# Appendix 4

# ENVIRONMENTAL MANAGEMENT PROGRAMME

# CONSTRUCTION ENVIRONMENTAL MANAGEMENT PROGRAMME (CEMP) FOR WORKING FOR WETLANDS PROJECTS

**September 2010**
**CEMP Version: 1**

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**Working for Wetlands programme**
**Planning, Monitoring and Evaluation Section**

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# TABLE OF CONTENTS

# 1 INTRODUCTION

## 1.1 Context

This Construction Environmental Management Programme (CEMP) has been compiled as a guideline for the mitigation and management measures to be implemented during construction for the proposed wetlands rehabilitation projects in South Africa. **THIS CEMP MUST BE READ IN CONJUNCTION WITH THE FOLLOWING DOCUMENTS:**

- **BASIC CONDITIONS OF EMPLOYMENT ACT, 1997: CODE OF GOOD PRACTICE FOR EMPLOYMENT AND CONDITIONS OF WORK FOR SPECIAL PUBLIC WORKS PROGRAMMES (Annex 1) AND;**
- **BASIC ASSESSMENT REPORT (Annex 2)**

## 1.2 Background to the request for the CEMP

The Department of Environmental Affairs (DEA) requested the compilation of a CEMP after the evaluation and authorisation of the Basic Assessment Report (BAR) applications for rehabilitation of wetlands in South Africa. The CEMP is based on Impacts Assessments, Public Participation input and Environmental Practitioner's experience.

The purpose of this document is to ensure that all projects implemented under the Working for Wetlands programme adopt an effective and appropriate approach to wetland rehabilitation and that all activities are compliant with relevant legislation. This includes, as top priority, ensuring that the safety of people involved in the projects is not compromised at any time, that rehabilitation interventions are sustainable and that the objectives of the Expanded Public Works Programme (EPWP) and Working for Wetlands are maximised through the projects.

This document forms part of the agreement between the South African National Botanical Institute (SANBI) and each project implementer. This document outlines areas in which compliance is required and serves as a reference against which practices shall be audited. Given that each project operates under specific conditions, innovation by the implementers, and modification of the CEMP, where appropriate, are encouraged within the framework of the prescripts in Section 2.

## 1.3 Site description

### *1.3.1 Proposed project and associated construction and operational activities*

Refer to the attached Basic Assessment Report appendix A and D

### *1.3.2 Affected biophysical, economic and social environment*

Refer to the attached Basic Assessment Report appendix A and D

### *1.3.3 Potential Issues Identified during the Impact Assessment in BAR*

Refer to the attached Basic Assessment Report appendix A and D

# 2 PRESCRIPTS

## 2.1 Expanded public works programme

### *2.1.1 Compliance with the requirements of the Expanded Public Works Programme*

All projects shall comply with:

- The Ministerial Determination on Special Public Works Programmes (Government Notice No. R 63, 25 January 2002)
- The Code of Good Practice for Employment and Conditions of Work for Special Public Works Programmes (Government Notice No. R 64, 25 January 2002)

### *2.1.2 Employment*

The implementer shall not employ any contractor or staff member who has been dismissed from any other project or expanded public works programme. The implementer shall ensure representivity with respect to race and gender in the selection of staff.

### *2.1.3 Target groups*

Projects shall work towards the following targets in all occupational categories, with respect to employment:

- 60 % women
- 20 % youth (18 to 25 years)
- 2% disabled

Where these targets are not immediately realized, a transformation plan shall be put in place to achieve them. The plan will include targets and reasonable timeframes. Progress will be evaluated annually.

### *2.1.4 Remuneration*

All work must be task based. Written approval from the Regional Coordinator is required when this is not possible. Workers are to be paid on the basis of the number of tasks completed.

Employers will pay workers rates provided for in the approved PIP guideline for the current financial year

Contractors shall pay the workers the wage agreed for the task. All production bonuses shall be distributed equitably amongst team members when production targets are achieved.

### *2.1.5 Employment contracts*

Contractors shall have an employment contract with each of their workers. Workers shall have the contents of the contract explained to them, and shall indicate that they understand its contents and the grievance procedure and disciplinary code shall be available to all workers

### *2.1.6 Management structure*

The implementer's management organogram shall be made available to Working for Wetlands upon request.

Project management capacity shall be adequate to deal with the size of project. Each contractor may only have one team.

The implementer and his/her staff shall not have any financial involvement with contractors outside of the formal tender agreements

## 2.2 Health and safety

### *2.2.1 Medical examinations*

Prior to employment, all employees shall undergo a medical examination performed by a registered occupational health practitioner. Specific job classes shall have annual medical examinations or other tests as specified in the Occupational Health and Safety (OHS) Act.

Records of all medical examinations shall be kept by the implementer.

### *2.2.2 First aid kit*

An adequately equipped first aid kit shall be easily accessible at all work sites. The first aid kit shall be kept fully stocked according to the stock list.

All first aid treatment and usage of stock shall be recorded in the dressing book kept on site.

The first aid kit shall be under control of a trained and competent first aid officer with a current certificate. Each team shall have at least one trained first aid officer and one alternate

### *2.2.3 Personal protective equipment and clothing (PPE)*

The PPE prescribed in the agreement between the implementer and contractor shall be worn at all times during work. PPE shall meet the minimum prescribed standards of quality (SABS approved). PPE shall be replaced when it becomes ineffective through wear and tear.

In order to maintain consistency within the programme, Working for Wetlands shall provide designs to be used on the t-shirts worn by the workers

### *2.2.4 Occupational health and safety*

Each project manager and contractor shall have a copy of the OHS Act. All relevant OHS standards will be fully implemented.

In terms of the OHS Act, the provincial director shall be notified of planned construction work.

The designated health and safety officer shall also be appointed as the construction safety officer. The appointment letter shall be available on site.

Incident reports shall be up to date and available. All incidents shall be reported within 24 hours to the Regional Coordinator. All incidents shall be investigated by a trained incident investigator within 7 days of the incident. All near misses shall be reported to the Regional Coordinator on a quarterly basis.

Health and safety meetings shall be held for all implementers at the quarterly national implementers' forum.

The programme manager, technical advisors and regional coordinators of Working for Wetlands shall intervene to suspend operations at projects where clear violations of health and safety legislation and the best management practices are observed, and where these violations constitute a clear health and safety risk.

### *2.2.5 Compensation for Injuries and diseases*

It is the responsibility of the employers (contractors) to arrange for all persons employed on a Special Public Works Programme (SPWP) to be covered in terms of the Compensation for Occupational Injuries and Diseases Act, 130 of 1993. The employer (contractor) shall pay a worker who is unable to work because of an injury caused by an accident at work 75% of their earnings for up to three months. The employer shall be refunded this amount by the Compensation Commissioner. This does NOT apply to injuries caused by accidents outside the workplace such as road accidents or accidents at home.

### *2.2.6 Water quality*

In wetlands with a high risk of pollution, such as those in urban areas, the project manager shall take steps to ensure that he/she is aware of changes in water quality. If water quality is found to be so poor that it is a threat to health, the following steps shall be taken:

- Workers shall be made aware of it immediately.
- If unable to supply appropriate PPE, work shall stop.
- Workers shall be encouraged not to drink water directly from the wetland.
- Technical Advisors shall be informed of poor water quality.

### *2.2.7 Water and flooding*

Teams working near open water shall have life jackets on site. Consideration shall be given to the safety of team members working near water who are unable to swim.

Given the nature of the work, project managers and contractors shall be sensitive to the potential dangers of floods. A highly risk averse approach shall be followed whenever dealing with an actual or potential flood event. Rainfall in the catchment above the wetland, and flow within the wetland shall continually be visually monitored by project managers and contractors. In high rainfall events where there is an increased risk of sudden floods, workers shall be withdrawn from the site.

### *2.2.8 Substance abuse*

The use of any narcotic substances is not allowed on sites.

