



**FINAL ENVIRONMENTAL  
MANAGEMENT PROGRAMME FOR  
THE PROPOSED CONSTRUCTION OF  
MQANGQALA ACCESS ROAD IN  
WARD 01 OF UMZUMBE LOCAL  
MUNICIPALITY, KZN PROVINCE**



**DOCUMENT DESCRIPTION****COMPILED BY**

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The details of project Applicant

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**Environmental Consultants**

Ngeja Consulting on behalf of Umzumbe Local Municipality has appointed Thlaho Environmental Consultants as the Independent Environmental Assessment Practitioner (EAP) to compile the EMPr.

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### **LEGAL CONTEXT**

A growing awareness of the environment and an increase in the number of environmental laws and regulations, present company management with a daunting task of monitoring, interpreting and implementing systems to produce a workable plan to comply with legal requirements.

The list below was compiled to ensure that the person responsible for the activities of the proposed project is aware of his/ her legal responsibilities and liabilities. Completing with these laws and regulations will minimise the risks in terms of legal, financial (claims) and rehabilitation costs.

Non compliance to environmental law is a criminal offence and if prosecuted the Developer will be liable for any environmental damage incurred.

#### **List of Legislation**

<b>ACT NAME</b>	<b>ACT NO.</b>	<b>NOTES/ REMARKS</b>
National Environmental Management Act	107 of 1998	<b>List of activities and competent authorities</b>
Conservation of Agricultural Resource Act	43 of 1983	<b>Control of utilisation and protection of wetlands, soil conservation, control and prevention of veld fires, control of weeds and invader plants.</b>
National Environmental Management Act: Waste Act, 2008.	59 of 2008	<b>Protect health and the environment by providing reasonable measures for the prevention of pollution and ecological degradation and for securing ecologically sustainable development.</b>
Fencing Act	31 of 1963	<b>Prohibition of damage to a property owner's gates and fences.</b> <i>Climbing or crawling over or through fences without permission</i>
Veld and Forest Fires Act	101 of 1998	<b>Prevention of unauthorised veld and forest fires</b>
Occupation Health and Safety Act	85 of 1993	<b>Prescribes health and safety measures necessary to adhere to for all construction workers</b>
National Water Act	36 of 1998	<b>All aspects relating to pollution of surface and ground water</b>
Hazardous Substances Act	15 of 1973	<b>Diesel and Fuel storage in an appropriate manner</b>
Biodiversity Act	10 of 2004	<b>Protected species</b>

#### **Selected Provincial Legislation**

KwaZulu Natal Heritage Act	Act No. 10 of 1997
Development Facilitation Act	Act No. 67 of 1995
KZN Planning and Development Act	Act No. 5 of 1998

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### **TERMS AND ABBREVIATIONS**

DWA	-	Department of Water Affairs
DAEARD	-	Department of Agriculture; Environmental Affairs and Rural Development
EMPr	-	Environmental Management Programme
ECO	-	Environmental Control Officer

## 1. INTRODUCTION

Umzumbe Local Municipality proposes to construct a 1.5 km long access road x 5m width. The proposed Mqangqala access road will serve a rural community who have been disadvantaged in the past.

In terms of The Constitution of the Republic of South Africa (Act No. 108 of 1996) everyone has the right to an environment that is not harmful to their health or well-being and to have the environment protected, for benefit of present and future generations, through reasonable legislation and other measures that prevent pollution and ecological degradation, promote conservation and secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development. The needs of the environment as well as affected parties should thus be integrated into overall project management.

This site-specific EMPr details permissible and non-permissible activities during the construction, operational and maintenance phases of the said project.

### 1.1. Scope of the EMPr

In accordance with the requirements of the NEMA Environmental Impact Assessment (EIA) Regulations, 2010, and the requirements of the Department of Agriculture and Environmental Affairs (DAEARD), KwaZulu-Natal Province, this EMPr is to be implemented by the Developer/ Applicant as well as any employee, contractor, agent or sub-contractor appointed to act on behalf of the Developer/Applicant in the execution of the project, in order to ensure environmental compliance on site.

The specifications outlined in this EMPr are thus applicable to all activities undertaken by the Developer/Applicant as well as appointed contractors and all persons involved in the execution of the works including sub-contractors, the workforce, suppliers and volunteers for the duration of construction, operation and future maintenance.

An Environmental Code of Conduct (Section 4) has also been developed that provides a simplified set of rules that should be adhered to by all persons involved with the project at all times. This is to be displayed at strategic points where it will invoke constant environmental awareness.

## 2. ACTIVITIES AND ASPECTS CAUSING IMPACTS

Potential negative environmental impacts that may occur during the construction and operational phases of the proposed project could include:

- environmental pollution;
- soil erosion;
- visual disturbance;
- destruction of natural vegetation;
- pollution of beach via storm water channels;
- restriction of access;
- reduction of air quality;
- noise pollution;
- negative social impacts; e.g., disruption of traffic and restriction of livelihood opportunities.

In order to minimise these impacts, care must be taken with, *inter alia*, the disposal of waste, spillage, storage, noise and dust control, selection of sites, preservation and re-establishment of indigenous vegetation and sediment management and the demarcation of sensitive areas. All of the above will be dealt with in this EMPr.

With regard to environmental pollution please note that all waste produced during the construction period must be removed and disposed of at a near licensed landfill site. In terms of part 6 section 26 (NEMWA 59 of 2008) No person may dispose of waste in a manner that is likely to cause pollution of the environment or harm to health and well-being. Waste must not be buried or burnt on site.

### **3. ASSIGNED RESPONSIBILITIES**

This section indicates the party responsible for implementing the environmental measures and action plans laid out in the EMPr.

Formal responsibilities are necessary to ensure that key procedures are executed. Specific responsibilities of the Project Proponent, Project Manager, Site Manager/Engineer, Contractor/Operator and Environmental Control Officer are as detailed below.

#### **3.1. The Project Proponent / Project Manager**

- Ensure that the Site Manager/Engineer and the Contractor/Operator are aware of all specifications, legal constraints, standards and procedures pertaining to the project specifically with regard to the environment;
- Ensure that all stipulations within the EMPr are communicated and adhered to by the Site Manager/Engineer and the Contractor/Operator; and
- Monitor the implementation of the EMPr throughout the project.

The Project Manager should be fully conversant with the EMPr for the project, as well as all applicable environmental legislation.

