other	generated waste to	disposal points.	Manager
construction waste		unusable substances brought to site.	disposal points		
		• Place signage on disposal points for visibility.		Site clear of any	
		• Good housekeeping practices are required.	Once off induction	signs of litter and	
			of construction	well maintained	

		• All loose materials and packaging from all site teams on required	
		activities collected and disposed at specific practices.	
		designated points.	
		• All contractors and their workers to be Weekly	
		inducted of the required good housing keeping walkabouts	
		practices.	
		<ul> <li>Assign responsibility to monitor housekeeping</li> </ul>	
		practices.	
Dust generation	Extent of dust spread kept	• Activities with high dust generation potential Continuous Site records	Site
	minimal	to be avoided under high windy conditions. aligning of	Manager/ECO
		• Roads leading into the site to be sprayed using operations with Speed regulating	
		a water tank during dry periods of the year. weather conditions signage.	
		• Vehicular speed inside the site be reduced to	
		maximum of 40km/h. Weekly watering	
		• Avoid unnecessary movement of construction of roads in drier	
		vehicle times.	
		• Construction work limited to normal working	
		hours (7am to 5pm). Site inspections of	
		operations	
Noise and	Restrict noise and vibration	• Restrict working time to normal working Continuous Site operational	Site Manager
vibrations	to working hours.	hours (7am to 17h00). records	
		• Regular servicing of vehicles and machines to	
		remove excessive noises	

Release of noxious H	Reduce the release of	0	Regular servicing of vehicles to minimize the	Continuous	Service records	Site
gases into the r	noxious gases into the		release of noxious gases.			Manager/ECO
environment a	atmosphere	0	No unnecessary operation of			
			machines/vehicles.			
Accidental leakage H	Preservation of groundwater	0	Use of trays when fuelling to prevent spillages	Throughout the	Site drip trays	Site
or spill of oils/fuels r	resources from pollution		to the ground.	phases		Manager/ECO
onto		0	Fuelling activities to be monitored by		Site Incident	
soils/groundwater			experienced persons onsite.		reports	
		0	Vehicles be checked regularly in the morning			
			for signs of leakages/drippings and effect		Site operational	
			corrective action where necessary.		records	
		0	Any fuels and oils brought to site must be			
			locked away and register for access kept.			
Health and Safety of H	Preservation of the safety and	0	Provision of Personal Protective Equipment	Continually	Records of	Site
construction h	health of the workers		(PPE) such as safety shoes, gloves, goggles and		awareness or	Manager/ECO
workers			overalls to all employees;		trainings	
		0	No employee must be allowed in working			
			areas without necessary PPE		General caution	
		0	Operations should be restricted between		signage	
			07H00 to 17H00.			
		0	All contractors required to ensure they			
			conduct basic first aid and safety awareness			
			training for its employees.			

		0	Site movement to minimized and controlled			
		0	Signage be placed where heavy machines will			
			be actively working			
		0	No authorized persons should be allowed			
			onsite.			
		0	Any persons authorized but unfamiliar with			
			operations to be accompanied.			
Covering of the	Continued access to water for	0	Provide alterative drinking water point for	Once off	Established water	PR
nand dug well water	livestock and nearby		dependent nearby community and livestock.		point	
source	communities					
Potential pollution	Preservation of groundwater	0	Use of mobile ablution facilities in the initial	Weekly	Mobile ablution	Site
of groundwater	resources from pollution		phase.	monitoring of	facilities onsite.	Manager/ECO
from wastewater		0	Weekly pumping of effluent and	empting of holding		
generated			transportation to the towns wastewater	tanks		
			facilities for proper handling and treatment.			
Operation Phase				1	1	1
Waste separation at	Reduce the volume of waste	0	Provision of different waste separation	Continuous	Availability of	ECO
source	to the landfill site by early		containers for public spaces.		waste separation	
	provision of opportunities	0	Initiate a public awareness program on waste		containers/drums	
	reuse and recycling		separation for schools and the public.		in public areas and	
		0	Identify an environmental youth group and		public institutions	
			support in addressing environmental topics		such as schools.	
			including problems of waste.			