The implementer and contractors shall ensure that workers do not perform their duties under the influence of any narcotic or alcoholic substances. Workers who are under the influence during work hours shall be dealt with in terms of the appropriate disciplinary procedures

## 2.3 Transport

### *2.3.1 Compliance of vehicles*

All vehicles (including trailers) used by projects shall comply with all legal requirements in terms of roadworthiness and licensing and shall display a valid license at all times. The following vehicles shall display a valid Certificate of Fitness:

- Any truck, bus or minibus where the gross vehicle mass exceeds 3500 kg. Any vehicle designed or adapted to convey 12 persons or more, including the driver.
- Vehicles used in transporting persons for reward.

Vehicle size shall be suitable for the number of passengers to be transported. For bakkies, the minimum space required per person translates to the following capacity, including driver and passengers in the front and back:

- Short wheelbase bakkie 0,25m$^2$ per person standing = 15 persons 0,35m$^2$ per person seated = 11 persons
- Long wheelbase bakkie 0,25m$^2$ per person standing = 17 persons 0,35m$^2$ per person seated = 13 persons.

Minibus taxis shall not carry more than the number of people for which they are certified.

Retreads shall not be fitted to the front wheels of vehicles used for carrying passengers. Wheels on the same axle must be of the same size and be fitted with the same type of tyre.

### *2.3.2 Daily vehicle checklist*

A daily pre-trip vehicle check shall be done and recorded by the driver on a suitable checklist. The checklist shall be up to date and kept in the vehicle. Trailers shall form part of the daily checklist. The project manager shall verify and sign the checklists weekly.

Faults affecting the roadworthiness of the vehicle shall be repaired immediately or alternative transport used.

### *2.3.3 Driver's licenses and permits*

All drivers shall have a valid driver's license for the vehicle category used. The competence of all drivers shall be verified by the implementer. All contractor drivers shall be in possession of a valid appropriate Professional Driving Permit (PDP) for the category of vehicle.

Drivers shall undergo an annual medical check and the results shall be filed with the project manager.

Driver's licenses shall be verified annually by the local traffic authority or by telephoning 012 303 2718.

### *2.3.4 Passenger safety*

Vehicles used for transporting workers shall have suitable passenger facilities, including as a minimum:

- Sufficiently strong railings to a height of 350mm above seat surface or 1000mm above standing surface.
- If installed, benches shall be properly secured
- If installed, canopies or tarpaulins shall be properly secured and ventilated.
- Tools, equipment and containers shall be suitably secured and isolated from passengers.
- Workers and materials, such as rock, cement etc., shall not be transported in the same vehicle at the same time.
- Bakkie-drawn trailers may under no circumstances be used for transporting people.

# 3 ADMINISTRATION

## 3.1 Contractor's documents

The contract between the implementer and the contractor shall be readily accessible to project managers and contractors. The project manager must ensure that the contractor and workers understand the contract.

Each contract shall be allocated a unique identity number.

The following shall form part of the contract between the implementer and contractors:

- Rehabilitation specifications
- Technical drawings of the structures, including a list of the material required.
- Environmental management plan
- Site plans

## 3.2 Records, data and quality control

Each contractor shall maintain an up to date timesheet of daily worker attendance. Details of new appointments shall be submitted to the implementer. Timesheets shall be available for inspection by any Working for Wetlands staff member. A record shall be kept of equipment and consumables issued against the contract document. A quality control sheet completed by the implementer shall record on-going quality checks and the final check before payment. This shall certify that work done complies with contract specifications.

## 3.3 Payments

The implementer shall ensure that the contractors' workers have been paid on time and in the amount to which they are entitled. Proof of such payment, signed by all team members, shall be submitted to Working for Wetlands on request.

Disabled team members shall be paid the same amount for the days worked as other workers, and the contractor shall claim the half disabled wage back from the implementer.

In situations where tasks are completed before the expected time period, workers shall still be paid for the original number of days quoted. For example, if a team planned to take 15 days to complete a task that is subsequently accomplished in 10 days, the contractor shall still pay the workers for the full 15 days.

Each worker shall receive a payment advice that complies with the requirements of the EPWP documents listed in Section 1. A copy of all contracts and documentation relating to payments to workers shall be retained by the contractor and implementer. This documentation shall provide proof of receipt of payment by workers, and shall be made available to Working for Wetlands on request.

# 4 GENERAL ENVIRONMENTAL GUIDELINES FOR CONSTRUCTION

## 4.1 Introduction

As requested by the DEA, this document serves as a guideline for the management of the site by the Environmental Control Officer (ECO). Duties of the ECO shall be carried out by the Provincial Coordinator (PC) via monthly inspections in order to minimise adverse environmental impacts and effects. The PC shall be informed of incidents and accidents on site by the Implementer and His/her staff.

The CEMP provides specifications and regulations that shall in all instances be adhered to. However, it is the responsibility of all people involved to commit themselves to the implementation of the CEMP in all phases of the project or in those instances where specific instructions are provided. The implementer shall be responsible for ensuring compliance of the contractors with the CEMP and shall rely on regular monitoring for compliance. The contractor shall monitor his/her employees to ensure their compliance with the provisions of the CEMP. The contractors shall receive copies of the CEMP from the client at which time he/she will be given the opportunity to resolve any misconceptions and uncertainties. The CEMP shall form part of the contract and will therefore be a legally binding document. In the event of discrepancy with regard to environmental matters or environmental specifications this document shall take precedence.

### *4.1.1 Environmental Control Officer (ECO)*

The contractor shall direct all his/her queries regarding any environmental issues or aspects to the ECO. The ECO shall discuss the matter with the DEA as required and give feedback to the contractor. The ECO shall be responsible for evaluating compliance of all aspects of the CEMP. Monthly site audits shall be undertaken by the ECO and a detailed report submitted to the SANBI for review prior to the following audit. An annual overview report shall be submitted to the DEA. If queries or problems arise for issues that cannot be proficiently addressed by the ECO, the ECO shall seek advice from the Project Manager who shall seek assistance from a person or persons that are educated and experienced in the relevant field.

### *4.1.2 Feedback to the DEA*

Any problems or areas of non-compliance with regard to the CEMP shall be communicated to the Contractor by the ECO, in addition to informing the DEA, who will decide on appropriate action.

### *4.1.3 Failure to comply with the Environmental Considerations*

The ECO shall order the contractor to suspend part or all of the works if the contractor causes damage to the environment by not adhering to the specifications set in the CEMP. The suspension shall be enforced until such time as the offending party/ies' actions, procedure and/or equipment are corrected. No extension of time shall be granted for such delays and all costs shall be borne by the Implementer.

The programme manager, technical advisors and regional coordinators of Working for Wetlands shall intervene to suspend operations at projects where clear violations of the environmental management plan and the best management practices are observed, and where these violations are having or have the potential to cause a significant environmental impact

#### *4.1.4 Environmental training programme*

The ECO, with the assistance of the contractor, shall communicate all aspects of the CEMP to the site staff (i.e. from site agents to labourers) prior to commencement of excavation or any other environmentally disturbing activity. Basic environmental awareness training shall be carried out for all employees and shall be included in safety training. A copy of the CEMP shall always be made available on site.

#### *4.1.5 Progress / site meetings*

Environmental issues shall be put on the agenda as a discussion point during progress/site meetings. The Implementer, or a designated person involved with environmental issues on the project, shall attend the progress and/or site meetings on a regular basis to provide feedback on any outstanding or contentious environmental matter.

## 4.2 Public participation

Public participation was undertaken as a component of the BAR. The links to the community that have been established shall be maintained and utilised to the mutual benefit of all parties. The ECO is responsible for addressing any environmental problems or queries that are raised by the community and therefore shall maintain close contact with the representatives of the immediate community. This CEMP shall be made available, on request, for the public to peruse.

