ENVIRONMENTAL MANAGEMENT PLAN
FOR
KATJI-NA-KATJI
INTERIM WATER SUPPLY PROJECT

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24/07/2019
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LIST OF ABBREVIATIONS

AIDS   Acquired Immune Deficiency Syndrome
CoC    Code of Conduct
EIA    Environmental Impact Assessment
EMA    Environmental Management Act 7 of 2007
EMP    Environmental Management Plan
DEA    Department of Environmental Affairs
DWSSC  Directorate of Water Supply and Sanitation
HIV    Human Immunodeficiency Virus
I&AP   Interested and Affected Parties
km     kilometer
kV     kilovolt
kVA    kilo (Volt X Amps)
Kw     kilowatt
MAWF   Ministry of Agriculture, Water, and Forestry
m      meter
mm     millimeter
MET    Ministry of Environment and Tourism
MWH   megawatt hour
NEM    NamWater Environmental Manager
NWQG   Namibian Water Quality Guideline
NWQS   Namibian Water Quality Standard
STI's  Sexually Transmitted Infections
uPVC   Unplasticized Polyvinyl Chloride
v      Voltage
WSS    Water Supply Scheme
GLOSSARY OF TERMS

**Environmental Impact Assessment (EIA):** The continuous method of assessing adverse effects of development on the environment.

**Interested and affected parties (I&AP):** Persons or group of people, organization, institution that may, directly or indirectly affected by the proposed development.

**Namibian Water Quality Guideline (NWQG):** Guidelines used to evaluate drinking water quality, to promote safe drinking water and safeguard water supply.

**Namibian Water Quality Standards (NWQS):** A basic set of determinants to which water quality should comply and adhere.

**Unplasticized Polyvinyl Chloride (uPVC):** A type of plastic material commonly used and ideally applicable for transportation of potable, waste and storm water.

**Water Supply Scheme (WSS):** A collection of NamWater transportation infrastructure aimed at providing potable water to specific communities or industrial areas.
1. **INTRODUCTION**

Katji-na-Katji is a village located 90 km south of Rundu. The population of the village is estimated to be 2,756 people while the surrounding communities (excluding Murarani East) has an estimated population of 1,683 people. The location of Katji-na-Katji is illustrated in **Figure 1** below.

The increase in population within Katji-na-Katji area has caused water demand to increase. This led to inhabitants in the Katji-na-Katji area, to request for water supply from Namwater through various official offices (Mankumpi constituency and the Kavango west regional office), to attend to this water demand.

After a meeting between NamWater and the regional council, NamWater took up the emergency plea from the community, with an interim solution to increase water supply for the Katji-na-Katji community.

**Figure 1:** Katji-na-Katji Location Map

The interim solution, which NamWater proposes, is to install and connect two newly drilled boreholes to the existing scheme to increase water supply and water security to the Katji-na-Katji community.
However, there will be environmental impacts that should be mitigated and managed to ensure the least negative environmental impact and also enhancing positive impacts. The actions caused by construction will require mitigation, and in order to mitigate these impacts, an Environmental Management Plan (EMP) is required.

The EMP provides:

- Strategies and plans to manage environmental impacts identified through application of best practices to avoid, reduce or mitigate potential adverse impacts to minimal or insignificant levels;
- Measures that could enhance positive impacts;
- Information required to ensure adherence to legal requirements;
- Strategies to maintain good community relationships;
- A method for auditing and monitoring implementation and operation of recommended measures, thereby ensure compliance with the EMP.
- Assignment of responsibilities with regard to measures to be implemented.

Mitigation of impacts is only possible if NamWater makes an effort to ensure that the EMP is put at its full use. Therefore, the purpose of this EMP report is to ensure that construction and operational activities for the water interim solution project are managed according to the EMP.

2. PROJECT BACKGROUND

The current water scheme supplies water to the Katji-na-Katji community and institutions, covering a distance of 23 km from Oukordon in the south to Mauguva village in the north, along the B8 road towards Rundu. The village comprises of a health centre (clinic), Katji-na-Katji pre-primary, primary and secondary schools (including hostel), constituency office, cuca shops, churches, village households and police station.

During the early 1980s, three boreholes were drilled to provide water to the Katji-na-Katji community. The water demand since the '80s has increased drastically due to two factors: firstly, the increase in the communities’ population, secondly, livestock drinking holes have dried up thus prompting the community to use water from boreholes for their livestock.

The Mankumpi Constituency (Kavango west region), on behalf of the Katji-na-Katji community members and surrounding villages, requested NamWater to assist with providing sufficient potable water. Reacting to this appeal NamWater consequently drilled six boreholes. However, some of the newly drilled boreholes had poor water quality due to high sodium, magnesium and chlorides concentration. The water quality of the boreholes do not meet the
national water quality standards for potable water and requires treatment to make it fit for human consumption.

Fortunately, two of the boreholes have good quality water, which comply with the national standards. Based on the recommendations provided by NamWater Planning Division, water supply solution for Katji-na-Katji comes two-fold. Firstly, NamWater recognizes the urgent responsibility to increase water supply, and as such, a short-term solution is proposed by NamWater to connect and equip two newly drilled boreholes (WW100323 and WW100326 with 2.7 m³/h and 3 m³/h respectively). Secondly, the second long-term solution proposed by NamWater will take years to achieve, mainly for the reason that this will involve the construction of a treatment plant to treat the boreholes with bad water quality.

Pipelines will have to be constructed from the two good quality boreholes to convey water abstracted from the boreholes to the existing reservoirs at the Katji-na-Katji clinic. Water will be transported via two pumping mains. A pipeline will be constructed to increase the transfer capacity of water to important institutions, like the Katji-na-Katji school and the clinic. This short-term solution will serve as an interim measure to meet water demand in the Katji-na-Katji village.

NamWater management thus concluded that the interim solution is best for the time being.

### 3. EXISTING WATER SUPPLY INFRASTRUCTURE

#### 3.1 Water Source

The current Water Supply Scheme is supplied with ground water from three boreholes, which belong to the Directorate of Water Supply and Sanitation (DWSSC) within the Ministry of Agriculture, Water and Forestry (MAWF).

The boreholes supply water to the community at three separate communal water points, namely Katji-na-Katji, Leevi and Eukordon. See areas served by the boreholes shown in Figure 2 below.
Figure 2: Location of DWSSC boreholes

The three polygons around each borehole give the water supply coverage of each borehole. The overall polygon (in green) is the greater Katji-na-Katji area that is not adequately supplied with water.