		0	Initiate demonstration projects at council			
			premises on waste separation practices.			
		0	Engage businesses with large premises for			
			placement of waste separation demonstration			
			containers.			
		0	Place notices of penalties for illegal dumping			
			or littering in hotspot areas.			
		0	Identify area for placement of skip containers			
			for domestic rubble and garden waste.			
		0	Acquire skip containers for waste separation.			
Differentiated	Reduce the quantities of	0	Induction of contractors on procedures	Annual induction	Induction records	ECO
loading of waste at	waste landfilled through		required for waste handling at loading points.	of employees and	(list of attendees,	Contractors
source by	improved handling and	0	Monitor contractors regularly to comply with	every new recruit	date of induction,	
contractors	treatment.		measures initiated to separate waste at source.		signatures and	
		0	Dedicate a contractor towards rubble and	Weekly inspection	contact details)	
			garden waste collection with appropriate	of contractor		
			trucks.	loading practices	Inspection reports	
		0	Reuse of clean rubble waste as fill material for			
			some depressed surfaces or roads.			
		0	Contracts of waste contractors to induce			
			clauses on required waste handling practices.			

Securing of waste	Prevent littering of the	0	Maintain current practices of all waste trucks	Continuous	Inspection reports	ECO
with nets during	landscape		to have mesh/nets or cage to secure all waste	securing of loaded		Contractors
transportation			when transported from town to landfill site.	waste		
		0	Inspect waste trucks for securing of waste			
			when transported to site.	Weekly inspection		
				of contractor		
				trucks		
Waste offloaded in	Site utilization in accordance	0	Place signage of the various areas for	Weekly site visits	All waste in	ECO
appropriate	to approved plan.		offloading different type of waste.		marked areas	
demarcated areas		0	Waste contractors should be inducted on site		accordingly	
			utilization layout			
		0	Weekly inspection of the site to ensure			
			compliance.			
Recyclable	Reduce quantities of waste	0	Initiate waste picking and sorting activity at	Continuous	Picking and	PR/ECO/Site
materials removed	for landfilling.		the landfill site.		sorting of waste	Workers
from general cell		0	Acquire waste pickers and sorters of		onsite	
			recyclables and reusable materials and			
			package them.			
		0	Engage local waste recyclers to explore			
			possibilities and interests in waste collected			
			and packaged at site.			

Health and safety of	Preservation of the safety and	0	Provision of Personal Protective Equipment	Continually	First aid training	Contractors
workers	health of the workers		(PPE) such as safety shoes, gloves, eye wear		records	
			and overalls to all employees;			
		0	Conduct first aid and safety awareness training		PPE	
			for contractors	Every 2 years		
		0	Schedule inspections and audit of the practices			
			of the contractors for compliance.			
Onsite waste	Provide data for process	0	Construct platform at the gate for weighbridge	Continually	Site records	Site
weighing and	improvements	0	Acquire mobile weighbridge unit for	weigh incoming		Manager/ECO
subsequent			installation at the site.	waste vehicles		
offloading.		0	Assign responsibility of weighing and			
			recording information associated with waste			
			vehicles to the site.			
		0	All waste carrying vehicles pass through the			
			weighbridge for weighing.			
		0	Regular auditing of the records for compliance			
			to required record system.			
Opportunities for	Ensure site utilization	0	Priority be given to locals for non-qualifying	Continuous	Liselo locals as	PR
locals in picking and	activities benefits local		job opportunities in waste picking and sorting	throughout site life	part of waste	
sorting of waste	communities		of recyclables.	span	pickers and sorters	
		0	Where qualifying positions are available,			
			locals be given advantage.			