# 5 SITE ESTABLISHMENT

## 5.1 Site plan

The project manager shall design a site plan for each site that identifies suitable locations for all work, storage, parking, toilet, processing and other areas prior to site establishment. The Contractor shall erect and maintain temporary boundary markers of the type and in the locations directed by the Engineer. Such markers, such as danger tape or suitable equivalent, shall be erected before undertaking designated activities.

## 5.2 Site clearance

The Contractor shall ensure that the clearance of vegetation is restricted to that required to facilitate the execution of the Works. Site clearance shall occur in a planned manner, and cleared areas shall be stabilised as soon as possible. The detail of vegetation clearing shall be to the Engineer's approval. All cleared vegetation shall either be mulched and mixed into the topsoil stockpiles or disposed of at an approved disposal site. The disposal of vegetation by burying or burning is prohibited without the requisite permit from the local authority.

The Contractor shall strip the Top-material within the working areas. The Top-material shall be stockpiled separately from subsoil and used for subsequent rehabilitation and revegetation. Top-material stockpiles shall not be compacted.

Should fauna be encountered during site clearance, earthworks shall cease until fauna have been safely relocated.

## 5.3 "No-go" areas

The construction site shall be contained in an area required to undertake the works. Any area beyond shall be considered "no go" areas. The Contractor shall ensure that, insofar as she/he has the authority, no unauthorised

entry, stockpiling, dumping or storage of equipment or materials shall be allowed within the demarcated “no go” areas.

“No go” areas shall be clearly demarcated with commercially available danger tape or suitable equivalent. The Contractor shall maintain the construction site boundary for the duration of construction and ensure that the danger tape does not become dislodged.

## 5.4 Waste currently on site

The site shall be cleared of all litter/waste prior to any construction related activities and the waste shall be disposed of at a registered waste disposal facility. This is to ensure that no waste is incorporated into the environment during the construction process. Recycling of waste material shall be encouraged.

## 5.5 Vegetation clearing

Vegetation on the site shall be removed prior to commencement of construction activities. However, care shall be taken to confine removal of vegetation during construction activities to within the boundaries of the development area. The removal, damage or disturbance of any flora and fauna outside the construction area shall not be permitted unless specifically authorised by the ECO.

No areas may remain cleared (bare soil exposed) for longer than 3 weeks. Efficient construction planning must ensure that all relevant materials, construction equipment and manpower are available upon commencement of construction in an area. Thereafter, the cleared areas must be suitably re-vegetated (refer to Section 12).

## 5.6 Biodiversity

Disturbance of indigenous plants and animals shall be minimised. Collection of indigenous plants, parts of plants or animals may only take place with the appropriate permits.

Level 2 and 3 structures shall take into consideration the migration of fish species.

Bio-engineering methods that involve re-vegetation will, as far as possible, use individuals of local species taken from surrounding areas, in order to avoid or reduce genetic pollution. Collection must not lead to habitat destruction. Alien species may not be used for re-vegetation unless approved by the Provincial Coordinator.

## 5.7 Removal of top-material

Prior to the commencement of construction activities top-material (up to a maximum of 30 cm) shall be removed from the work area and stockpiled for re-use in subsequent rehabilitation and landscaping activities. The top-material shall be stockpiled separately from the subsoil and construction materials. The contractor shall ensure that no remnants of stockpiles are left in positions or states that may be eroded during and after construction.

## 5.8 Defacement of natural features

Trees, natural vegetation, or any other natural features outside the work area, which will not be cleared for construction purposes, shall not be defaced or painted for benchmarks. No damage is permissible, not even for survey purposes. The latter shall only be undertaken if agreed to by the ECO. Any feature defaced by the contractor shall be reinstated to the satisfaction of the ECO.

Should any Red Data species be encountered, *in situ* conservation shall be undertaken if at all possible. Should this not be considered possible then a specialist shall be consulted for possible relocation.

In addition, any bird nests encountered should not be interfered with. If impact is unavoidable the nest shall be relocated by a suitably qualified individual.

No pesticides of any description shall be used during the construction phase. Pesticides should also be discouraged from use during the operational phase of the project.

For the conservation of wildlife, should any be found, species may not be killed or otherwise deliberately disturbed. It is anticipated that as a result of the construction wildlife species will take shelter in neighbouring areas and reserves. Although highly unlikely, construction workers should be advised not to catch or kill any wild animals in the area, including snakes.

## 5.9 Heritage sites and features

No archaeological or heritage sites have been identified on site. If archaeological or heritage sites are exposed during construction work all activities shall be halted and the incident shall immediately be reported the appropriate provincial heritage authority[1] for investigation and evaluation of the find. Old burial grounds (if found) will be reported to the ECO who will advise the contractor as to the mode of action, which will include informing the South African Police Service (SAPS) and the South African Heritage Resources Agency (SAHRA).

## 5.10 Stabilizing of steep slopes

The disturbance of steep slopes, for example by the removal of vegetation, may result in slope instability and erosion by rain and surface runoff. All slopes that are disturbed during construction shall immediately be stabilised to prevent erosion. The rehabilitation measures listed in Section 12 must be implemented in the rehabilitation.

## 5.11 Removal of alien vegetation

The contractor shall ensure that invasive alien vegetation is cleared from the entire site prior to the commencement of construction activities. Any species that are declared invasive species [according to the Conservation of Agricultural Resources Act (Act 43 of 1983)] must be removed from site. Follow up clearing may be necessary if the species re-establish following the initial clearing. No trees within environmentally sensitive areas may be removed, whether alien species or not, unless permitted by the ECO.

Other alien species (non-listed) occurring on site shall not be used for landscaping activities and shall be removed from site where possible.

## 5.12 Revegetation

Once construction is complete, rehabilitation (i.e. the planting of indigenous vegetation) of disturbed areas shall be undertaken immediately in order to restore the aesthetic and ecological value of the area. Only locally appropriate indigenous vegetation shall be utilised. Rehabilitation shall be undertaken according to the following schedule:

- Infilling of all excavation work. Subsoil shall be filled in first to ensure that topsoil is present on the surface to secure a suitable plant growth medium. Substrate that is not suitable for plant growth should not be used for infilling of excavations unless it is used at a suitable depth e.g. deeper than 2 m.
- Removal of all construction rubble from the site, including substances that cannot be used for infilling of excavations, shall be undertaken.

[1] If no provincial heritage authority in place then the South African Heritage Resources Agency (SAHRA) shall be contacted.

- Steep and unstable slopes shall have stabilising measures put in place to prevent collapse of the slopes or soil erosion. Slope stabilisation and soil erosion prevention measures include the placement of silt fences, staked grass sods and rows of sawdust filled onion bags.
- The exposed ground should be seeded and mulched with an appropriate stabilising grass mixture. A good stabilising grass seed mix should include:
    - *Andropogon eucomus* (Snowflake Grass)
    - *Aristida congesta* (Tassel Three-awn)
    - *Cenchrus ciliaris* (Foxtail Buffalo Grass)
    - *Cynodon dactylon* (Kweek/Couch grass)
    - *Digitaria eriantha* (Common Finger Grass)
    - *Eragrostis curvula* (Weeping Love Grass)
    - *Imperata cylindrical* (Cottonwool Grass)
    - *Melinis repens* (Natal Red Top)

The site shall be watered following seeding and mulching, and continued on a regular basis, the frequency depending on the amount of rainfall received. Should germination not occur within one month of planting, the site should be reseeded and mulched.

# 6 ENVIRONMENTAL PLANNING

The implementation of wetland rehabilitation activities has potential impacts on the wetland site and the downstream habitat. The implementation of these activities shall take into consideration the following potential impacts.

## 6.1 Hydrological impacts

The construction of interventions within watercourses is likely to have difficulties associated with the presence of water, under both normal and wet conditions. In the event that the planned interventions are located within the seasonal and permanent zones of the wetland, diversions may need to be put in place to temporarily divert water away from the work site.