#### **3.2. The site Manager/ Engineers**

- Be fully conversant with the EMPr;
- Be fully conversant with all environmental legislation and ensure compliance;
- Have overall responsibility for the implementation of the EMPr;
- Liaise with the Project Manager and Contractor/Operator on matters concerning the environment;
- Prevent actions that will harm or may cause harm to the environment, and take steps to prevent pollution of the site;
- Implement remedial measures in the event of pollution incidents or environmental impacts;
- Monitor and verify that environmental impacts are kept to a minimum;
- Review and approve construction methods where necessary; and
- Order the removal of any person(s) and/or equipment in contravention of the specifications of the EMPr.

#### **3.3. The Contractor**

- Be fully conversant with the EMPr;
- Ensure that the environmental specifications of this document (including any revisions, additions or amendments) are effectively implemented. This includes the on-site implementation of steps to mitigate environmental impacts;
- Ensure that suitable records are kept and that the appropriate documentation is available to the Project Manager;
- Advise the Project Manger of any incidents or emergencies on site, together with a record of action taken;
- Ensure quality in all work done, technical and environmental;
- Resolve problems and claims arising from damage immediately to ensure a smooth flow of operations;

- Be fully conversant with all environmental legislation and ensure compliance;
- Ensure that all the environmental specifications contained within this EMPr are adhered to at the site;
- Regularly liaise with the Site Manager on matters relating to the environment;
- Confine activities to the demarcated construction site, and
- Use this Environmental Management Programme for the benefit of all involved

The above responsibilities listed for the Contractor will also apply to any appointed sub-consultants.

#### **3.4. The Environmental Control Officer (ECO) will:**

- Know the background to the project and monitor the implementation of the EMPr,
- Act as a guide, advisor and consultant to the contractors on environmental issues during construction, implementation and rehabilitation;
- Be fully conversant with the EMPr;
- Be fully conversant with all environmental legislation and ensure compliance;
- Ensure that all the environmental specifications contained within this EMPr are adhered to at the site;
- Regularly liaise with the Site Manager on matters relating to the environment;
- Compile monthly reports as to the progress of the construction phases
- Report to all parties involved (Site Manager, Project Proponent);
- Make (propose) changes (for approval) to the EMPr as necessary; and
- Ensure that all environmental requirements are met

The EMPr specifies the minimum requirements to be implemented by the Applicant as per the scope of works and scope of the EMPr, in order to minimise and manage the potential environmental impacts and ensure sound environmental management practices.

It is essential that the EMPr requirements be carefully studied, understood, implemented, and adhered to at all time.

To simplify the EMPr requirements, each aspect related to the EMPr has been addressed in the table below. Each action within the EMPr is supported by the priority of when the specific action will need to be implemented. Each of these aspects is briefly described below for ease of reference.

#### **ENVIRONMENTAL ASPECT**

This section highlights the various aspects associated with the project i.e. the Applicant / Contractor's activities that will interact with the environment.

#### **ACTIONS REQUIRED/ ENVIRONMENTAL MEASURES**

This section indicates the actions required to either prevent and/or minimise the potential impacts on the environment that is associated with the project.

#### **TIME PERIOD FOR IMPLEMENTATION**

This section in the table indicates when the actions for that specific aspect must be implemented and/or monitored.




**Construction Phase EMPr**


ENVIRONMENTAL ASPECT	ACTIONS REQUIRED/ MITIGATION MEASURED	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
<i>3.4.1. Administrative and Legal Requirements</i>			
Environmental Awareness, Roles and Responsibilities for Environmental Management	1. The overall responsibility for ensuring the implementation of this environmental management plan rests with the Applicant.	Applicant	Prior to, during and after construction
	2. The Applicant and appointed contractors must ensure that all permanent and temporary staff, sub-contractors and suppliers adhere to this EMPr.	Applicant / Contractors	During construction
	3. Prior to the commencement of construction as well as during construction, appropriate signage must be erected along the roads warning both pedestrians and motorists of earthworks.	Contractors	Prior to, during and after construction
	4. The principle contractor must appoint a senior staff member directly involved in the site construction activities as the <b>Site Environmental Officer</b> . This person shall ensure the implementation of and adherence to the EMPr in the contractor's execution of the day-to-day construction activities. This environmental responsibility must be specified in this person's duties, which will also include: a. Liaison with the appointed ECO; b. The on site implementation of the EMPr; c. Monitoring inappropriate behaviour, environmental impacts, including pollution and environmental incidents; and d. The implementation of corrective action.	Contractor	Prior to construction
	5. All procedures and equipment must be used in accordance with the Occupational Health and Safety Act Regulations (OHSA) of South Africa, Act no. 85 of 1993.	Contractor/ ECO	Prior and During construction

ENVIRONMENTAL ASPECT	ACTIONS REQUIRED/ MITIGATION MEASURED	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
	<p><b>Environmental Control Officer (ECO)</b></p> <p>6. The Applicant must appoint a person with a qualification in environmental management as the ECO. The ECO must be the responsible person for monitoring and reporting on compliance in respect of the implementation of the EMPr. Requirements include:</p> <p>a. Weekly/ Monthly monitoring of activities to ensure compliance with the EMPr;</p> <p>b. Liaison and ongoing communication with the site Environmental Officer;</p> <p>c. Ensuring environmental awareness among members of the workforce;</p> <p>d. Ensuring that the Contractor/s and members of the construction workforce are aware of the requirements of the EMPr;</p> <p>e. Reporting of environmental incidents that may occur on site in accordance with the requirements of the EMPr and environmental legislation;</p> <p>f. Daily site diary;</p> <p>g. A non-conformance register; and</p> <p>h. A public compliant register.</p>	Applicant / ECO	During construction
	7. The site Environmental Officer must provide evidence to the ECO that the EMPr is being implemented and adhered to (either through inspections sheets or audit reports).	Contractor	During construction
	8. The contractor and site environmental officer must inform the developer/ applicant and ECO prior to the commencement of any significant construction activity.	Contractor / site environmental officer	Prior and during construction
Compliance	1. All persons employed by the developer/Applicant or their contractors, shall abide by the requirements of the EMPr.	Applicant / Contractors	Prior to and during construction
	2. A fine system must be implemented for wilful negligence or non-compliance resulting in environmental degradation or pollution. The fine system must be agreed to by all parties at the outset of the construction phase.	Applicant	Prior to and during construction