During consultations between NamWater, the community members and the Mankumpi constituency, it was revealed that none of the existing water supply points have water meters. The water supply points are communal water points and managed communally. The community is obliged to pay for prepaid electricity, diesel, and repairs of water supply installations.

3.2 Water Quality and Disinfection

No treatment processes of the groundwater is being done since equipping the three boreholes in the 1980s to supply groundwater to Katji-na-Katji. Currently, there is still no treatment processes employed to improve the water supplied to the Katji-na-Katji WSS. However, NamWater’s Electrical and Mechanical Department will include chlorination dosing systems in their designs; this system will assist in purifying the groundwater.
3.3 Pipe Work and Reservoirs
Eukordon borehole (WW37778) supplies water to 2 x 10 m³ plastic reservoirs on a ±2.5 m stand on site and to a nearby school to the north via a ±650 m pipeline of unknown diameter and material.

Katji-na-Katji borehole (WW200188) supplies water to a 10 m³ plastic reservoir on a ±2.5 m stand on site and to the clinic and constituency office via a ±820 m pipeline of unknown diameter and material.

Leevi borehole (WW201242) supplies water to 3 x 10 m³ plastic reservoirs on a ±2.5 m stand on site. All three boreholes supply water to troughs for livestock watering.

The Katji-na-Katji school reservoir is supplied with water from the reservoirs at the clinic via a ±320 m pipeline of unknown diameter and material.

3.4 Power Supply and Control System
Eukordon (WW37778) and Katji-na-Katji (WW200188) boreholes have pole-mounted transformers supplying electric power. Leevi borehole (WW201242) is diesel driven and the electric power grid is within ±1 km.

4. DESCRIPTION OF THE PROPOSED PROJECT

4.1 Interim solution objective
The primary objectives of the project is to increase potable water supply to the Katji-na-Katji community.

4.2 Scope of Work
4.2.1 Construction of the pipeline
The two boreholes will be equipped with appropriately sized pumps and connected with 63 mm diameter uPVC class 6 pipelines, with lengths of ±320 m (borehole 1) and ±2,370 m (borehole 2). The pipeline will be equipped with scour valves and air valves, and it will be below ground.

The water pipelines from the boreholes will be connected to the existing reservoirs at the Katji-na-Katji clinic and school. Please see Figure 3 below for bearings.
5.2.2 Construction of power line

The proposed 11 kV power lines will be supported by wooden monopole structures, each measuring approximately 9 metres in height. The span width between the wooden monopole structures will be approximately 100 to 120 metres. A three-phase electrical system will be installed, i.e. three conductors. Figure 4 below illustrates a typical layout of a 3 phase 11 kV power line.

The power line to the boreholes will run parallel to the proposed water pipelines and branching from the main overhead transmission line. The overhead transmission line is running parallel with the B8 highway road. The distance from the transmission line to Borehole 1 is approximately 190 metres while the distance to Borehole 2 is approximately 350 metres. See Figure 3 for the power line routes.
5. DESCRIPTION OF THE ENVIRONMENT

The baseline description provided below focuses on the Katji-na-Katji receiving environment:

5.1 Climate

The Katji-na-Katji climatic zone has warm summers and relatively mild winters, characterised with warm days and slightly chilly nights. The area has a hot semi-arid climate (Mendelsohn, et al., 2009).

5.1.1 Precipitation

The average annual rainfall for Katji-na-Katji is between 500 mm and 550 mm. Katji-na-Katji's driest month is in June, while the maximum rainfall falls between January and February (Mendelsohn, et al., 2002).
5.1.2 Temperature
The average maximum temperature for Katji-na-Katji during the hottest months is typically between 32 °C to 34 °C. The average minimum temperature during the coldest months is between 4 °C to 6 °C respectively (Mendelsohn, et al., 2002).

5.2 Geology
The regional geology comprises primarily sediments of the Kalahari Sequence, ranging in age from late Cretaceous to Quaternary. The unconsolidated to semi-consolidated clay, sand, and gravel of the Kalahari Sequence fill the Okavango Sub-basin, which deepens from the northeast towards the northwest, from 0 to > 400 m along the north-west trending basin axis. The basin axis stretches from the northwest corner of former Bushman land through the southwestern Kavango Region and from there into the Ohangwena Region. Sub-outcrops of volcanic rock occur at the Okavango River near Katji-na-Katji and between Mukwe and Bagani (Christelis et al., 2011).

The Kalahari sediments can be divided into two broad groups. The first and deepest group is the thickest and consists of layers of clays, conglomerates, water-borne sands, silts, and calcrites. The second top-most and youngest group is a relatively thin layer dominated by sand deposited mainly by wind, a fact shown most vividly by the many old dunes in the region. The predominance of the Aeolian sand in these layers reflects the generally arid conditions that have persisted over many millennia, although isolated deposits of clays have been laid down by water flowing along the omiramba and in inter-dune valleys during periodic wetter cycles (Christelis et al., 2011).

5.3 Natural Flora
Katji-na-Katji's landscape is dominated by tree and shrub (Biome) Savannah, the area is known to have a Northern Eastern Kalahari woodland vegetation.

Vegetation species include: Mangetti tree (Schinziophyton rautanenii), Silver Terminalia (Terminalia sericea), Variable combretum (Combretum collinum), Commiphora species, Camel-thorn (Acacia erioloba) and Black-thorn acacia (Acacia mellifera). Makalani palms (Hyphaene Petersiana), Blue sour plum (Ximenia Americana), black-thorn (Acacia mellifera), devil’s claw (Harpagophytum), Jackal berry (Diospyros mespiliformis), shepherd tree (Bosia albitrunca), cluster leaf (Terminalia prunioides), wild syringa (Burkea africana), kiaat (Pterocarpus angolensis), Zambezi teak (Baikiaea plurijuga) and Monkey Orange (Strychnos spinosa) (Mendelsohn, et al., 2009).
5.4 Fauna
According to Mendelsohn, et al., (2009) Katji-na-Katji has a relatively moderate diversified wildlife population. The area is known to frequent the following wildlife species such as elephant (*Loxodonta*), kudu (*Tragelaphus strepsiceros*), leopard (*Panthera pardus*), cheetah (*Acinonyx jubatus*), wild dog (*Lycaon pictus*), buffalo (*Syncerus caffer*), spotted hyena (*Crocuta crocuta*) and brown hyena (*Hyaena brunnea*). Furthermore, locals have sighted local birds such as the Stripped Kingfisher (*Halcyon chelicuti*) and Meyer’s parrot (*Poicephalus meyeri*) (Mendelsohn, et al., 2009).