Flying litter in	The surrounding landscape is	0	A compactor or other earth moving machine	Daily compaction	Minimal flying	Site Manager
surroundings area of	free of litter		be stationed at site to shift and gather waste	and covering	litter in the	
the landfill site			offloaded, compact on daily basis to prevent		surrounding	
			flying into adjacent land.	Monthly manual		
		0	All litter that gathers around the fence should	litter removal		
			be regularly cleaned through manual removal	around the site		
Increase in vermin,	Reduce vermin numbers to	0	Adequate daily covering of landfilled waste on	Daily compaction	Compacting	PR/Site Manager
flies and pests in the	site and adjacent landscape		general waste cell.	and covering of	machine onsite	
surrounding area				general waste cell		
Luring of	Avoid social disturbance to	0	Access to the site be controlled by lockable	• Continuous	Control gate to site	Site Manager
scavengers to the	the local community		gate.	access control		
site to collect food		0	Place 24-hour security personnel to control			
and other reusable			access and record all authorized entries to the			
and recyclables			site.			
		0	Job opportunities reserved for locals to limit			
			immigration into the area			
Luring aggressive	Minimise the presence of	0	Daily compacting and covering of the general	Daily compaction	Records of any	Site Manager
wild animals to the	wild animals into the area		waste cell.	and covering.	animal sightings	
site		0	Regular sighting (observation) and recording			ECO
			of wild animals in the area			
		0	Conduct nearby community visits to			
			determine eminent concerns that may arise			

			and device measures to address where			
			possible.			
Leachate generation	Preserve baseline conditions	0	Ensure construction of base layering of general	Once off during	Quarterly reports	ECO
to subsurface	of the groundwater resources		waste cells as per design requirements.	construction		
environment	of the area	0	Drilling of boreholes up and down gradient of		Monitoring	
			the site.	Quarterly	programme	
		0	Quarterly borehole water quality sampling and	groundwater		
			testing	monitoring		
		0	Inclusion of identified private water points for	programme and		
			water quality sampling and testing.	reporting		
		0	Analysis of results and interpretation of any			
			deviation from baseline conditions.			
		0	Regular reporting to the regulatory authority			
			of the results of the monitoring system.			
Generation of	Limits the spread the odour	0	Daily compacting and adequate covering with	Daily compacting	Site observations	Contractor
Odour			sand/clay material	and covering		
Accidental spillage		0	Use drip trays when refuelling of earth moving		Drip trays	Contractor
of oils or fuels			vehicles onsite		available onsite	
infiltrating to		0	Daily inspection of vehicles for signs of	Daily machine	Record of daily	
groundwater			leakages and or spills and keep record	inspections.	inspections	
Generation of	Minimise the spread of	0	No open burning of waste to be allowed prior	Weekly site	Incineration	Site Manager
smoke into	smoke to adjacent landscape		acquiring an incineration unit	inspections	schedule.	
surrounding area						

		0	Schedule incineration for few days (2-3) a		No signs of open	
			week spaced with up to 2 days in-between to		burning on waste	
			avoid continuous smoke retention in the		cells	
			atmosphere.			
		0	Incineration of waste to be monitored			
			frequently by the health/environmental officer			
		0	Limit incineration on windy days and months			
			of the year			
Landfilling as per	Maintain the approved	0	The landfilling process to align with the cell	Daily landfilling	Site observations	Site
operation design	approach to landfilling		recommended approach.	Weekly		Manager/ECO
recommended		0	Regular Inspection of the landfilling approach.	inspections		
Opportunities in	Local benefit form site	0	Priority be given to locals for non-qualifying	Lifespan of site	Site guarding	PR
guarding of site	utilization		job opportunities in waste picking and	utilization	contacted to locals	
			recycling		of the area	
		0	Where qualifying positions are available,			
			locals be given advantage			
Potential pollution	Preservation of groundwater	0	Weekly monitoring of the septic tank levels	Weekly	Records of	Site
of groundwater	resources from pollution	0	Pumping of septic effluent and transportation	monitoring of	pumping and	Manager/ECO
from wastewater			to the town's wastewater facilities for proper	septic tanks	transportation	
generated			handling and treatment.			
				Monthly review of		
				the operations		