ENVIRONMENTAL ASPECT	ACTIONS REQUIRED/ MITIGATION MEASURED	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
	3. Should a contractor be in breach of any of the specifications contained in the EMPr, the Applicant / ECO / lead contractor must, verbally or in writing, instruct the responsible Contractor regarding corrective and/or remedial action required, specify a timeframe for implementation of these actions, and/or indicate that work must be suspended should non-compliance continue. Contractors must be responsible and must bear the cost of any delays, corrective or remedial actions required as a result of non-compliance with the specifications and clauses of the EMPr.	Applicant / ECO / main consultant	During construction
Final Payment	Payment of the final invoice to contractors must not be made until a final inspection by the ECO is made and it has been confirmed that the work has been completed in accordance with the scope of work and EMPr.	ECO	After construction
Environmental Training and Induction	1. In terms of section 2(h) and (j) of the NEMA, the contractor has the responsibility to ensure <b>all</b> personnel involved in the project are aware of, and familiar with, the EMPr, the key environmental issues and consequences of non-compliance to the EMPr.	Contractor	Prior to and during construction
	2. To ensure compliance to the EMPr by contractors, sub-contractors and employees, the Applicant must ensure that the EMPr forms part of the formal site induction for all contractors, sub-contractors and casual labourers, preferably in their native language. The induction training will, as a minimum, include the following: a. The environmental impacts, actual or potential, of their work activities; b. The environmental benefits of improved personal performance; c. Their roles and responsibilities in achieving compliance with the EMPr, including emergency preparedness and response requirements; and d. The potential consequences of departure from specified operating procedures.	Applicant	Prior to construction
	3. All contractors, sub-contractors and casual labourers must acknowledge their understanding of the EMPr and environmental responsibilities by signing an induction attendance record.	Contractor	Prior to construction

ENVIRONMENTAL ASPECT	ACTIONS REQUIRED/ MITIGATION MEASURED	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
Review	The ECO, site Environmental Officer and consultant must consult and review implementation progress and discuss and resolve inter alia environmental concerns, non-compliance (including environmental incidents) and I&AP issues raised.	Main Consultant / ECO / site environmental officer	During construction
<b>3.4.2.No-Go Areas</b>			
	1. Unauthorised entry, stockpiling, dumping or storage of equipment, material or waste must be strictly prohibited in identified no go areas.	Contractor	Prior to and during construction
	2. Gathering of firewood, fruit, plants or any other natural material on site or in areas adjacent to construction sites is prohibited.	Contractor	Prior to, during and after construction
	3. No workers must access restoration sites indiscriminately via existing or newly shaped embankments. Identified or existing public access ways shall be used.	Contractor	Prior to, during and after construction
	4. Unauthorised access onto/into private properties must be strictly prohibited.	Contractor	Prior to, during and after construction
<b>3.4.3.Site Establishment</b>			
Contractor Site Establishment	<ol style="list-style-type: none"> <li>1. The site selected for a Construction Camp should ensure potential negative impacts on the biophysical environment are kept to a minimum for example               <ol style="list-style-type: none"> <li>(a) The Contractor and ECO must select a location that has easy access and that has already been cleared or disturbed by previous human activity e.g. old fields, abandoned tracks or yards, previous construction camps or stockpile areas).</li> <li>(b) Select a level site to minimise the chances of any soil erosion caused by storm runoff.</li> </ol> </li> <li>2. The location, which is yet to be identified and approved, must be defined, fenced off and limited to authorised contractors only.</li> </ol>	Contractor / ECO	Prior to construction


ENVIRONMENTAL ASPECT	ACTIONS REQUIRED/ MITIGATION MEASURED	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
	3. If the Contractor chooses to locate the camp site on private land, he must get prior written permission from the Developer/ Applicant and the landowner. 4. The contractor's camp must be sited so as to cause the least amount of disturbance to the adjacent land owners.	Contractor/ ECO	Prior to construction
Sanitation (Applicable to contractor Sites)  An example of portable site toilets which can be used on site. No pit latrines are to be dug.	1. Where waterborne sewerage is not available, temporary chemical toilets must be provided by a company that has been approved by the Developer/Applicant. Such toilets must be available for all site staff. Toilets should be no closer than 50m from any natural water bodies. 2. The ECO should be consulted on the location of any temporary chemical toilets. 3. Chemical toilets are to be maintained in a clean state and should be moved around to ensure that they adequately service the work areas at all times. 4. Under no circumstances may open areas or the surrounding bush be used as a toilet facility. 5. Bins and / or skips must be provided at convenient intervals for disposal of waste along the work areas and in the construction camp. 6. The Contractor must ensure that all litter is collected from the work areas and camp areas daily. 7. Bins and/or skips should be emptied regularly and waste should be disposed of at a registered landfill site. Waybills for all such disposals are to be kept by the Contractor for review by the Engineer / ECO. 8. A registered chemical waste company is to be used to remove waste from chemical toilets on site. 9. Upon completion of the project or decommissioning of the construction camp, the site shall be rehabilitated to the pre-use or determined purpose for the areas. If required, any disturbed surface must be ripped and re-vegetated. 10. Recycling and the provision of separate waste receptacles for different types of waste should be encouraged.	Contractor  Contractor / ECO  Contractor  Contractor  Contractor  Contractor  Contractor  Contractor  Contractor  Contractor	Prior to construction  Prior to construction  During construction  During construction  Prior to and during construction  During construction  During construction  During construction  After construction  Prior to and during construction

ENVIRONMENTAL ASPECT	ACTIONS REQUIRED/ MITIGATION MEASURED	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
<b>3.4.4. Access to Construction Site</b>			
Site Access  Water spray that must be used on site during construction to prevent dust.	<ol style="list-style-type: none"> <li>1. Efforts must be made to create minimum disturbance to residents and businesses neighbouring the construction area.</li> <li>2. The Contractor will be required to monitor the road for any signs of erosion. Should erosion occur, steps (e.g. Exposed areas should be rehabilitated with grass mix that blends in with the surrounding vegetation; Damage to re-vegetated areas should be repaired promptly; disturbed areas around the proposed site must be re-vegetated using a specified seed mix and/ or appropriated indigenous grasses, forbs, shrubs or trees) must be taken immediately to curb erosion and prevent further degradation of the road. Any severe erosion must be reported to the Engineer.</li> <li>3. The liberation of dust into the surrounding environment must be effectively controlled by the use of water sprays, fabric containment or curtains, where required.</li> <li>4. The speed of haul trucks and other vehicles must be strictly controlled to avoid dangerous conditions, excessive dust or excessive deterioration of the road being used. A speed of 40Km / hr must be not exceeded.</li> <li>5. All access ways must be rehabilitated / re-instated once all plant work has been completed within a specific area to rectify any damage that may have been caused by plant or vehicles.</li> </ol>	<p>Contractor/ ECO</p> <p>Contractor/ Engineers</p> <p>Contractor</p> <p>Contractor / ECO</p> <p>Contractor</p>	<p>Prior to construction</p> <p>Prior to and during construction</p> <p>During construction</p> <p>During construction</p> <p>After construction</p>
<b>3.4.5. Equipment, Vehicle Maintenance Yard and Secured Storage Areas</b>			
Equipment, vehicles & storage	<ol style="list-style-type: none"> <li>1. The equipment and vehicle maintenance yard must be situated within the boundaries of the construction camp only and within 32 meters from a watercourse. No equipment or vehicle maintenance shall be allowed at any other sites. Emergency repairs may be done only in cases where the vehicle or equipment cannot be moved from its location without causing further or more damage to the environment.</li> </ol>	Contractor	Prior to construction