6. RESPONSIBLE PARTIES

6.1 Contractor
The contractor is responsible for the implementation of the EMP during the construction phase of the Katji-na-Katji interim solution project. The EMP will be included in all tender and contract documents. This guarantees that the contractor is fully aware of his obligations and responsibilities.

The Contractor shall take adequate steps to educate all members of his workforce (in Consultation with NamWater) as well as his supervisory staff on the relevant environmental laws and protection requirements. The Contractor shall supplement these steps with prominently displayed notices and signs in strategic locations to remind personnel of environmental obligations.

The Contractor shall ensure that all his employees, and those of his Sub-Contractors, attend an Environmental, Awareness Training. This training shall be structured to ensure that attendees:

- Acquire a basic understanding of the key environmental features on the site and its immediate environs;
- Become familiar with the environmental controls contained in the EMP;
- Are made aware of all protected areas and that the trapping, catching, poisoning, and/or shooting of animals is strictly forbidden. No domestic pets are allowed on site;
- Are informed that natural features (e.g. rock formations) are not defaced or marked for the survey or other purposes unless agreed beforehand with the contractor.
- Natural water sources (e.g. streams) are not allowed to be used for the purposes of swimming, personal washing, and the washing of machinery or clothes;
- Are made aware of the need to conserve water and minimise waste;
- Receive pertinent, written instructions regarding compliance with the relevant environmental management requirements (viz. typical environmental “Code of Conduct”);
- Are made aware of any other environmental matters as deemed necessary by the contractor.
- Are made aware of the importance of preserving archaeological sites.
- Receive training in site health, HIV/AIDS awareness and safety requirements,
- Are aware that a copy of the EMP is readily available on site and that all site staff are aware of the location and have access to the document;
- Become familiar with the environmental controls contained in the EMP;
- Are made aware of the need to conserve water and minimise waste;
- Are made aware of NamWater’s Code of Conduct;

6.2 NamWater

NamWater’s Environmental Manager is primarily responsible for the implementation of the EMP during the construction, operation and maintenance phases for the Katji-na-Katji interim solution project. He/she should also ensure proper implementation of the EMP by the Contractor. Compliance will be monitored via compliance audits.

NamWater shall ensure that the contractor complies with the EMP. NamWater, as the implementing agency, is responsible for:

- Ensuring that the objects of the EMP are being obtained;
- Ensuring that all environmental impacts are managed according to the environmental principles of avoiding, minimizing, mitigating and rehabilitation. This will be achieved by the successful implementation of the EMP;
- Ensuring that appropriate monitoring and compliance auditing are executed;
- Ensuring that the environment is rehabilitated to its natural state as far as possible.
7. LEGAL ENVIRONMENT

A legal review was done and the key laws of concern include those, which protect the ecological integrity of the Katji-na-Katji ecosystem and its water resource, including the Water Act of 1954 and the Water Resources Management Act of 2004, and applicable international treaties such as the Convention on Biological Diversity. These laws and conventions place Namibia under an obligation to conserve the ecological integrity of the Katji-na-Katji ecosystem for sustainable use by Namibians.

7.1 The Constitution of the Republic of Namibia

There are two clauses contained in the Namibian Constitution that are of particular relevance to sound environmental management practice, viz. articles 91(c) and 95(l). In giving effect to articles 91(c) and 95(l) of the Constitution of Namibia, general principles for sound management of the environment and natural resources in an integrated manner have been formulated. The formulation of these general principles resulted in Namibia’s Environmental Assessment Policy of 1994. To give statutory effect to this Policy, the Environmental Management Act was approved in 2007 and gazetted as the Environmental Management Act (Act No. 7 of 2007) (herein referred to as the EMA. As the organ of state responsible for management and protection of its natural resources, MET: DEA is committed to pursuing the 13 principles of environmental management that are set out by Part 2 of the Act.

To summarise, Articles 91(c) and 95(l) refer to:

- Guarding against over-utilisation of biological natural resources;
- Limiting over-exploitation of non-renewable resources;
- Ensuring ecosystem functionality
- Protecting Namibia’s sense of place and character;
- Maintaining biological diversity and
- Pursuing sustainable natural resource use.

7.2 Environmental Assessment Policy (1995)

Cabinet endorsed Namibia’s Environmental Assessment Policy in 1995 as the first formal effort in Namibia to regulate the application of environmental impact assessments and environmental management. Amongst others, the Policy provides a procedure for conducting EIA’s which sets out to:

- Better inform decision makers and to promote accountability of decisions taken;
Strive for a high degree of public participation and involvement of all sectors of the Namibian community during the execution of the EIA;

Take into account the environmental costs and benefits of projects and Programmes;

Promote sustainable development in Namibia;

Ensure that anticipated adverse impacts are minimized and that positive impacts are maximized.

7.3 Environmental Management Act (No 7 of 2007) (EMA)
The Environmental Management Act (EMA) was promulgated in 2007 by Parliament and gives effect to the Environmental Assessment Policy. The Act specifies the environmental assessment procedures to be followed as well as the listed activities (activities that require an EIA).

Of relevance to this project are the following listed activities, as provided in Section 27 of this Act, which includes:

- Water use and disposal;
- Bulk water transportation

7.4 EIA Regulations Government Notice No. 30, promulgated on 6 February 2012
The regulations, promulgated in terms of the EMA, were promulgated on 6 February 2012 and indicated certain list of activities that may not be undertaken without an environmental clearance certificate: environmental management act, 2007 from MET: DEA prior to commencing project.

7.5 Water Act 54 of 1956 and Water Resources Management Act 11 of 2013
The Water Resources Management Act 11 of 2013 is presently without regulations; therefore, the Water Act 54 is still in force. The Act provides for the management and protection of surface and groundwater resources in terms of utilisation and pollution.

8. ENVIRONMENTAL MANAGEMENT PLAN
An EMP is a dynamic document that is regularly updated as required, it relates to the local natural and socio environment. The EMP is tailor made for particular conditions and proposed development. The EMP is valid for all contractors and subcontractors. It is a project specific plan developed to ensure appropriate environmental management is carried out.
The EMP provides for the establishment of a grievance procedure as indicated in Annexure 1. Grievance registration form is also depicted in Annexure 1.