In order to reduce the requirements to divert water from the construction site, implementation of the rehabilitation activities within seasonal and permanent wetness zones shall take place within the dry season:

- Winter rainfall areas - November to March
- Summer rainfall areas - May to September

In those cases where working in wet conditions is unavoidable the following shall be implemented:

- Water shall be diverted away from the intervention site during the implementation of rehabilitation activities
- Diversions shall be temporary in nature (e.g. sand bags, eco-logs)
- Upon completion of the rehabilitation activities at the site, the diversions shall be removed to restore natural flow patterns
- In those instances where the impact of the diversions are negligible and removal may result in further disturbance, diversions structures shall be left *in situ* (this shall be decided in consultation with Working for Wetlands)

Water courses are subject to unanticipated flooding and adequate precautions shall be taken to avoid damage to facilities, equipment and wetland habitat:

- Ensure storage areas are located outside of floodable areas
- Minimise the extent of disturbed/exposed areas to reduce extensive damage during flood events

## 6.2 Disturbances

### *6.2.1 Vegetation*

Disturbance of indigenous plants within the wetland and surrounding catchment shall be minimised. In the event that vegetation needs to be removed during construction, the vegetation shall be stored in a shaded and moist area, or at the Peninsula project's nursery site, for use in revegetation. Re-vegetation of all exposed soil must be done before the team leaves the site.

Bio-engineering methods involving the re-vegetation or planting of specified areas shall, as far as possible, use local plant species obtained from the following sources:

- vegetation removed during excavation,
- local 'borrow' sites, or
- naturally sourced seed mixes

This should limit the threat of introducing genetically-modified and genetically different species into the area. Non-invasive alien plant species shall not be used for re-vegetation unless approved by the Working for Wetlands (e.g. Vetiver grass)

The collection of indigenous plant or parts thereof shall only take place if the following guidelines are followed:

- Obtain the required collection permits
- Limit habitat destruction
- Implement 'mosaic' collection to ensure limited disturbance and adequate recovery of the 'borrow' site.

### *6.2.2 Faunal species*

Disturbance of faunal species within the wetland and surrounding catchment shall be minimised. This includes minimising:

- disruptions to the movements/migration of species;
- interruptions of breeding activities and behaviour;
- disturbance of feeding and breeding sites.

The presence of species of conservation importance shall be known prior to the commencement of rehabilitation activities. In those instances where these species are present, work shall be scheduled to reduce the impacts on the abovementioned activities. This information shall be determined by means of consultation with specialists.

The construction of interventions within wetlands and watercourses necessitates the planning of these interventions taking into consideration the migration of fish species where applicable.

### *6.2.3 Local resources*

In some instances locally available resources may be utilised in the implementation of wetland rehabilitation activities. This would primarily be rocks for the construction of gabion structures. Prior approval of the technical advisor shall be obtained, with respect to:

- suitable rock types,
- suitable areas for collection, and
- appropriate collection methods

All purchased rock shall be from registered and approved crushers. Copies of the certificates shall be kept on file by the implementer. Any rock that is collected from old quarries or mine dumps shall have the necessary documentation from the land owner.

## 6.3 Compaction

The storage of materials and access to the site is likely to result in the compaction of the soil around the site. This increases the risk of erosion and sediment generation originating from the site.

All impacted areas shall be rehabilitated (loosen soil and re-vegetate) once work has been completed and prior to the team leaving the site. These activities shall include the closure and rehabilitation of temporary access routes and addressing any potential erosion risks.

## 6.4 Sediment mobilisation

The construction of interventions within watercourses is likely to have impacts on downstream habitat associated with the presence of sediment within runoff water. In order to reduce impacts associated with sediment from the construction site, implementation of the rehabilitation activities should take place within the dry season:

- Winter rainfall areas - November to March
- Summer rainfall areas - May to September

In those instances where the toes of structures are designed to be flooded by the downstream structures work shall commence from the top of the system down. This shall ensure that work occurs in drier conditions and less sediment would be mobilised during excavation. The impacts associated with sediment generated during earthworks shall be minimised by constructing temporary sediment traps downstream, preferably at the location of the next intervention, to reduce disturbance footprints.

In those instances where structures are not designed to be flooded by downstream structures, the interventions shall be constructed from the bottom of the system up, so that each structure then serves as a sediment trap for the construction upstream.

Further measures to reduce sediment generated from construction activities include ensuring that soil is not deposited into a watercourse and the re-vegetation of the exposed areas as soon as possible as per Section 10.2.

# 7 CONSTRUCTION SITE

## 7.1 Restriction to working area

It is important that activities are conducted within a limited area so as to facilitate control and to minimise the impact on the existing natural environment and disturbance to the neighbouring communities. Working areas are defined as those areas required by the contractor to undertake the works as agreed with the ECO.

## 7.2 Contractor's camp

An area to be approved by the ECO shall be taped off for the purpose of temporary staff accommodation facilities during the construction period. . The contractor's camp, offices and storage facilities shall be located within the site boundaries. No person shall be allowed to stay on the neighbouring site. Any temporary structures erected during construction will be restricted to the construction campsite. The taped area shall include that of a 10 m buffer zone between the site and the 1:100 year floodline of any watercourse and/or dam.

All staff remaining on site shall be supplied (by the contractor) with adequate protective clothing, water and refuse facilities (with regular collection) and facilities for cooking and heating. No open fires shall be permitted.

The contractor shall provide water and/or washing facilities at the construction camp for the site staff.

All contractor vehicles shall be stored in a location where an oil trap shall be installed to prevent soil pollution. The ECO shall advise the contractor on a suitable area on the site.

## 7.3 Stores and workshops

Stores buildings and containers shall be secure and provide safe storage space where equipment and materials will not deteriorate.

All stores and workshops shall comply with the OHS Act and shall show a high standard of housekeeping.

## 7.4 Refuse

Refuse refers to all solid waste, including construction debris (cement bags, wrapping material, timber, cans, wire, nails, etc.), waste and surplus food, food packaging, organic waste etc. The contractor shall be responsible for the establishment of a refuse control and removal system that prevents the spread of refuse within and beyond the construction site.

The contractor shall ensure that all refuse is disposed of by him/her and his/her sub-contractors' employees in refuse bins which he/she shall supply and arrange to be emptied on a daily basis. These bins shall all have lids and shall be adequate in number and accessibility.

Waste shall be separated as follows:

- Hazardous waste, consisting of substances that may be harmful to the receiving environment, and therefore require precautionary measures when handled. Examples include (but not limited to) oil, paint, diesel etc., (in addition, refer to Section 7.7 and 10.8).

- General waste, consisting of non-hazardous substances and substances that cannot be recycled. Examples include (but not limited to) construction rubble, excess construction materials that cannot be reused, and food waste.
- Reusable construction material, which can be used at other construction sites.
- Where possible, glass and metal waste should be separated and removed from site for recycling purposes

Refuse bins shall be watertight, wind-proof and scavenger proof and shall be appropriately placed throughout the site and shall also be conspicuous (e.g. painted bright yellow). Refuse shall also be protected from rain, which may cause pollutants to leach out. Particular caution shall be exercised with regards to handling of hazardous waste, to ensure that it does not spill or leak from the waste collection containers. The utmost care shall be taken to ensure that no waste is able to enter wetlands and/or dams on or near to the site.

The contractor or the appointed Waste Removal Company shall truck refuse collected out of the construction site. Refuse shall be disposed of at a Department of Water Affairs (DWA) registered site on a needs-scheduled basis. The disposal site shall also be approved of by the contractor and the local authority. Refuse shall not be burned or buried on or near the site.

The contractor shall ensure that the contractor's camp and construction site is cleaned on a daily basis. These areas shall then be inspected by the contractor to ensure compliance with this requirement. A litter patrol around the construction area shall take place twice weekly to ensure that all litter is cleared up.

The contractor shall be warned, in writing, by the ECO of any infringement and shall be expected to clear the litter within 24 hours of the notification.