ENVIRONMENTAL ASPECT	ACTIONS REQUIRED/ MITIGATION MEASURED	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
	2. Storage areas for material and equipment must be situated in a position as agreed in consultation with the ECO. These areas shall be secured to prevent unintended damage or pollution to the environment.	Contractor	Prior to construction
	3. Storage areas must be designated, demarcated and fenced if necessary.	Contractor	Prior to construction
	4. Storage areas should be secure so as to minimize the risk of crime. They should also be safe from access by children / animals etc.	Contractor	Prior to and during construction
	5. Fire prevention facilities must be present at all storage facilities.	Contractor	Prior to and during construction
	6. Definitions of hazardous substances / materials are those that are potentially: poisonous, flammable, carcinogenic or toxic. Some examples of hazardous substances / materials: a. diesel, petroleum, oil, bituminous products; b. cement; c. solvent based paints; d. lubricants; e. explosives; f. drilling fluids; g. pesticides, herbicides; or h. LP gas.	Contractor	Prior to and during construction
	7. All hazardous substances must be stored within a secured storage area, with impervious lining and bunding and must be located more than 32 metres from a watercourse. Drip trays shall be used where appropriate.	Contractor	Prior to and during construction
	8. Residents living adjacent to the construction site must be notified of the existence of the hazardous storage area.	Contractor	Prior to and During construction
	9. Plant and equipment shall be maintained to prevent spillage of oil, diesel, fuel or hydraulic fluid. The Contractor shall repair or withdraw equipment or machinery from use if they consider these to be polluting and irreparable.	Contractor	During construction

ENVIRONMENTAL ASPECT	ACTIONS REQUIRED/ MITIGATION MEASURED	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
	10. A procedure for the management of oils spills must be introduced. This should address the cleaning of spillage from hard surfaces, utilising environmental friendly cleaning materials as well as the removal and disposal of polluted soil.	Contractor	During construction
	11. On completion of all operations, the construction site must be cleared of any contaminated soil, which must be handled in accordance with the oil management procedure.	Contractor	After construction
	12. Fuel must be stored in tanks with lids, which will be kept firmly shut and under lock and key at all times, within a secondary containment facility.	Contractor	During construction
	13. No smoking must be allowed in the vicinity of storage or dispensing areas.	Contractor	During construction
	14. Staff dealing with these materials / substances must be aware of their potential impacts and follow the appropriate safety measures.	Contractor	Prior to and During construction
	15. Contractors must submit a method statement and plans for the storage of hazardous materials and emergency procedures.	Contractor	Prior to construction
	16. Fuel tanks must meet relevant specifications and be elevated so that leaks may be easily detected.	Contractor	Prior and During Construction
	17. Fuel storage areas must be at least 3.5 m from any buildings, boundaries or combustible / flammable material(s).	Contractor	Prior to Construction
	18. Fuel decanting and refuelling must take place within the construction camp only. 50kg of hydrocarbon absorbent shall be placed at the construction camp.	Contractor	During Construction
	19. Symbolic safety signs (in accordance with SABS 1186) shall be erected at storage facilities and tank capacities shall be clearly indicated (in accordance with SABS 0232).	Contractor	Prior to Construction
Handling of Hazardous Materials	1. All concrete mixing must take place on a designated, impermeable surface.	Contractor	During construction
	2. No vehicles transporting concrete to the site may be washed on site.	Contractor	During construction
	3. No vehicles transporting, placing or compacting asphalt or any other bituminous product may be washed on site	Contractor	During construction



ENVIRONMENTAL ASPECT	ACTIONS REQUIRED/ MITIGATION MEASURED	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
 <p>An example of a spillage on site that will need to be cleaned up using the prescribed methods.</p>	4. Lime and other powders must not be mixed during excessively windy conditions.	Contractor	During construction
	5. All substances required for vehicle maintenance and repair must be stored in sealed containers until they can be disposed of / removed from the site.	Contractor	During construction
	6. Hazardous substances / materials are to be transported in sealed containers or bags.	Contractor	During construction


ENVIRONMENTAL ASPECT	ACTIONS REQUIRED/ MITIGATION MEASURED	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
<p>Transportation of material to site.</p>	<p>7. If there is a transport accident resulting in leakage or spillage, the following actions should be followed:</p> <p>a. Emergency action must be taken to contain the spilled material and to prevent further uncontrolled spillage or leakage. Immediate steps must be taken to clear the area being impacted from any material;</p> <p>b. These emergency actions are normally initiated by the driver of the vehicle and executed by the emergency service personnel;</p> <p>c. Emergency action such as Evacuation and Spill Control Techniques should follow immediately after the incident and would normally last for three to four hours.</p> <ul style="list-style-type: none"> <li>▪ <b>Evacuation</b> Persons in the immediate vicinity of a spill should <i>immediately evacuate</i> the premises (<i>except for employees with training in spill response in circumstances described below</i>). If the spill is of “medium” or “large” size, or if the spill seems hazardous, immediately notify emergency response personnel.</li> <li>▪ <b>Spill Control Techniques</b> Once a spill has occurred, the employee needs to decide whether the spill is small enough to handle without outside assistance. Only employees with training in spill response should attempt to contain or clean up a spill.</li> </ul> <p><b>NOTE:</b> If you are cleaning up a spill yourself, make sure you are aware of the hazards associated with the materials spilled, have adequate ventilation, and proper personal protective equipment. Treat all residual chemical and clean-up materials as hazardous waste.</p>	<p>Contractor</p>	<p>Prior and During Construction</p>