Monthly audits will be done during construction phase and more regularly if EMP compliance is not satisfactory. Operational and maintenance audits will be done annually and more frequently if compliance is poor.

EMP implementation is a cyclical process that converts mitigation measures into actions and through cyclical monitoring, auditing, review and corrective action, ensures conformance with stated EMP aims and objectives. For an effective EMP, continuous monitoring and auditing is required, and continual improvement of the EMP ensures corrective action is provided.

The project activities are grouped according to the different construction, operation and maintenance stages. Most of the potential impacts can be reduced to insignificant levels through good housekeeping.
9. MANAGEMENT ACTIONS

9.1 Construction Phase

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<th>Monitoring</th>
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| a. Minimize the disturbance of vegetation and faunal communities and their habitats during the construction of the Katji-na-Katji Interim Pipeline. | Disturbance of vegetation and faunal communities and their habitats. | - Identify and demarcate the extent of the construction or accommodation site and associated work areas using danger tape with steel droppers.  
- Identify animal species, populations and nest to be relocated. Relocate to areas with no associated risks. Such operations should be planned well in advance.  
- Protect identified plants using danger tape and steel droppers.  
- Keep disturbance of vegetation and fauna to a minimum. The area to be disturbed should be as small as possible. | Visual inspection to ensure that construction activities are done within the demarcated area.  
Frequency: Daily, especially during the first phase of construction, as this is the time when most disturbances to the vegetation and fauna and their habitats are most likely occur.  
Responsible Person: NEM and Resident Engineer. |
<p>| b. Prevent unnecessary removal of | Unnecessary removal of trees/plants of importance. | - Do not remove any vegetation unless it is absolutely necessary. Make sure that bulldozer, grader and excavator operators are informed. | Visual inspection/checks to prevent, as well as to ensure |</p>
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| trees/plants of importance. |  | • The clearing of plants or natural features for the proposed construction should be managed to avoid the further damage to vegetation cover.  
• The use of herbicides and pesticides is prohibited. | the unnecessary removal of trees/plants.  
Frequency: Daily  
Responsible Person: NEM |
| c. Minimize the loss of rare/endangered fauna and flora species. | Loss of rare / endangered fauna or flora species. | • Avoid small mammal/reptile and bird nesting where possible. Do not hurt, kill or unnecessarily disturb birds or animals.  
• Maintain plant demarcations in position until the construction works cease. | Checks to ensure that construction is limited to the demarcated area.  
Visual checks to ensure that no unnecessary movement occurs in breeding and habitats of these species.  
Frequency: Daily  
Responsible Person: NEM |
| d. Prevent the poaching of flora and fauna. | Poaching of fauna and flora. | • Employees who poached fauna and/or flora will be handed to the authorities for prosecution.  
• Employees who set traps will be handed to the authorities for prosecution. No wild animals under any circumstance be hunted illegally, handled, removed or be interfered with. | Visual inspection.  
Frequency: Weekly visual checks.  
Responsible Person: NEM and Resident Engineer. |
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| e. Minimise the creation and use of tracks outside existing roads. | Creation of tracks outside existing roads. | - The Contractor shall be held responsible for all project related traffic.  
- Use existing roads.  
- Construction traffic shall be controlled to ensure minimal disruption to other road users.  
- Do not construct new roads when the quality of existing roads deteriorates. Where possible, repair or upgrade existing roads.  
- Areas to be cleared for road construction should be as small as possible. | Visual checks to ensure that no off-road driving exists.  
Frequency: Weekly  
Responsible Person: NEM and Resident Engineer. |
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<td>• Road construction methods should ensure good road surfaces to preclude vehicles driving off-road to find smoother surfaces with less corrugation or potholes.</td>
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<td>• Ensure that adequate vehicle turning areas are allowed for.</td>
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<td>• Enforce speed limits at all times. Unless otherwise specified, the speed limit on construction roads is 50km/h.</td>
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<td>• Runoff from roads must be managed to avoid erosion and pollution problems.</td>
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<td>• Roads not required for further use shall be rehabilitated immediately.</td>
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<td>• Enter and exit roadways and construction areas at demarcated entrances.</td>
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<td>• Erect signage to warn motorists about construction activities and heavy vehicle movement where appropriate.</td>
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<td>• Use 3-point turns and not U-turns. Confine turning to the road.</td>
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<td>• Prevent shortcuts between roads.</td>
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<td>f.  Minimise the damage and destruction of important palaeontological and archaeological sites during construction.</td>
<td>Disturbance to sites of palaeontological and archaeological importance.</td>
<td>• Do not disrupt any archaeological or palaeontological sites.</td>
<td>Monitoring can and should involve field induction of key construction personnel so that they will be able to recognize the important palaeontological and archaeological sites themselves. Frequency: Monthly. Person Responsible: Key Construction Personnel.</td>
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<td>• All workers will be educated about the importance of preserving archaeological sites.</td>
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<td>• Educate specific workers about tell-tale signs of archaeological sites and the action to be taken if one is identified.</td>
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<td>g.  Borrow pits should only be established if its really necessary and careful excavation should be considered to Minimise impact.</td>
<td>Establishment of borrow pits.</td>
<td>• No borrow pits should be established.</td>