The contractor shall be responsible for cleaning the contractor's camp and construction site of all structures, equipment, residual litter and building materials at the end of the contract and where necessary and appropriate, the ground scarified, topsoil restored and indigenous vegetation re-established.

The contractor will be responsible for removal of rubbish, which may wash into watercourses as a result of litter. The contractor will also be responsible for any litter in the sensitive areas, which is dumped or left there by the construction crew.

## 7.5 Ablution facilities

The contractor shall be responsible for provision of sanitation for his/her and the sub-contractor's staff. Where possible, a minimum of one pit latrine shall be provided per 15 persons. Toilets may not be situated within 50 metres of a watercourse. Should toilets be needed elsewhere, their location shall first be approved by the ECO. The ECO is responsible for ensuring that any toilets placed are suitably situated and comply with requirements stated below.

The toilets shall be provided with doors and locks and shall be secured to prevent them from falling over. Toilets shall be placed outside areas susceptible to potential flooding. The contractor shall supply toilet paper at all toilets at all times. The contractor shall ensure that the labourers make use of the toilets provided.

The contractor shall be responsible for the cleaning, maintenance and servicing of the toilets. The contractor shall ensure that the toilets are protected from vandals. No litter or general waste shall be placed in the toilets.

Upon completion of the contract the pit latrines shall be filled in and all structures shall be removed from site.

Washing areas with soap and sufficient clean water shall be provided for hand washing after ablutions. .

## 7.6 Eating areas

The contractor shall, in conjunction with the ECO, designate restricted areas for eating. The contractor shall provide adequate refuse bins that must be cleaned on a daily basis.

The feeding, or leaving of food, for stray or other animals in the area is strictly prohibited.

## 7.7 Fuel and chemical management

The contractor shall ensure that fuels and chemicals (e.g. drums of fuel, grease, oil, brake fluid, hydraulic fluid) are stored and handled carefully so as to prevent spillage. In the event of a spill, appropriate steps shall be undertaken to prevent widespread pollution. These liquids shall be confined to specific and secured areas within the contractor's camp and shall be clearly marked. The liquids shall be stored in a bunded area with adequate containment (at least 1.5 times the volume of the fuel) with an impermeable floor beneath them for potential spills or leaks, in such a way that does not pose any danger of pollution even during times of high rainfall.

In addition, the contractor shall ensure that workers do not smoke or take part in any activity that may result in sparks in the vicinity of fuels and other flammable substances to prevent ignition.

Refuelling of vehicles shall only take place at a predetermined area, where adequate pollution prevention measures are in place to such as a smooth impermeable floor (concrete or 250 µm plastic covered in sand). Appropriate signage shall be erected indicating the refuelling and storage areas. Mixing of lubricants will be on the non-pervious layer at least 20m from the wetland edge.

A specialist waste contractor shall dispose of any hazardous waste off-site at a licensed hazardous waste disposal site.

The contractor shall be responsible for ensuring that any party delivering potentially dangerous chemicals and oil to site is aware of the appropriate storage and drop-off locations and procedures. Transfer of hazardous chemicals and other potentially hazardous substances shall be carried out so as to minimise the potential leakage and prevent spillage onto the soil.

### *7.7.1 Equipment*

Drip trays shall be put in place in relevant locations (inlets, outlets, points of leakage, etc.) so as to prevent spillage or leakage during transfer. The contractor shall stand any equipment that may leak, and does not have to be transported regularly on watertight drip trays to catch any pollutants. The drip trays shall be of a size that the equipment can be placed inside it. Drip trays shall be cleaned regularly and shall not be allowed to overflow. Substances, which cannot be reused, shall be disposed of according to the relevant waste disposal procedure. The ECO shall inform and advise the contractor as to the best waste disposal procedure.

If fuel is dispensed from 200 litre drums, only empty externally clean drums may be stored on the bare ground. All empty externally dirty drums shall be stored on an area where the ground has been protected. The proper dispensing equipment shall be used, and the drum shall not be tipped in order to dispense fuel. The dispensing mechanism of the fuel storage drum shall be stored in a waterproof container when not in use.

### *7.7.2 Spill procedure*

The contractor shall keep the necessary materials and equipment on site to deal with spillage of the relevant hazardous substances present on site. The contractor shall set up a procedure for dealing with spills, which will include notifying the ECO and the relevant authorities immediately following the spillage event. These procedures must be developed with consultation and approval by the appointed ECO.

The clean up of spills caused as a result of the construction activities, and any damage to the environment, shall be for the contractor's own account. A record must be kept of all spills and the corrective action taken.

## 7.8 Vehicles

Site vehicles shall only permitted within the demarcated construction camp, as required, to complete their specific task.

All construction vehicles shall be in a good working order to reduce possible noise pollution. Local and Provincial Noise Regulations shall be complied with at all times.

On-site vehicles shall be limited to approved access routes and areas (including turning circles and parking) on the site so as to minimise excessive environmental disturbance to the soil and vegetation on site. Servicing and maintenance of vehicles on-site shall be avoided as far as possible.

Construction shall be limited to normal working hours (as described in Section 10.1), in order to limit disturbance from vehicles and construction activity.

## 7.9 Hand tools

Hand tools will be suited to the nature of the work. Tools will have correct, properly secured handles and will be in safe working order. Tools will be properly maintained and sharpened regularly. Tools will be used in the correct and safe manner.

## 7.10 Concrete mixers, compactors and other machinery

All machinery will have the required machine guards. All nip points, pulleys, fan belts and revolving parts will be suitably enclosed. Power take offs will be provided with suitable covers in good condition. Covers will be chained to non-revolving machinery.

Only trained operators may operate machinery, and will wear the required PPE. Workers, other than machine operators, will not be within two spade lengths of operating machinery

Concrete mixers may only operate on a stable, level site.

Machinery will be in good working order. If owned by the implementer or contractor there will be a maintenance schedule and record for the machinery. Machinery will be used safely and efficiently at all times.

## 7.11 Stockpiling of materials

The contractor shall temporarily stockpile excavated materials (e.g. soils and rocks) and construction materials in such a way that the spread of materials is minimised. The stockpiles may only be placed within the demarcated stockpile area, which must fall within the demarcated construction area. The contractor shall, where possible, avoid stockpiling materials in vegetated areas that will not be cleared. Stockpiles of construction materials must be clearly separated from topsoil stockpiles in order to limit any contamination of the topsoil. Stockpiles shall be located away from sensitive hydrological features (including but not limited to dams, wetlands, watercourses, ponds, pans, drainage channels, etc.). Stockpiles shall be less than 2 metres in height.

Storm water runoff from the stockpile sites and surrounding areas shall be directed into the storm water system and shall not run freely into the surrounding environment, or create "ponding" or accumulation of water.

Stockpiles shall be stabilised if signs of erosion are visible. Erosion control measures such as silt fences must be placed around the stockpiles.

## 7.12 Stock control

The receipt and issue of all equipment and supplies will be adequately controlled. All issues and receipts will be recorded. The balance of stock recorded will correspond at all times with stock in the stores. Designated managers will verify stock periodically and on a bi-annual basis, stocktaking will be done. The proper procedures will be followed in disposing of unserviceable or surplus items.

Where contractors cannot make use of proper dedicated stores, all equipment and supplies will be safely and securely stored with controlled access.

## 7.13 Temporary fencing

The contractor shall ensure that the construction camp is demarcated with danger tape, or suitable equivalent, for the duration of the construction period.

The tape shall serve to prevent public access to the camp, for public safety and security reasons. Tape shall be placed around the sensitive hydrological features buffer no-go areas on site.

The contractor must maintain the tape for the duration of the construction period. All tape must be removed and the site restored on completion of the project.

# 8 METHOD OF WORK

## 8.1 Verification of work

Actual work done (volumes and areas) shall be verified and recorded by the implementer, who is responsible for ensuring that contractors' invoices correspond to actual production. The implementer shall verify a minimum of 5% of work completed during the month. On completion of an intervention, a certificate of completion shall be submitted to the regional coordinator by the implementer.