ENVIRONMENTAL ASPECT	ACTIONS REQUIRED/ MITIGATION MEASURED	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
<i>3.4.6. Materials Management – Sourcing and Maintenance</i>			
Stockpile Management	1. Stockpiles must not be situated where they will obstruct natural water pathways.	Contractor	During construction
	2. Stockpiles should not exceed 2m in height unless otherwise permitted by the Applicant.	Contractor	During construction
	3. If stockpiles are exposed to windy conditions or heavy rain, they should be covered either by cloth, depending on the duration of the project.	Contractor	During construction
	4. Stockpiles should be kept clear of weeds and alien vegetation growth by regular weeding.	Contractor	During construction
<i>3.4.7. Education of site Staff on General Environmental Conduct</i>			
Environmental Education and Awareness	1. Ensure that all site personnel have a basic level of environmental awareness training. The Contractor must submit a proposal for this training to the ECO for approval. Topics covered should include: - a. What is meant by “environment”; b. Why the environment needs to be protected and conserved; c. How construction activities can impact on the environment; d. What can be done to mitigate against such impacts; e. Awareness of emergency and spills response provisions; and f. Social responsibility during construction. e. g. being considerate to local residents.	Contractor/ ECO	Prior to construction

ENVIRONMENTAL ASPECT	ACTIONS REQUIRED/ MITIGATION MEASURED	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
	2. It is the ECO's responsibility to provide site managers with environmental training and to ensure that the managers/foremen have sufficient understanding to pass this information onto the construction staff: <ul style="list-style-type: none"> <li>a. Translators are to be used where necessary;</li> <li>b. The Applicant should be on hand to answer questions;</li> <li>c. The use of pictures and real-life examples is encouraged as these tend to be more easily remembered;</li> <li>d. Use should be made of environmental awareness posters on site;</li> <li>e. Construction workers should be made aware that they are not to make excessive noise (e.g. Shouting / hooting) as the sites are near to commercial &amp; residential areas; and</li> <li>f. The need for a "clean site" policy also needs to be explained to the construction workers.</li> </ul>	Contractor	Prior to construction


ENVIRONMENTAL ASPECT	ACTIONS REQUIRED/ MITIGATION MEASURED	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
Worker Conduct on Site	<p>A general regard for the social and ecological well-being of the site and adjacent areas is expected of the site staff. Workers need to be made aware of the following general rules:</p> <ol style="list-style-type: none"> <li>No alcohol / drugs to be present on site;</li> <li>No firearms allowed on site or in vehicles transporting staff to / from site, (unless used by security personnel);</li> <li>Prevent excessive noise;</li> <li>Prevent unsocial behaviour;</li> <li>Bringing pets onto the site is forbidden;</li> <li>No harvesting of firewood from the site or from the areas adjacent to it;</li> <li>Construction staff shall make use of the facilities provided for them, as opposed to ad-hoc alternatives. (e.g.: fires for cooking; the use of surrounding bush as a toilet facility is forbidden);</li> <li>Trespassing on private / commercial properties adjoining the site is forbidden;</li> <li>Driving under the influence of alcohol is prohibited; and</li> <li>Other than pre-approved security staff, no workers shall be permitted to live on site.</li> <li>No wildlife may be trapped, hunted or killed on site. Should wildlife be encountered on site, the Engineers must be immediately alerted and through consultation with ECO, the animal removed without endangering it.</li> </ol>	Contractor/ ECO	Prior to construction
<b>3.4.8. Fire Management</b>			
Fire Prevention	1. Fires must only be allowed in facilities or equipment specially constructed for this purpose at the construction camp.	Contractor	During construction
	2. No open fires or uncontrolled fires shall be permitted on site. Open fires for cooking/ heating purposes must be strictly prohibited.	Contractor	During construction

ENVIRONMENTAL ASPECT	ACTIONS REQUIRED/ MITIGATION MEASURED	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
	3. No burning, on-site burying or dumping of waste shall occur. <i>In terms of National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) Atmospheric pollution causes imbalances in the atmosphere.</i> The atmosphere is the earth's life support system and needs to be treated carefully.	Contractor	During construction
	4. The contractor must ensure that adequate fire-fighting equipment is present on the site and all vehicles working on site at all times and in good working order.	Contractor	During construction
	5. The workforce must be made aware of fire prevention and fire fighting measures.	Contractor	Prior to and during construction
	6. Any flammable material must be stored in areas where it does not present a fire hazard to surrounding vegetation and people. This includes bitumen, thinning agents, petrol, LPG containers, fuels and oils.	Contractor	During construction
<b>3.4.9. Conservation of Resource</b>			
Conservation of resources	Necessary measures must be taken to prevent the wastage of natural resources. These shall include: closing taps and valves, switching off lights during daytime and preventing spillages of consumables.	Contractor	During construction
<b>3.4.10. Pollution Control Measures</b>			
Pollution control measures	1. Material Safety Data Sheets (MSDS) for on site chemicals, hydrocarbon materials and / or waste and hazardous substances must be readily available. MSDS's should include information pertaining to environmental impacts and measures to minimise and mitigate against any potential environmental impacts which may result from an incident.	Contractor	During construction
	2. The Contractor must prepare an emergency procedure and a procedure for the management e.g. storage, decanting and disposal of hazardous substances.	Contractor	Prior to and during construction

ENVIRONMENTAL ASPECT	ACTIONS REQUIRED/ MITIGATION MEASURED	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
 <p>Spill kit that must be used for soil contamination</p>	3. Rain water collected within containment facilities can be released, if not contaminated. If the contents of containment facilities are contaminated, the material must be removed and disposed of as hazardous waste.	Contractor	During construction
	4. The contractor shall exercise suitable precautions e. g. (hazardous substance containers must be in good condition and compatible with the materials stored within; any spills on the exterior of the container must be cleaned immediately, all hazardous substance containers should be closed while not in use) with the storage, handling and transport of all materials that could adversely affect the environment. If pollution of any surface or groundwater occurs, it shall immediately be reported in accordance with the incident reporting and communication procedure and appropriate mitigation measures shall be employed.	Developer	During construction
	5. In the case of a spill of hydrocarbons, chemicals or bituminous material along the work front the spill should to be contained and the material together with any contaminated soil collected and disposed of as hazardous waste.	Contractor	During construction
	6. Should a pollution incident occur on site the site environmental officer and ECO must: <ul style="list-style-type: none"> <li>a. Ensure the immediate implementation of reasonable measures to contain and minimise the impacts of the incident;</li> <li>b. Notify all persons as per the procedure;</li> <li>c. Undertake clean up procedures immediately;</li> <li>d. Record the incident in the Environmental Incident Register; and</li> <li>e. Implement measures to prevent similar incidents from occurring in the future.</li> </ul>	Site Environmental Officer / ECO	During construction
	7. Static tanks containing fuel, oil, grease or bituminous material must be confined to the construction camp only.	Contractor	During Construction
	8. All general waste must be removed from the work areas on a daily basis and disposed of in suitable waste receptacles at the contractor's camp.	Contractor	During construction
<b>Waste Management</b>			