<td>Checks to ensure that no borrow pits are established. Frequency: Monthly. Responsible Person: NEM and Resident Engineer</td>
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<td>h. Minimise the number of heavy vehicles on the road.</td>
<td>Increased number of heavy vehicles on the road.</td>
<td>• Heavy vehicles should be limited to the numbers necessary.</td>
<td>Checks to ensure that there is a minimal heavy vehicles on the road. Frequency: Weekly Responsible Person: Resident Engineer</td>
</tr>
<tr>
<td>i. Minimise and prevent the activities that accelerate erosion during construction.</td>
<td>Erosion.</td>
<td>• Runoff on steep inclines should be diverted to prevent the formation of erosion gullies. • Vegetative cover is the most efficient and economical means of controlling soil erosion. • Berms should be constructed at selected intervals on long sloping areas to prevent erosion. Diversion berms should be reshaped as necessary to divert runoff. • When equipment crossings are necessary, diversions may be wider with flatter side slopes to minimise erosion. • Berms should be constructed with compacted soil, have a minimum top width of 60 cm and a minimum height of 30 cm, and should allow for 10% settlement. It should have side slopes with a gradient of at least 2:1.</td>
<td>Visual inspection to ensure that activities that accelerate soil erosion are minimised and if possible prevented at all cost. Frequency: Daily Responsible Person: NEM and Resident Engineer</td>
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<td>Objectives</td>
<td>Risk Sources</td>
<td>Management Action</td>
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<td>j. Minimise and prevent the collection and removal of firewood during construction.</td>
<td>Collection of firewood.</td>
<td>• Runoff should be guided to a point where it will not cause damage. Scour by the discharge of runoff should be prevented. • No vegetative matter may be removed for firewood. • The collection and removal of firewood are not allowed. Is it not the same as the previous recommendation? • Fire extinguishers should be readily available at designated locations. • Cooking places shall be located at a safe distance from fuel/hazardous material storage area and vehicle parking bays. • The Contractor shall either provide firewood or limit the use thereof by providing gas or fuel-efficient stoves.</td>
<td>Checks to ensure that there’s no removal and collection of firewood by the employees. Frequency: Weekly Responsible Person: NEM.</td>
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<tr>
<td>k. Dust control</td>
<td>Generation of dust</td>
<td>• The Contractor shall take all reasonable measures to minimise the generation of dust as a result of construction activity. • Construction vehicles to use only designated roads and to adhere to speed regulations.</td>
<td>Visual inspection to ensure that activities that generate dust are minimised and if possible prevented. Frequency: Daily Responsible Person: NEM and Resident Engineer</td>
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<td>Objectives</td>
<td>Risk Sources</td>
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<td>• Consider temporary ceasing of work during high wind conditions.</td>
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</table>
| I. Noise   | Generation of noise | • Install and maintain silencers on trucks and machinery.  
• Repair faulty brakes.  
• Operators should not use hooters for the purposes of general communication. | Visual inspection to ensure that activities that generate noise are minimised and if possible prevented.  
Frequency: Daily  
Responsible Person: NEM and Resident Engineer |
| m. Driving | Increased risk for accidents | • No operator will operate any equipment when he is under the influence of any narcotics.  
• Adhere to safety rules.  
• Always keep your headlights on.  
• Drivers must have the correct licence for the vehicle they are driving. | Visual inspection to ensure that activities that generate noise are minimised and if possible prevented.  
Frequency: Daily  
Responsible Person: NEM and Resident Engineer |
| n. Concrete Batching | Solid waste accumulation, pollution | • Concrete batching shall take place on a smooth impermeable surface enclosed with a bund.  
• Batching shall take place at least 20m away from any water source to avoid contamination. | Checks to ensure that concrete batching is properly done. |
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<tr>
<th>Objectives</th>
<th>Risk Sources</th>
<th>Management Action</th>
<th>Monitoring</th>
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<td></td>
<td>• All waste water resulting from batching of concrete shall be contained and disposed of appropriately and shall not be discharged into the environment.</td>
<td>Frequency: Daily and as required. Responsible Person: NEM and Resident Engineer</td>
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<td>• Any spillages of concrete shall be cleaned –up immediately and disposed of through the solid waste disposal system.</td>
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<td>• Empty cement bags shall be collected continuously and stored in containers until disposal at appropriate disposal sites.</td>
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<td>• Bulk cement storage should be at the main construction camp.</td>
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<td>o. Site establishment</td>
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<td>• No establishment within 100 metres from any watercourse.</td>
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<td>• At existing disturbed areas</td>
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<td>• Away from prominent roads to minimise visual impact.</td>
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<td>• All vehicles to be parked at dedicated parking area.</td>
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<td>• Constructing camp should be fenced?</td>
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<td>p. Trenching</td>
<td></td>
<td>• Contractors urged to ensure all open trenches are back filled.</td>
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<td>Objectives</td>
<td>Risk Sources</td>
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<td>• Back fill to same contours or slightly higher to allow for settlement.</td>
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</table>
| q. Blasting| Blasting can cause noise, dust, and vibration, and can cause injury to employees. | • Vehicles carrying explosives should be appropriately marked with warning signs.  
• Explosives should be stored in dry and well-secured areas.  
• Contractor shall hire the best experienced qualified persons for blasting actions.  
• Employees are not allowed to handle any explosives, unless he/she has been trained to handle explosives. |            |
### 9.2 Operation and maintenance phase