## 8.2 Corrective action for sub-standard work

Payment shall not be made for work that does not comply with contract specifications. A record shall be kept of non-compliance to standards and poor performance. Copies of instructions issued to contractors to correct deficiencies shall be kept.

## 8.3 Minimum standards for construction

### *8.3.1 Gabions*

Gabion work shall be done according to design specifications.

Minimum 2.5mm double galvanised wire shall be used, with a mesh size that is appropriate to the size of the rock being used. Support and binding wire shall be a minimum 2.2 mm. Lacing will be done according to specification. Support wires shall be in place (bracing). All adjoining baskets shall be laced together. Geotextile shall line all faces of the gab ion baskets that are exposed to earth and certain water exposed sides.

Water corrosivity shall be determined at each site; if necessary PVC coated gabions shall be used.

Soil dispersivity shall be determined at each site. If dispersive soils are detected, the technical advisor shall be contacted.

Density of fill material shall satisfy the gabion design. Clay bricks, weathered rock and sandstone and shale shall not be used as fill material. Any unconventional fill material shall be approved by the technical advisor. Fill material shall not be smaller than mesh size. Where fill material is hauled to its point of placement by means of wheelbarrows, the haul distance shall not be greater than 150m.

Workers shall be trained in gabion construction by an accredited organisation.

### *8.3.2 Cement and concrete batching*

Concrete mix shall be according to specifications and correct MP A concrete must be used. Manufacturer's directions for mixing, consistency and treatment after pouring will be complied with.

Cement shall be stored in dry conditions for no longer than six weeks after delivery. When cement is stored temporarily infield it shall be kept on a dry waterproof base with a waterproof cover.

A demarcated site at least 20m away from water/wetland edge shall be used for cement mixing. No batching activities shall occur directly on unprotected ground. The batching plant shall be located on a smooth impermeable surface (concrete or 250 µm plastic covered with 5 cm of sand). The area shall be bunded and sloped towards a sump to contain spillages of substances. All wastewater resulting from batching of concrete shall be disposed of via a contaminated water management system and shall not be discharged into the

environment. Contaminated water storage areas shall not be allowed to overflow and appropriate protection from rain and flooding shall be implemented

Empty cement bags shall be stored in weather proof containers to prevent windblown cement dust and water contamination. Empty cement bags shall be disposed of on a regular basis via the solid waste management system, and shall not be used for any other purpose. Unused cement bags shall be stored so as not to be affected by rain or runoff events. In this regard, closed steel containers shall be used for the storage of cement powder and any additives. The Contractor shall ensure that sand, aggregate, cement or additives used during the mixing process are contained and covered to prevent contamination of the surrounding environment.

The Contractor shall take all reasonable measures to prevent the spillage of cement/ concrete during batching and construction operations. During pouring, the soil surface shall be protected using plastic and all visible remains of concrete shall be physically removed on completion of the cement/ concrete pour and appropriately disposed of. All spoiled and excess aggregate/ cement/ concrete shall be removed and disposed of via the solid waste management system.

Construction using shuttering shall not take place at more than 1m height increments. Reinforcing shall be used according to specification. Concrete will be mixed and used on the same day. Where sand, stone and cement are hauled to their point of placement by means of wheel barrows; the haul distance may not be greater than 150m.

Where applicable, the location of the batching plant (including the location of cement stores, sand and aggregate stockpiles) shall be as approved by the Engineer. The concrete/cement batching plant shall be kept neat and clean at all times.

### *8.3.3 Geo cells*

Geo cells shall not be used in conditions that exceed their design specifications. Geo cell material shall be UV resistant. Geo cells shall be anchored in by the "trench" method and in such a way that prevents undermining of the cells. Fill material shall conform to the design specifications. The following general rules shall be applied:

- If soil is used to fill the cells, it shall be re-vegetated immediately,
- If concrete is used to fill the cells, some degree of permeability of the structure shall be permitted. If concrete is used as fill, concrete baffles shall be inserted. Rock is not suitable for this purpose.

### *8.3.4 Earth works*

Excavations may not exceed 1.5m depth without shoring and reinforcement. Excavation and compaction must comply with design specifications. The technical advisor must be consulted for work undertaken in dispersive, unstable and organic soils. Backfilling in trenches must be done in layers of thickness not exceeding 100mm before compaction. Each layer shall be compacted using hand compactors. Where excavation material is hauled by means of wheelbarrows, the haul distance may not be greater than 150m.

All earthworks shall be undertaken in such a manner so as to minimise the extent of any impacts caused by such activities, particularly with regards to erosion and dust generation. No equipment associated with earthworks shall be allowed outside of the Site and defined access routes unless expressly permitted by the Engineer.

# 9 TRAINING

## 9.1 Training entitlement

In compliance with EPWP requirements, each worker shall be entitled to a minimum of two days training for every 22 days worked.

All training funded through the Department of Labour shall be planned in conjunction with the department's provincial representatives. A minimum of 30% of all training shall be accredited, and all first aid and health and safety training shall be accredited.

## 9.2 Wetland awareness

All project personnel shall be trained in basic wetland awareness, including a basic understanding of the components of wetlands, how wetlands function, the benefits they provide, why they need to be conserved and used sustainably, and the importance of rehabilitation in contributing to wetland conservation and sustainable use. Training shall take place as a minimum once a month.

## 9.3 Wildlife

Where work takes place in areas containing dangerous game, especially nature reserves and national parks, workers shall receive training in basic animal behaviour. In these areas, before work commences each day, the site shall be checked for dangerous animals.

A person trained in dangerous animal behaviour shall be present and suitably equipped to deal with such threats at all times. Wherever possible, first aid training shall include treatments for snakebites.

## 9.4 Environmental induction training

Within seven days of the commencement date, the Contractor's site staff including foremen and site management staff shall attend an environmental awareness training course, of approximately one-hour duration. The Contractor shall liaise with the Engineer prior to the Commencement Date to fix a date and venue for the course. The Contractor shall provide a suitable venue with facilities and ensure that the specified employees attend the course.

No more than 20 people shall attend each course and the Contractor shall allow for sufficient sessions to train all personnel. Subsequent sessions shall be run for any new personnel coming onto site.

The environmental awareness training course shall be held in the morning during normal working hours. Any new employees coming on to site after the initial training course and the Contractor’s suppliers and subcontractors shall also attend the course. Provision should also be made for quarterly refreshers courses to be undertaken during the course of the Contract. The Contractor shall ensure that all attendees sign an attendance register, and shall provide the Engineer with a copy of the attendance register the day after each course.

## 9.5 Health and safety training

The following minimum levels of training are required with respect to health and safety:

- All workers and contractors must successfully complete phase 1 health and safety training.
- All project managers must successfully complete phase 2 health and safety training.

## 9.6 First aid training

Two first aid officers will be trained per team.

## 9.7 Training records

Training attendance records shall be kept by the implementer. The implementer will be responsible for obtaining all contractor and worker training information.

## 9.8 Fire fighting training

All workers shall receive basic fire fighting training in areas where this is appropriate

# 10 ENVIRONMENTAL CONTROL MEASURES

## 10.1 Control of working hours

Working hours for all operations shall be limited to between 08h00 and 17h00 on weekdays. No work shall take place on a Saturday, Sunday and or Public Holidays. Any deviations to these work hours shall be cleared with the ECO prior to implementation.

## 10.2 Control of runoff that could cause pollution

Pollution may result from the release, accidental or otherwise, of chemicals, oils, fuels, sewage, wastewater containing organic kitchen waste, detergents, solid waste, litter and other such substances. The contractor shall ensure that rainwater does not run into areas containing cement, oil, diesel and other such substances as this could result in a pollution threat to sensitive environmental areas. Storage areas for these substances shall be placed on high lying ground and contain a bunded area in case of a spill. The bunded area shall be covered if deemed appropriate by the ECO.