ENVIRONMENTAL ASPECT	ACTIONS REQUIRED/ MITIGATION MEASURED	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
<p><b>The Contractor’s intended methods for waste management and waste minimisation shall be implemented at the outset of the contract and approved by the ECO .All personnel shall be instructed to dispose of all waste in a proper manner.</b></p>			
<p><b>3.4.11. Solid Waste Management</b></p>			
<p>General Waste</p>  <p>An example of recycling bins that can be used to separate recycling material on site.</p>	<ol style="list-style-type: none"> <li>1. The waste management strategy will be agreed with the ECO, and will include, but not be limited to, the re-use and recycling of any solid waste generated in construction activities.</li> <li>2. Where waste is transported for the purposes of disposal, a person transporting the waste must, before offloading the waste from the vehicle, ensure that the facility or place, to which the waste is transported, is authorised to accept such waste. (NEMWA, Act 59 of 2008)</li> <li>3. Existing infrastructure being demolished shall be reused as far as possible.</li> <li>4. Recyclable waste must be separated, reused and recycled at approved facilities. Proof shall be available.</li> <li>5. Different waste bins, for different waste streams, must be provided to ensure correct waste separation.</li> <li>6. All non-recyclable solid waste must be disposed of at a permitted landfill site, and proof shall be available and presented to the ECO at the weekly site visits.</li> <li>7. No building rubble must be used for any infilling work.</li> <li>8. Littering must be prohibited and dumping of any waste shall not be allowed in undeveloped or open areas.</li> <li>9. No waste material must be burned, buried in the sand or disposed of in any area that is not a licensed landfill site.</li> <li>10. Measures must be taken to reduce the potential for litter and negligent behaviour with regard to the disposal of all refuse. All places of work the contractor shall provide litter collection facilities for later safe disposal at approved site.</li> </ol>	<p>Contractor</p> <p>Contractor</p> <p>Contractor</p> <p>Contractor</p> <p>Contractor</p> <p>Contractor</p> <p>Contractor</p> <p>Contractor</p> <p>Contractor</p> <p>Contractor</p>	<p>During construction</p> <p>During construction</p> <p>During construction</p> <p>During construction</p> <p>During construction</p> <p>During construction</p> <p>During construction</p> <p>During construction</p> <p>During construction</p> <p>During construction</p>



ENVIRONMENTAL ASPECT	ACTIONS REQUIRED/ MITIGATION MEASURED	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
	11. General waste produced on site may include: a. Building rubble; and b. General domestic waste (food, cardboards, paper, bottles, tins).	Contractor	During construction
	12. An adequate number of general waste receptacles shall be available along the work front to collect waste from employees and to prevent littering.	Contractor	During construction
	13. All general waste must be removed on a daily basis and disposed of in suitable waste receptacles.	Contractor	During construction
	14. Bins must be clearly marked and lined for efficient control and safe disposal of waste.	Contractor	During construction
	15. Hazardous waste must not to be mixed or combined with general waste earmarked for recycling or disposal at a licensed landfill site.	Contractor	During construction
	16. Waste bins should be cleaned out on a regular basis to prevent any windblown waste and/or visual or odour disturbance.	Contractor	During construction
Sewage / Waste Water and Infrastructure	1. Discharge of waste from temporary chemical toilets into the environment must be strictly prohibited.	Contractor	During construction
	2. The contractor shall ensure that demolition or construction work does not damage sewage infrastructure such as pipelines, manholes or pump stations. Should incidental damage occur, Developer/ Applicant and the ECO shall be contacted immediately.	Contractor	During construction
Hazardous Waste 	1. Hazardous waste produced on site may include: a. Oil and other lubricants, diesel, paints and solvent; b. Containers that contained chemicals, oils or greases; and c. Equipment, steel, other material (rags), soils and water contaminated by hazardous substances (oil, fuel, grease or chemicals).	Contractor	During construction
An example of hazardous material which has not been	2. Mixing/ decanting of all chemicals and hazardous substances shall take place either on a tray or container with an impermeable surface.	Contractor	During construction
	3. Hazardous waste is to be disposed at a Permitted Hazardous Waste Landfill Site. The contractor shall provide proof of disposal.	Contractor / ECO	During construction
	4. No material shall be left on site that may harm man or animals.	Contractor	During construction

ENVIRONMENTAL ASPECT	ACTIONS REQUIRED/ MITIGATION MEASURED	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
properly stored and is leaking on to bare soil. Hazardous material must always be kept separate from other storage areas and must be banded.	5. Broken, damaged and unused nuts, bolts and washers must be picked up and removed from site.	Contractor	During construction
	6. Hazardous waste bins shall be clearly marked, stored in a contained area (or have a drip tray) and covered (either stored under a roof or the top of the container shall be covered with a lid).	Contractor	During construction
<b>3.4.12. Erosion and Sedimentation Management</b>			
Erosion	1. Soil erosion through contractor activities must be prevented.	Contractor	Prior to and during construction
	2. Suitable erosion control measures shall be implemented in areas sensitive to erosion i.e. storm water discharge points and embankments. These measures could include: <ol style="list-style-type: none"> <li>a. The suitable use of sand bags or soil saver;</li> <li>b. The prompt rehabilitation of exposed embankment areas (with indigenous vegetation for example where appropriate);</li> <li>c. The removal of vegetation, only as it becomes necessary for work to proceed;</li> <li>d. Preventing the unnecessary removal of vegetation especially on steep areas; or</li> <li>e. Taking necessary precautions in terms of design, construction and earthworks.</li> </ol>	Contractor	Prior to, during and following construction
	3. The time that stripped areas are left open to exposure should be minimised wherever possible. Care should be taken to ensure that lead times are not excessive.	Contractor	During construction