**Waste Management**

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Potential Impact</th>
<th>Management Action</th>
<th>Mitigation Action</th>
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</thead>
<tbody>
<tr>
<td>a. To prevent the improper disposal of waste</td>
<td>Pollution</td>
<td>• Enforce a waste management programme.</td>
<td>A visual check to ensure wastes is managed according to the waste management plan</td>
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<td>• All waste will be removed to an appropriate waste dump.</td>
<td>Frequency: Weekly.</td>
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<td>• No waste should be buried.</td>
<td>Person Responsible: Scheme Supervisor.</td>
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<td>• General Waste: Includes waste paper, plastic, cardboard, harmless organic (e.g. vegetables) and domestic waste.</td>
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<td>• Hazardous Substances includes: sewerage, fuels, lubrication oils, hydraulic and brake fluid, solvents, paints, anticorrosive, insecticides and pesticides, chemicals, acids, etc. It should be disposed of at designated hazardous disposal sites.</td>
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<td>• Contaminated soil should be stored in drums and taken to the nearest appropriate waste dumpsite.</td>
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<td></td>
<td>• Do not change the oil on the uncovered ground. Drip trays will be used to catch oil when vehicles are repaired in the field.</td>
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<td>Objectives</td>
<td>Potential Impact</td>
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<td>• Used oil and hydraulic fluids will not be discarded on the soil or buried. It will be removed from the site and taken back to an appropriate dumpsite.</td>
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<td>• In the event of a hazardous spill:</td>
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<td>• Immediately implement actions to stop or reduce the spill.</td>
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<td>• Contain the spill.</td>
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<td>• Arrange implementation of the necessary clean-up procedures.</td>
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<td>• Collect contaminated soil, water, and other materials and dispose of it at an appropriate waste dumpsite.</td>
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<td>• Used solvents and grease should be stored in drums or other suitable containers. It should be sealed and recycled or disposed at an appropriate disposal site.</td>
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<td>• Hazardous waste should not be burnt.</td>
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<td></td>
<td>• Bunding, concrete slabs and/or other protective measures should be installed where hazardous materials are handled.</td>
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<td>• Ensure that the staff are informed and have information pertaining to the management of spills or ingestion.</td>
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<tr>
<td>b. To avoid potential chemical/hazardous substance pollution</td>
<td>Pollution</td>
<td>• Designated areas for the storage of potentially hazardous material will be lined with concrete and secured. The bunded area will be of adequate capacity to contain 1.5 times the volume of the hazardous material to be stored in the bunded area.</td>
<td>Visual checks to ensure chemical/hazardous substances are stored appropriately. Frequency: Monthly. Responsible Person: Scheme Supervisor.</td>
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</table>
| c. Prevent diesel and oil spills during operation and maintenance and ensure adequate clean up. | Concrete, diesel and oil spills and inadequate clean up.         | • Clean up concrete, fuel and oil spills immediately.  
• Clean small oil or fuel spills with an approved/appropriate absorbent material.  
• Contain oil or fuel spills in water using an approved oil absorbent fibre.  
• In cases where oil spills cannot be cleaned up immediately, monitor seepage into deeper soils and groundwater.  
• Do not bury polluted soil, but rather dispose it at an appropriate dumpsite.  
• Provide bunding at fuel storage and transfer sites. The bunding should be big enough to contain 110% of the volume of the tank. Where a bund wall encloses a group of... | Checks to prevent and minimise oil and diesel spills and to ensure adequate clean up should spills occur. Frequency: Daily throughout the operation period. Responsible Person: Scheme Supervisor.                                                                                     |
<table>
<thead>
<tr>
<th>Objectives</th>
<th>Potential Impact</th>
<th>Management Action</th>
<th>Mitigation Action</th>
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</table>
| d. Waste Management | Littering (Litter such as paper, plastic, etc. can be blown away into the surrounding environment). | • No littering will be allowed. The operation and maintenance areas will be kept free of waste at all times. All maintenance sites will be cleaned on a daily basis before leaving the site.  
• Provide sufficient waste bins at worksites. Make sure that all waste is removed from the worksites.  
• Bins should be placed in pairs to ensure that one is always present while the other is being emptied.  
• Areas likely to generate higher quantities of waste shall be equipped with additional bins.  
• Refuse bins must be stable, i.e. cannot be tipped by animals, and have scavenger and baboon proof lids.  
• Make sure that the bins are covered so that plastic bags, paper etc. are not blown away. | Checks to ensure that litter is disposed of correctly in bins provided.  
Frequency: Daily, at the end of the work day.  
Responsible Person: Scheme Supervisor. |
### Objectives
- Make sure that the bins are regularly emptied and the waste taken to an appropriate waste dumpsite.
- The central waste storage vessel shall be emptied weekly or as necessary.

### 9.3 Workshops, vehicle and equipment management

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<tr>
<th>Objectives</th>
<th>Potential Impact</th>
<th>Management Action</th>
<th>Mitigation Action</th>
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</thead>
<tbody>
<tr>
<td>a. Appropriate storage of machinery, vehicles, and materials.</td>
<td>Inappropriate storage of machinery, vehicles, and materials may result in the possible damage/disturbance of nearby undisturbed environments.</td>
<td>• Store machinery, vehicles, and materials only in demarcated areas;</td>
<td>Regular inspection to ensure that machinery, vehicles, and equipment are stored in designated areas. Frequency: Daily. Responsible Person: Scheme Supervisor.</td>
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<td>• Do not leave machinery and equipment standing around if not in use;</td>
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<td></td>
<td></td>
<td>• Do not store machinery, vehicles or materials in undisturbed or rehabilitating areas</td>
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</tr>
<tr>
<td>b. Minimize the leakage of fuels and lubricants</td>
<td>The use of vehicles and equipment that may leak fuel and lubricants.</td>
<td>• Only service machinery and vehicles in designated areas.</td>
<td>Visual inspection to ensure that vehicles and equipment are in excellent condition and</td>
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<tr>
<td></td>
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<td>• Regularly check your vehicle for fuel and oil leaks.</td>
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<td>Objectives</td>
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<td>Management Action</td>
<td>Mitigation Action</td>
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<td>from vehicles and equipment.</td>
<td></td>
<td>• Maintain vehicles and equipment in good conditions through regular and thorough servicing.</td>
<td>also to ensure that there is no leakage of fuels and lubricants.</td>
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<td>• Inform the Foreman of leaking vehicles and machinery so that he can schedule repairs.</td>
<td>Frequency: Daily.</td>
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<td>• Only refuel on the bund created for that purpose.</td>
<td>Responsible Person: Scheme Supervisor.</td>
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<td>• Immediately clean any accidental fuel and oil spills – do not hose spills into the natural environment.</td>
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<td>• Dispose of contaminated soil as hazardous waste in the correct location on site.</td>
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<td>• If a mobile fuel bowser is used, then all refueling shall occur with appropriate measures in place to prevent spillages (drip trays, funnels, non-dripping dispensing nozzles, etc.)</td>
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<td>• All mobile fuel browsers shall carry a spill kit that is adequately sized to contain at least a 200-litre spill.</td>
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<td>• Train staff in the correct procedure/technique to transfer fuels.</td>
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<td>• Make sure all vehicles are roadworthy. Repair faulty brakes, exhausts, etc. immediately.</td>
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<td>• Fire extinguishers shall be present whenever undertaking any form of hot work, i.e. welding, gas cutting, angle grinding, etc.</td>
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### 9.4 Health and safety

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<th>Objectives</th>
<th>Potential Impact</th>
<th>Management Action</th>
<th>Mitigation Action</th>
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<tbody>
<tr>
<td>a. Minimise the risk of HIV infection and the increase of STI's.</td>
<td>Risk of HIV infection.</td>
<td>• Provide an AIDS awareness programme for all the staff.</td>
<td>Verify that an awareness and education programme on the risks of HIV/AIDS and recommended preventative measures have been conducted. Frequency: Monthly Responsible Person: Scheme Supervisor.</td>
</tr>
<tr>
<td>b. Minimize the occurrence of injuries.</td>
<td>Injuries.</td>
<td>• Contractor is obliged to provide PPE to their employees. • Make sure that all staff are equipped and know how to use safety and protective gear. This includes hard hats,</td>
<td>Checks to ensure that correct procedures are followed and that protective clothing are worn at all times during maintenance.</td>
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<td>Objectives</td>
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<td>goggles, hearing protectors, dusk masks, steel-toed shoes, etc.</td>
<td>Visual checks to ensure that machinery and equipment used during maintenance are in good working condition. Frequency: Check weekly. Responsible Person: Scheme Supervisor.</td>
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<td>• Keep a comprehensive first aid kit at the scheme offices and at maintenance sites.</td>
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<td>• Establish an emergency rescue system for evacuation of serious injured people.</td>
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<td>• Emergency procedures for accidents should be communicated to all employees.</td>
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<td>• Dangerous areas must be clearly marked and access to these areas controlled or restricted.</td>
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<td>• Good driving and adherence to safety rules will result in a minimum number of road and workplace accidents.</td>
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<td>• Fire extinguishers must be available at all refueling sites. Staff should be trained to handle such equipment.</td>
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<td>• Nobody is allowed to dispose of a burning or smoldering object in an area where it may cause the ignition of a fire.</td>
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<td>• Hazardous substances must be kept in adequately protected areas to avoid soil, air or water pollution.</td>
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<td>Management Action</td>
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<td></td>
<td>• Work areas, such as these for the maintenance of equipment, must be on concrete slabs.</td>
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<td>• Explosives should be stored according to the prescribed regulations.</td>
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10. REHABILITATION AND SITE CLOSURE