Town residents	All visitors align to required	• No town residents to be allowed access site to	Continuous	Records of visitors	Site Manager
visitors do not	site requirements	dispose waste until prior approval is provided.		to site	
interfere and or		• No commercial agencies allowed to dispose			
disrupt site		waste at site without making prior			
operations.		arrangement and agreement with site			
		proponent.			
		• All waste coming into the facility should be			
		weighed and guided to appropriate area.			
		• Avail drop-off waste skips at the gate area for			
		residents and nearby communities.			
		• Keep a register of waste brought to site			
Decommissioning Ph	lase	·	·		
Stakeholder	Common understating is	• Maintain and update the list of stakeholders	Continuous	Stakeholder	PR/ECO
engagement on land	reached on potential end	established for engagement on end land use		engagement plan	
end land use	land uses	• Device a stakeholder engagement plan			
		o Implement stakeholder engagement plan on		Updated list of	
		end land uses.		stakeholders	
Safety and Health of	Employees health and safety	• Provide PPE to the workers	Throughout the	All employees	Site Manager
workers	is uncompromised	<ul> <li>Induction on safe working practices</li> </ul>	phase	with PPE onsite	
Potential pollution	Preservation of groundwater	• Weekly monitoring of the septic tank levels	Weekly	Records of	Site
of groundwater	resources from pollution	• Pumping of septic effluent and transportation	monitoring of	pumping and	Manager/ECO
from wastewater		to the town's wastewater facilities for proper	septic tanks	transportation	
generated		handling and treatment.			

			Monthly review of the operations		
No access to site until end use is approved by all stakeholders.	site disturbance is minimized post utilization	<ul> <li>Secure all access routes into the site.</li> <li>Monthly inspection the site for breached access and rectification of any breaches</li> </ul>	Continuous	Lockable gate Maintained fence	PR/ECO
Site closure and after care	Detect any risks of groundwater resources pollution	<ul> <li>Groundwater sampling and monitoring to continue post closure of the site.</li> <li>Analysis of results and interpretation of any deviation from baseline conditions.</li> <li>Regular reporting to authorities</li> </ul>	Continuous to site relinquishment	Sampling and testing results	PR/ECO

## 6. Compliance to EMP

An EMP is a legally binding document under the requirements of the Environmental Management Act (No. 7 of 2007) and as such this document must be read as a living document and that its requirements implemented and regularly updated with changing project activities.

### 6.1 Protocol for Managing Incidents

As a legally binding document, incidents involving deviation shall invoke the following process;

- 1. Immediate reporting of the incident to the site supervisor and record of incident be kept.
- 2. Correction measures immediately implemented to cause a halt and safeguard the environment or health and safety of the people onsite and surroundings.
- 3. The ECO to conduct an investigation of the incident and recommend further action to ensure the incidents does not recur.

#### 6.2 Measures for Non-Compliance

Incidents results from negligence shall incur disciplinary actions which may include option such as;

- o financial penalties,
- $\circ$  legal action
- fines and/or suspension of work or contract.

The disciplinary action shall be determined according to the nature of the non-compliance or crime, and exact penalties to the discretion of the EM and ECO in compliance to the requirements of the ECC.

## 7. EMP Monitoring and Review

This Environmental Management Plan must be used as an on-site reference document during all phases of the site development and operation. Auditing must take place every quarter in order to monitor compliance with the EMP. The compiled quarterly reports will make up the bi-annual reports required by the MEFT-DEA on the operations of the landfill over the entire validity of authorization afforded.

#### 8. Conclusions and Recommendations

Implementation of the EMP is critical to ensuring the implementation of the envisaged activities. The devised measures to safeguard public health and safety and environment are considered adequate in mitigating adverse effects from any of the envisaged activities. These measures have been taken from contemporary practices in waste management across sectors but are also are measureable, cost effective and practicable.

It is upon this that with full commitment of the Proponent to implementation of the measures included in this document, it is recommended by the Environmental Assessment Practitioner that the project is issued clearance to proceed with envisaged activities. The Proponent is liable to the regulatory Authority for the full implementation of measures and controls contained.