ENVIRONMENTAL ASPECT	ACTIONS REQUIRED/ MITIGATION MEASURED	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
<b>3.4.13. Water Management</b>			
Storm water	1. Section 30 of NEMA and Section 20 of National Water Act make provision that anyone who causes degradation or pollution to the environment is responsible for preventing impacts from occurring, continuing, recurring and for the costs of the repair of the environment.	Contractor	Prior to construction
	2. Storm water pipelines shall be consolidated where possible to reduce the number of discharge end points within an area.	Contractor	During construction
	3. All waste water and contamination run-off from the storage and working areas of the site must be channelled into existing waste water management system.	Contractor	Prior/ During construction
Water Quality	1. Storage areas that contain hazardous substances must be bunded with an approved impermeable liner.	Contractor	During construction
	2. Spills in bunded areas must be cleaned up, removed and disposed of safely from the bunded area as soon after detection as possible to minimise pollution risk and reduced bunding capacity.	Contractor	During construction
	3. No vehicle washing is allowed on site.	Contractor	During construction
	4. Washing of clothes, equipment or machinery within any watercourse is prohibited.	Contractor	During construction
	5. Mixing / decanting of all chemicals and hazardous substances must take place either on a tray or on an impermeable surface. Waste from these should then be disposed of to a suitable waste site.	Contractor	During construction
	6. Every effort should be made to ensure that any chemicals or hazardous substances do not contaminate the soil or ground water on site.	Contractor	During construction
	7. Should the Contractor be required to use water from a natural resource, the Contractor shall apply a method statement to that effect and obtain the required permits. No construction shall take place in the wetland, streams and other river courses without the necessary water licence from the Department of Water Affairs.	Contractor	During construction

ENVIRONMENTAL ASPECT	ACTIONS REQUIRED/ MITIGATION MEASURED	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
<b>3.4.14. Air Quality</b>			
Air Quality	1. No burning of waste, such as plastic bags, cement bags and litter, shall be permitted at the contractor or restoration sites.	Contractor	During construction
<b>3.4.15. Noise</b>			
Noise	1. Construction activities must be undertaken according to working hours stipulated by the Applicant i.e. during daylight hours only.	Contractor	During construction
	2. In order to prevent noise impacts resulting from construction activities, working hours are to be limited to weekdays between 7h00 to 17h00 and on Saturdays between 08h00 to 13h00.	Contractor	During construction
	3. If certain construction requires work outside of these hours, all adjacent landowners have to be informed prior to any construction outside of the specified hours commencing.	Contractor	During construction
	4. Construction vehicles and equipment generating excessive noise must be fitted with appropriate noise abatement measures.	Contractor	During construction
	5. Construction workers must be provided with the appropriate PPE i.e. ear plugs.	Contractor	During construction
	6. A complaints register must be provided to record any complaints regarding excessive noise.	Contractor	During construction
	7. All complaints received must be investigated and a response given to the complainant within 14 days.	Contractor / ECO	During construction
<b>3.4.16. Protection of Fauna and Flora</b>			
Flora and Fauna	1. The removal of all economically valuable trees or vegetation shall be negotiated with the Landowner before such vegetation is removed.	Landowner	During Construction

ENVIRONMENTAL ASPECT	ACTIONS REQUIRED/ MITIGATION MEASURED	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
	2. Trees that are not to be cleared should be marked beforehand with danger tape.	Contractor/ ECO	During Construction
	3. There must be no disturbance to any birds, animals, reptiles and their habitats.	Contractor	During Construction
	4. No natural vegetation is to be collected for use as firewood.	Contractor	During Construction
	5. No animals are to be disturbed and no animals are allowed to be shot, trapped or caught for any reason.	Contractor	During Construction
	6. No large trees are to be removed for any construction activities, unless they are classified as an invader species or are part of the approved removal and transplanting program. Consultation with the ECO prior to removal will be necessary.	Contractor	During Construction
	7. Invader species and weeds must be removed and disposed of in accordance with existing legislation on a regular basis.	Contractor	Prior to and during construction
Protection of Indigenous Vegetation	8. Removal of indigenous plant material from the site or surrounding and adjacent land will not be allowed.	Contractor	Prior to and during construction
<b>3.4.17. Areas of Specific Importance</b>			
Archaeological Sites	1. If an artefact on site is uncovered, work in the immediate vicinity must be stopped immediately.	Contractor	During construction
	2. The contractor must take reasonable precautions to prevent any person from removing or damaging any such article and must immediately, upon discovery thereof, inform the Developer/Applicant or ECO of such discovery.	Contractor	During Construction
	3. Approval must be obtained from Amafa-aKwaZulu-Natali should there be the need to demolish any sites of archaeological and cultural significance during the detailed design phase of the development. Demolition/construction work may only commence once Amafa's approval has being obtained.	Contractor	During Construction

ENVIRONMENTAL ASPECT	ACTIONS REQUIRED/ MITIGATION MEASURED	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
	4. Amafa should be contacted and in the case of graves, arrangements made for an undertaker to carry out exhumation and reburial.	Contractor	During construction
	5. Under no circumstances may any heritage material be destroyed or removed from site.	Contractor	During Construction
	6. Should any remains be found on site that is potentially human remains, the South African Police Service should also be contacted.	Contractor	During Construction
<b>3.4.18. Public and Workforce Safety</b>			
General	1. Dedicated pathways (temporary) for pedestrians must be developed to ensure safe passage around construction activities.	Contractor	Prior to construction
	2. Construction activities should be undertaken according to working hours stipulated by the Applicant i.e. during daylight hours only.	Contractor	During construction
	3. Flag men shall be appointed and provide ample warning of road hazards.	Contractor	During construction
	4. All members of the construction workforce working on the site or near the roads must be provided with the appropriate high visibility clothing to ensure that can be distinguished from the general public and be seen by motorists.	Contractor	During construction
	5. All construction workers handling chemical or hazardous substances must be trained in the use of such substances and the environmental, health and safety consequences of incidents.	Contractor	Prior to and during construction
	6. The workforce must be provided with sufficient potable water and under no circumstances are they to use untreated water from local watercourses for drinking.	Contractor	During construction

ENVIRONMENTAL ASPECT	ACTIONS REQUIRED/ MITIGATION MEASURED	RESPONSIBILITY	TIME PERIOD FOR IMPLEMENTATION
<i>3.4.19. Labour, Safety and Community</i>			
Labour, Safety and Community	1. The Contractor will appoint both male and female labourers from within the local surrounding or Tribal Authority area, as per the agreements reached between the Contractor and the Tribal Authority.	Contractor	During construction
	2. If the distance between the construction sites exceeds reasonable walking distance, the Contractor should provide transport to and from the site for the workers.	Contractor	During construction
	3. The Contractor should also ensure that construction personal have access to some form of medical treatment in case injuries occur.	Contractor	During construction
	4. The Contractor and his staff must maintain good relations with the community in the area, by respecting their lifestyles. Any disputes should be directed to the relevant social consultant for resolution. The Contractor must record and attend to any complaints from the community	Contractor	During construction
Fencing	1. The site must be secured in order to reduce the opportunity for criminal activity in the locality of the construction site.	Contractor	During construction
	2. Confined sites within residential / commercial areas should be fenced and manned to control the access of persons to the site. Potentially hazardous areas such as trenches are to be demarcated and clearly marked	Contractor	During construction