10.1 What is Rehabilitation?

Rehabilitation is the process of returning the land in a given area that has been disturbed by construction, operation and maintenance to an acceptable state or an otherwise predetermined state. Many projects, if not all, will result in the land becoming degraded to some extent. However, with proper rehabilitation, most impacts associated with the construction, operation and maintenance of the pipelines could be mitigated and restored to an acceptable level. Poorly rehabilitated areas provide a difficult legacy issue for governments, communities, and companies, and ultimately tarnish the reputation of companies as a whole.

Rehabilitation proposals and concept plans should be developed well before construction of pipelines and those plans should be revised from time to time.

The Rehabilitation Phase refers to the period of the project after the completion of the actual construction works, the onset signalled by site clean-up, site rehabilitation, the withdrawal of the contractor from site, and commencement of the maintenance period. To be fully effective, rehabilitation should begin as early as possible and be reviewed and updated on an ongoing basis. Rehabilitation should be an integrated part of all stages of the project life cycle.

10.2 Objectives of proper site closure and rehabilitation

The aim is to restore the area to an acceptable standard as close to its baseline environmental state as possible.

The objectives of the rehabilitation plan should be based upon the specific characteristics of the construction area and should reflect:

- Legislative requirements in the area;
- Health and safety considerations;
- Environmental and social characteristics of surrounding area;
- Biodiversity in the area;
- Ecosystem services provided within the site’s ecological boundaries;
- Post-closure land use plan.
10.3 Rehabilitation measures to implement:

a. Rehabilitation must be carried out as soon as possible after construction is completed and must be implemented progressively as construction is completed in sections of the pipeline.

b. Clear and completely remove from site all foreign materials, construction equipment, storage containers, concrete and compacted platforms, chemical toilets, bunded area(s), dustbins, temporary services and fixtures.

c. Remove from site all temporary fuel stores, hazardous substance stores, hazardous waste stores and pollution control sumps and pollution containment structures.

d. Remove from site all temporary sanitary infrastructure and waste water disposal systems. Take care to avoid leaks, overflows and spills and dispose of any waste in the approved manner.

e. Should there be spills of hazardous substances on the soil, polluted soil will be collected and disposed of at a hazardous landfill site that accepts such waste and replaced with unpolluted soil.

f. Ensure that all access roads utilised during construction (which are not earmarked for closure and rehabilitation) are returned to a usable state and / or a state no worse than prior to construction.

g. Dismantle and flatten temporary drifts and water course crossings, reinstating all drainage lines to approximate their original profile.

h. Rip and / or scarify all disturbed areas of the construction site, including temporary access routes and roads, compacted during the execution of the works.

i. Rip and / or scarify along the contour to prevent the creation of down-slope channels.

j. Make sure that all potential hazards are properly closed and left in a safe and neat position.

k. Ensure that the area is safe for the intended end land use.

l. Rehabilitation will be done to the satisfaction of the ENV section and MET.
10.4 Rehabilitation and Closure Plan

All contractors will have to submit a Rehabilitation and Closure Plan for approval by the NamWater Environmental Section. The Environmental Section will also audit implementation of the plan.
What is an Environmental Code of Conduct?

It is a set of rules that everybody has to follow in order to minimise damage to the environment.

What is the ENVIRONMENT?

The ENVIRONMENT means the surroundings within which people live. The ENVIRONMENT is made up of the soil, water, plants, and animals and those characteristics of the soil, water, air, and plant and animal life that influence human health and well-being. People and all human activities are also part of the environment and have to be considered during the operation of the Scheme.

Do these ENVIRONMENTAL RULES apply to me?

YES, The Environmental Rules apply to EVERYBODY. This includes all permanent, contract, or temporary workers as well as any other person who visits the Scheme. Every person will be required to adhere to the Environmental Code of Conduct.

ALL PERSONNEL must study and keep to the Environmental Code of Conduct

The SCHEME SUPERVISOR will issue warnings and will discipline ANY PERSON who breaks any of the Environmental Rules. Repeated and continued breaking of the Rules will result in a disciplinary inquiry and which may result in that person being asked to leave the Scheme permanently.

What if I do not understand the ENVIRONMENTAL RULES?

ASK FOR ADVICE, if any member of the WORKFORCE does not understand, or does not know how to keep any of the Environmental Rules, that person must seek advice from the SCHEME SUPERVISOR. The PERSON that does not understand must keep asking until he/she is able to keep to all the Environmental Rules.
Safety and Security

1. Only enter and exit roadways and maintenance areas at demarcated entrances.
2. Wear protective clothing and equipment as per signboards at the Scheme and according to instructions from your SCHEME SUPERVISOR.
3. Report to your SCHEME SUPERVISOR if you see a stranger or unauthorised person in the maintenance area.
4. Never enter any area that is out of bounds or that is demarcated as dangerous without permission of your SCHEME SUPERVISOR.
5. Never climb over any fence or enter private property without permission of the landowner or your SCHEME SUPERVISOR.
6. Do not remove any vehicle, machinery, equipment, or any other object from the maintenance site without the permission of your SCHEME SUPERVISOR.
7. Keep clear of blasting sites. Follow the instructions of your SCHEME SUPERVISOR.
8. Never enter or work in the Scheme while under the influence of alcohol or other intoxicating substances.
9. All staff should know the emergency procedures in case of accidents.