Berms must be constructed to direct all runoff into the storm water system. The engineers shall prepare temporary storm water channels for unexpected rains during construction. Erosion control measures shall be placed in areas where runoff concentrates in order to detain the sediment load and slow down the runoff. Erosion controls shall be put in place on all drainage channels that drain into water resources. These measures shall include, but not be limited to, silt fences, brushwood and rows of sawdust-filled onion bags. No wastewater shall run freely into any of the surrounding environment. Runoff containing high sediment loads shall not to be released directly into natural or municipal drainage systems or nearby water resources. Should sediment occur in runoff, an attenuation pond shall be constructed to allow solids to settle out prior to leaving the site.

Runoff from the site itself shall be free from oil, waste and litter before joining the storm water system or streams. This shall be ensured by securing any hazardous substances containers in order to prevent runoff and by cleaning up any refuse and construction material from the site on a regular basis.

Litter management in the storm water system or channels that lead to streams and or wetland shall be implemented. It is outside the scope of this document to prescribe litter trap designs, but the important aspect is that it shall be incorporated into the design of the development. Litter traps shall prevent solid waste from entering the storm water system.

The contractor shall only be allowed to draw water from the source/s designated by the client and the ECO. The client shall ensure that the contractor is aware of the designated water sources, and the ECO shall ensure that this is adhered to. Personnel shall not use natural hydrological features for any purpose, including recreation. These areas shall be considered “no-go” areas.

In the event of any pollution entering an environmentally sensitive area and/or buffer zone as a result of the contractor’s actions, the contractor shall be responsible for all costs incurred to assist in pollution control and/or to clean up the polluted area. Damage to the wetland as a result of the project operations shall be for the contractor’s account. The responsibility of the remediation of the pollution/erosion event will ultimately lie with the contractor.

## 10.3 Pollution control

The contractor/s shall ensure that pollution of surface and/or groundwater does not occur as a result of site activities.

In the event of pollution caused as a result of construction activities, the contractor, according to Section 20 of the National Water Act (Act No. 36 of 1998), shall be responsible for all costs incurred by organisations called to assist in pollution control and/or to clean up polluted areas. The public shall not call upon any organisation to assist with clean-up activities before the matter has been discussed with the contractor. The ECO shall be notified immediately following any pollution event.

The ECO shall ensure that the contractors are aware that shallow groundwater is susceptible to contamination from spills. Therefore good management practices (in accordance with local bylaws) are required to reduce the impact of the waste generation potential.

Builders' rubble and other debris shall be confined to the building site and shall not be stored/discarded on any open space outside the development area. The status of the hydrological features on or near to the site shall be monitored by the ECO to ensure that pollution does not occur in these areas.

## 10.4 Erosion control

The contractor shall take reasonable measures (to the satisfaction of the ECO) to prevent erosion caused by work, operations and activities undertaken during excavation and construction activities. The contractor shall ensure that disturbance on steep slopes is kept to a minimum, thus reducing the potential for erosion. The contractor is responsible for rehabilitating all disturbed areas in such a way that no future erosion will occur.

Erosion may occur in the event of rain during the excavation and construction period. Any erosion that occurs during a heavy rainfall event shall be remediated at the expense of the project budget. This shall include clean-up of the silt deposited and filling up of erosion channels that may form. Construction in sensitive areas shall be undertaken during the dry season if possible.

## 10.5 Dust control

The contractor shall take into consideration that there may be residential areas surrounding the building site and that dust could be a major disturbance, especially during the dry season.

The contractor shall take appropriate and reasonable measures to minimise the generation of dust as a result of his/her works, operations and activities. Particular attention shall be given to preventing dust generation during excavation and stockpiling activities. The contractor shall be responsible for educating the employees to report any excessively dusty conditions to the contractor, the ECO or responsible representative.

Corrective and preventative measures shall include (but not be limited to) regular and effective treatment of working areas using water sprays and appropriate scheduling of dust-generating activities.

The contractor shall ensure that transported materials do not escape from the construction vehicles by providing adequate covering for all load beds.

## 10.6 Noise control

Probably the two most important concepts in the regulation of noise are those of *disturbing noise* and *noise nuisance*.

A disturbing noise is one that exceeds the zone sound level set by the local authority. A noise nuisance means any sound, which disturbs or impairs or may disturb or impair the convenience or peace of persons.

Some of the activities that could constitute a noise nuisance are power tools, driving, loading and hooters. All of these elements could be connected with building activities.

Each province has its own noise regulations such as Gauteng Province promulgated new noise regulations in 1999 published in Provincial Notice 5479 of 1999 (Gauteng Noise Regulations). The contractor shall obtain and familiarise him/her with these regulations and ensure that he/she abides by these regulations at all times. The contractor shall familiarise him/herself with, and adhere to, any by-laws and regulations regarding the control of noise in their municipal areas.

Every effort shall be made to limit exceedingly noisy activities. Construction vehicles shall be in good working order such that they do not create a noise nuisance. Appropriate directional and intensity settings shall be maintained on all hooters and sirens, and the Contractor shall provide and use suitable and effective silencing devices for pneumatic tools and other plant. .

No amplified music shall be allowed on site. The use of radios, tape recorders, compact disc players, television sets etc. shall not be permitted unless the volume is kept sufficiently low as to avoid any intrusion on members of the public within range. The Contractor shall not use sound amplification equipment on Site unless in emergency situations.

## 10.7 Hazardous materials control

All relevant national, regional and local legislation with regard to the transport, use and disposal of hazardous materials shall be strictly complied with. The contractor shall obtain the advice of the manufacturer (Material Data Sheets) with regard to the safe handling of hazardous materials.

The contractor shall ensure that there is an emergency procedure in place to deal with accidents and incidents (e.g. spills) arising from hazardous substances.

The contractor shall ensure that all personnel on site are properly trained concerning the proper use, handling and disposal of hazardous substances.

The contractor shall report incidents to the ECO immediately. Any spill incidents shall be cleaned up immediately in according with the emergency procedure.

The contractor shall supply the ECO with a list of all hazardous materials that would be present on site during the construction period. The same applies to any sub-contractor who shall provide the contractor with this information.

## 10.8 Blasting control

Any blasting required on site shall only occur during official working hours. Blasting shall only be undertaken where absolutely necessary.

In the event that excessive blasting is required the contractor shall ensure that potential claims from neighbouring properties in respect of damages to houses, towers and bridges (cracked walls, etc.) are valid. It is recommended that a survey be conducted to determine the pre-blasting condition of all houses in the area that could be affected by blasting activities.

The contractor shall distribute a list of dates (and times) during which blasting shall occur on site as well as place notices in appropriate areas. This shall ensure that the immediate surrounding residents are aware of the timing of blasting and thus would be in a position to prepare for the event. Emergency services shall be notified in

writing, a minimum of 24 hours prior to blasting taking place. In the event that deviations from the original planned dates are perceived, the contractor shall notify the surrounding residents well in advance (a minimum of 24 hours).

Blasting activities shall only occur under controlled conditions, whereby safety precautions are adhered to, and only authorised personnel may take part in these activities. The contractor shall inform all construction workers of dates and times when blasting will take place and the necessary safety steps shall be taken to prevent any injuries.

# 11 EFFLUENT AND STORMWATER MANAGEMENT

## 11.1 Introduction

Any effluent flowing out from the site shall be free from any pollution hazard, as this waste will invariably enter the surrounding environment. Section 10.2 and 10.4 outlines the procedures to follow in order to ensure that pollution and/or erosion resulting from construction activities do not result in damage to the surrounding areas.

All pipelines used on site shall be constructed of suitable materials such as wheolite, which reduces the risk of cracking from soil movements.