## 3.4.20. Social Impacts

3.4.20. Social Impacts			
Disruption of Infrastructure and Services	1. The conduct of the construction staff when dealing with the public or other stakeholders shall be in a manner that is polite and courteous at all times. Failure to adhere to this requirement may result in the removal of staff from the site by the Applicant.	Contractor	During construction
	2. Disruption of access for local residents must be minimised and must have the Applicant's permission	Contractor	During construction
	3. The Contractor is to inform neighbours of disruptive activities at least 24 hours beforehand. This can take place by way of posters placed in appropriate positions giving the Applicant's and Contractor's details, or other method approved by the Applicant.	Contractor	During construction
	4. Local communities or local community organisations shall be given preference in supplying services and labour to the construction activities. A roster of "temporary labour" shall be kept indicating "origin" of employee.	Contractor	Prior to construction
Visual	1. Temporary structures on site should be located such that they have as little visual impact on local residents as possible.	Contractor	During construction
	2. Special attention should be given to the screening of highly reflective materials on site.	Contractor	During construction
	3. Lighting on the construction site should be pointed downwards and away from oncoming traffic and nearby houses.	Contractor	During construction
3.4.21. Rehabilitation			
Rehabilitation	1. All remaining construction infrastructure, building rubble and waste must be removed from the site as directed by the ECO.	Contractor	After construction
	2. The contractor's camp site must be rehabilitated to its pre establishment condition or agreed alternative.	Contractor/ Applicant	After construction
	3. Waste material of any description, including receptacles, scrap, rubble and tyres, must be removed entirely from the contractor's camp and disposed of at a recognised landfill facility.	Contractor	After construction



	5. Removal of all new alien recruitment must be controlled before leaving the site. All alien vegetation that had re-emerged must be removed and disposed of.	Contractor	After construction
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#### 4. ENVIRONMENTAL CODE OF CONDUCT

One of the objectives of the EMPr is to ensure that all the workforce, contractors, sub-contractors and construction staff have an understanding of environmental issues and potential impacts on site activities. This environmental code of conduct provides the basic rules that should be strictly adhered to. It is the responsibility of the Site Environmental Officer and ECO to ensure that each contractor, sub-contractor and workforce understand and adhere to the Code of Conduct.

##### Basic Rules of conduct

###### DO:

- Use only the toilets
- Clear litter daily
- Report spills
- Be careful with matches & cigarettes disposal
- Keep to work area only
- Use safety equipment & comply with procedures
- Fire extinguisher at hand for "Hot work"
- Prevent excessive dust & noise
- Minimise the clearance of vegetation
- Do not dispose contaminated waste water to the storm water or the environment
- Never damage or remove any trees, shrubs or branches unless it forms part of working instructions;
- Know the environmental incident procedures.

###### DON'T:

- Make any fires
- Enter any fenced off or marked areas
- Allow cement or cement bags to be wind blown
- Allow waste, oils or any other pollutants into the storm water channels
- Litter or leave food lying around
- Do not mix cement and concrete directly on the ground;
- Dump, allow waste of any nature into wetland, river etc;
- Do not waste electricity, water or consumables;
- Do not deface, draw or cut lettering or any other markings on trees, rocks or buildings in the area.

**Appendix 1 Letter of acceptance of Environmental Management Programme (EMPr)**

**RE: The Proposed Mqangqala Road within Umzumbe Local Municipality**

**To whom it may concern**

This is to state that the undersigned have received a copy of the Environmental Management Programme (EMPr) developed for this site by Thlaho Environmental Consultants dated April 2013. The undersigned do hereby agree to abide by the strictures of the Environmental Management Programme (EMPr). Any contravention of the EMPr will be recorded and corrective action will be carried out. Any changes to the EMPr must be approved by the Environmental Control Officer (ECO), the consultant Thlaho Environmental Consultants and the relevant authority. Such changes are to be made in writing and a record must be maintained.

As Agreed on this day \_\_\_\_\_ of \_\_\_\_\_ (Month) \_\_\_\_\_ (Year)

Environmental Control Officer (ECO)

**Name** -----

**Company**-----

**Signed**-----

Contractor

**Name** -----

**Company**-----

**Signed**-----

Engineer

**Name**-----

**Company**-----

**Signed**-----

**Appendix 2: Compliant Register- Mqangqala Road, uMzumbe Local Municipality**

This a register for recording all complaints received from neighbours i.e. Complaints about noise, odours, dust etc.

Date of Complaint	Complainant's Name	Contact Details	Nature of Complaint (date, time, duration, location)	Intended Action/ Corrective Action Taken	Date Completed	Name of Person taking Complaint and Date & Time of Complaint Lodged

**Appendix 3: Mqangqala Road, uMzumbe Local Municipality**

**Incident Register- This is record of incidents as defined in NEMA and the NWA. Incidents should be recorded and reported to the applicable authorities.**

Date of Incident	Details of Incident	Parties Responsible	Corrective Action Taken	Date Action Completed

**Appendix 4- Training Record- Mqangqala Road, uMzumbe Local Municipality**  
This is record of training carried out on site.

Date of Training	Name of Attendee	Company Name	Details of Training Course	Signature	Training Provided by (Company Name, Contact Person & Contact Details)

## 5. CONCLUSION

The application of the measures outlined in this Management Programme will ensure that the operation will have a minimised impact on the environment. If the measures outlined are not strictly adhered to, the contractor or responsible party will be prosecuted in terms of the applicable legislation.

This Management Programme will govern all activities on the project site and the actions of all employees and agents of the Contractor, be these actions during working hours or after working hours, in the vicinity of the site.

## 6. IMPORTANT NUMBERS

GOVERNMENT DEPARTMENTS	
DAEARD	Head Office (South Region)- 033 343 8428/ DAEARD Ugu District Office 039 6822040
Department of Water Affairs	031 336 2700
Department of Transport	033 355 8600
Department of Minerals and Energy	031 333 9400/1/2
KwaZulu- Natal Wildlife Services	033 845 1437
Department of Agriculture, Fisheries and Forestry	033 345 3515
Amafa AkwaZulu Natali Heritage	033 394 6543
ENVIRONMENTAL SPILLAGES	
Drizit Environmental	
Sales of absorbent products	084 464-0069
24- Hour Emergency Number (Spillage)	0800 202- 202
<b>PLEASE NOTE: The Contractor will be liable for all expenses relating to spillage incidents.</b>	