Waste Disposal

10. Learn the difference between different types of waste, namely:
    - general waste, and
    - hazardous waste.

Containers will be provided for different types of wastes.

| General Waste includes waste paper, plastic, cardboard, harmless organic (e.g. Vegetables) and domestic waste |
| Hazardous Waste includes objects, liquids or gases that are potentially dangerous or harmful to any person or the environment. Sewage, fuel, tyres, diesel, oils, hydraulic and brake fluid, paints, solvents, acids, soaps and detergents, resins, old batteries, etc. are all potentially hazardous. |
11. Learn how to identify the containers for the different types of wastes. Only throw general waste into containers, bins or drums provided for general waste.

12. Recycle drums, pallets and other containers.

13. Never bury or burn any waste on site, all waste is to be disposed of in allocated refuse disposal containers, bins or bags.

14. Never overfill any waste container. Inform your SCHEME SUPERVISOR if you notice a container that is nearly full.

15. Do not litter.

16. Do not bury litter or rubbish in the backfilled trench.

Plants and Animals

17. **Do not ever pick any plants, or catch any animal.** People caught with plants or animals in their possession will be handed to the authorities for prosecution.

18. Never feed, tease, play with, or set devices to trap any animal or livestock. Wild animals are not to be domesticated.

19. Keep off the rock outcrops unless given specific permission by the SCHEME SUPERVISOR to be there.

20. Never cut down any tree or branches for firewood.

21. Never leave rubbish or food scraps or bones where it will attract animals, birds, or insects.

22. Rubbish must be thrown into allocated waste disposal bins/bags.

23. Always close the gates behind you.

Preventing Pollution

24. Only work with hazardous materials in bunded areas.

25. Never discard any hazardous substances such as fuel, oil, paint, solvent, etc. into stream channels or onto the ground. Never allow any hazardous substances to soak into the soil.

26. Clean up spills immediately.

27. Immediately report to your SCHEME SUPERVISOR when you spill, or notice any hazardous substance overflow, leak or drip or spill on site, into the streambeds or along the road.

28. Immediately report to your SCHEME SUPERVISOR when you notice any container, which holds hazardous substances overflow, leak or drip. Spillage must be prevented.
29. Only wash vehicles, equipment and machinery, containers and other surfaces at work site areas designated by your SCHEME SUPERVISOR.
30. Do not change the oil on uncovered surfaces.
31. If you are not sure how to transport, store, use, or get rid of any hazardous substances ask your SCHEME SUPERVISOR for advice.

Health

32. Drink lots of clean water every day.
33. Use toilets that have been provided.
34. Take the necessary precautions to avoid contracting HIV / AIDS. Condoms are available at most Clinics.
35. Inform your SCHEME SUPERVISOR when you are sick.
36. Do not work with any machinery when you are sick.
37. If you are working in malaria areas, you must take the necessary precautions.

Dust Control

38. Do not make any new roads or clear any vegetation unless instructed to do so by your SCHEME SUPERVISOR.
39. Keep to established tracks and pathways.
40. Keep within demarcated work areas.

Saving Water

41. Always use as little water as possible. Reduce, re-use and recycle water.
42. Never leave taps or hose pipes running. Close all taps after use.
43. Report any dripping or leaking taps and pipes to your SCHEME SUPERVISOR.

Working Hours

44. You may only work on weekends and after hours with the consent of the SCHEME SUPERVISOR.
Archaeological and Cultural Objects

45. If you find any archaeological, cultural, historical or pre-historical object on the maintenance site you must immediately notify your SCHEME SUPERVISOR.

46. Never remove, destroy, or disturb any cultural, historical, or pre-historical object on site.

| Cultural and Historical Objects include old buildings, graves or burial sites, milestones, old coins, beads, pottery, and military objects. |
| Pre-Historical objects include fossils and old bones, old human skeletal remains, pieces of pottery and old tools and implements. |

Sensible Driving

47. Tracks and roads should be kept to a minimum. Where possible follow existing roads.

48. No off-road driving is allowed.

49. Never drive any vehicle without a valid licence for that vehicle class and do not drive any vehicle that is not road-worthy.

50. Never drive any vehicle when under the influence of alcohol.

51. **Always** keep your headlights on when driving on dusty roads.

52. Keep to the roads as specified by your SCHEME SUPERVISOR. Vehicles may only be driven on demarcated roads. Drivers should always use three-point turns, “U-turns” are not allowed. Do not cut corners.

53. Do not drive on rocky outcrops.

Noise

54. Keep noise levels as low as possible.

55. Do not operate noisy equipment outside normal working hours.

Fire Control

56. Do not make open fires, use a drum or tin and do not collect any vegetation to burn.
57. Do not smoke or make fires near refuelling depots or any other area where fuel, oil, solvents, or paints are used or stored. Fireplaces should be at a safe distance from fuel and explosive storage sites as well as vehicle parking sites.

58. Cigarette butts should always be thrown in allocated refuse bins. Make sure that the cigarette butt is out before throwing it into the bin.

59. Immediately notify your SCHEME SUPERVISOR if you see an unsupervised fire at the campsite or maintenance site.

Dealing with Environmental Complaints

60. If you have any complaint about dangerous working conditions or potential pollution to the environment, talk to your SCHEME SUPERVISOR.

61. If any person complains to you about noise, lights, littering, pollution, or any harmful or dangerous condition, immediately report this to your SCHEME SUPERVISOR.

For any enquiries, please call

NP du Plessis
Tell: 061-71 2093
Cell: 081 127 9040

Jolanda Murangi
Tell: 061-71 2105
Cell: 081 217 8116
12. REFERENCES


Annexure 1: Grievance Procedure

1. Receive and register grievance
2. Screen and assess
3. Act to resolve locally
   - Reject complaint
   - Refer as appropriate
   - Communicate decision
4. Refer to Head Office
   - Project Manager to take appropriate action
# Grievance Registration

<table>
<thead>
<tr>
<th>Case No:</th>
<th>Date:</th>
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<tbody>
<tr>
<td>Name of complainant:</td>
<td>Cell no:</td>
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<tr>
<td>Email address:</td>
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</tr>
<tr>
<td>Details of grievance: (Date, location, persons involved, frequency of occurrence, effects of ensuing situation, etc)</td>
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<tr>
<td>Name of person recording grievance:</td>
<td>Cell number:</td>
</tr>
<tr>
<td>Proposed date of response:</td>
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<tr>
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<td>Signature of complainant:</td>
</tr>
<tr>
<td>Date of redress:</td>
<td></td>
</tr>
<tr>
<td>Decision and action:</td>
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