## 11.2 Storm water

Natural (storm water) runoff shall be diverted away from the construction area towards the storm water drains or channels. In addition, it shall be ensured that storm water is not allowed to collect to form ponds or excessively muddy conditions.

Special care shall be taken in areas susceptible to erosion, e.g. steep slopes. The contractor shall ensure that excessive quantities of sand, silt and silt-laden water do not enter the storm water system. Design of the storm water drainage system so as not to contaminate the natural drainage system is important. Appropriate measures, e.g. erection of silt traps, or drainage retention areas, to prevent silt and sand entering drainage lines or watercourses shall be taken.

The contractor shall clear any partial or complete blockage of the storm water drainage system as a result of construction activities at his own expense.

## 11.3 Discharge of construction water (effluent)

The contractor shall ensure that polluted runoff (excluding silt pollution) such as runoff from the construction camp where equipment is cleaned and/or serviced, is not discharged overland. Such runoff shall be directed into the local sewer main or suitable alternative agreed upon with the local authority.

Silt-laden water may be disposed overland. This water may be allowed to filter into the ground provided that this action does not cause a pollution or erosion threat.

Water from washing concrete-mixing equipment (mixers and the like) shall not be discharged overland. As describe in Section 11.2 above, such water shall be collected (possibly in conservatory tank) and removed from the site and disposed of at a registered waste disposal site. It is suggested that such water be reused for washing other concrete-mixing equipment to minimise the amount of wastewater requiring removal from site.

Trucks delivering concrete shall not be washed or rinse their chutes on the site.

# 12 SITE REHABILITATION

All working areas shall be rehabilitated once work has been completed and before the team leaves the site. This includes closure and rehabilitation of temporary access routes. All foreign material not utilised in the rehabilitation activities shall be removed from the site. Re-vegetation of all exposed soil shall be done before the team leaves the site. Any potential erosion risks shall be addressed before the team leaves the site

Any areas that the Engineer believes may have been impacted upon or disturbed, shall be rehabilitated to the satisfaction of the Engineer, which includes all areas where Top material has been stripped. Once construction is complete the Contractor shall clear everything from the Site not forming part of the Permanent Works. The area to be rehabilitated shall first be landscaped to match the topography of the surrounding area as it was prior to construction. The composition of vegetation to be used for any rehabilitation shall be as specified in Section 5.12.

The Contractor shall not use herbicides, pesticides, fertilisers or other poisonous substances for the rehabilitation process unless otherwise agreed with the Engineer.

All rehabilitated areas shall be considered “no go” areas and the Contractor shall ensure that none of his staff or equipment enters these areas.

The Contractor shall undertake to remove all alien vegetation re-establishing on the area and shall implement the necessary temporary or permanent measures to combat soil erosion.

## 12.1 Removal of materials

After construction, any area cleared or disturbed (as a result of the activity) within and outside the boundaries of the construction site shall be rehabilitated to a state as agreed by the DEA and according to the specifications of the ECO.

All construction equipment and excess aggregate, gravel, stone, concrete, bricks, temporary fencing and the like shall be removed from the site upon completion of the work. No discarded materials of any nature shall be buried on the site, or on any vacant or open land in the area and shall only be disposed of at the appropriate registered waste disposal site.

## 12.2 Control of alien vegetation

Where project activities include the eradication of invasive alien plants, Working for Water guidelines and policies shall be adhered to. Any invasive alien plant clearing undertaken through Working for Wetlands projects shall be registered on the Working for Water Information Management System.

## 12.3 Landscaping and preparation for planting

Topmaterial that is disturbed or removed during construction and excavation shall be replaced, preferably using topsoil stockpiled prior to excavation activities, or with topsoil sourced from another reputable source. However, where possible, soils from different areas should not be mixed. Care shall be taken not to mix the topsoil with the subsoil during shaping operations.

Indigenous plants shall be used in the landscaping of the site. Plants that are proclaimed as problem plants or noxious weeds are to be excluded from the landscaping plan and these should be removed immediately, should they occur on site.

Species recommended for landscaping of the public areas include:

Trees and shrubs:

- *Buddleja saligna* (False olive)
- *Buddleja salviifolia* (Sagewood)
- *Celtis africana* (White stinkwood)
- *Diospyros lycoides* (Bluebush)
- *Dombeya rotundifolia* (Wild pear)
- *Gymnosporia buxifolia* (Common spike-thorn)
- *Olea europaea* (Wild olive)
- *Rhus lancea* (Karee)
- *Rhus leptodictya* (Mountain Karee)

Bulbs and forbs

- *Agapanthus* species (Agapanthus)
- *Albuca* species
- *Barleria obtusa*
- *Ceratotheca triloba* (Wild foxglove)
- *Chlorophytum* species
- *Crinum species* (Orange River Lily/Graslelie)
- *Felicia muricata*
- *Gazania krebsiana* (Botterblom)
- *Gerbera* species (Barberton Daisy)
- *Leonotis* species (Wild dagga)
- *Nemesia* species
- *Trachyandra* species
- *Watsonia* species (Watsonia)

The relevant landscaping contractors and excavation contractor shall be in consultation with each other and the ECO so as to prevent misunderstandings and therefore prevent potential negative environmental impacts.

An ecological approach to landscaping is recommended. Plants introduced into the project sites shall be guided by ecological rather than horticultural principles. For example ecological communities of indigenous plants provide more biodiversity and habitat opportunities and would blend with natural vegetation. This approach is also less costly to maintain and is sustainable in the long term.

# 13 EMERGENCY PROCEDURES

## 13.1 Introduction

The contractor shall ensure that all emergency procedures are in place prior to commencing work. Emergency procedures shall include, but are not limited to, fire, spills, contamination of the ground, accidents to employees, use of hazardous substances and materials, etc.

The contractor shall ensure that lists of all emergency telephone numbers/contact persons (including fire control) are kept up to date and that all numbers and names are posted at relevant and visible locations throughout the duration of the construction period.

## 13.2 Fire

The contractor shall take all reasonable measures to ensure that fires are not started as a result of construction activities on site, and shall also ensure that their operations comply with the Occupational Health and Safety Act (Act No. 85 of 1993). Open fires shall not be allowed on work sites and no exceptions should be made.

Basic functional fire fighting equipment shall be made available at each work site (1 back pack and at least 5 beaters), in forestry areas there must be 2 rake hoes per team.

Where fuels and machines are used on site, the prescribed fire extinguishers in working condition will be available.

Sparks generated during welding, cutting of metal or gas cutting can result in fires. Every possible precaution shall therefore be taken when working with this equipment near potential sources of combustion. Such precautions shall include having an approved fire extinguisher immediately available at the site of any such activities. The contractor shall ensure that there is basic fire fighting equipment available on site at all times. The contractor shall appoint a member of his staff to be responsible for the installation and inspection of this equipment. The contractor shall ensure that he/she has the contact details of the nearest fire station in case of an emergency.

Where projects fall within fire protection areas, the following will be applicable:

- The project will form part of the local Fire Protection Association
- The Project Manager will attend all FPA meetings
- The project will form part of the local FPA notification of the daily FOI (Fire Danger Index)
- In case of a red classification warning for the day extreme caution shall be applied.
- As soon as the actual FOI reaches a red classification all teams shall be withdrawn from affected areas.

## 13.3 Accidental leaks and spillages

The Contractor shall ensure that his employees are aware of the emergency procedure(s) to be followed for dealing with spills and leaks, which shall include notifying the Engineer and the relevant authorities. The Contractor shall ensure that the necessary materials and equipment for dealing with spills and leaks is available on Site at all times. Treatment and remediation of the spill areas shall be undertaken to the reasonable satisfaction of the Engineer.

In the event of a hydrocarbon spill, the source of the spillage shall be isolated, and the spillage contained. The area shall be cordoned off and secured. The Contractor shall ensure that there is always a supply of absorbent material readily available to absorb/ breakdown and where possible be designed to encapsulate minor hydrocarbon spillage. The quantity of such materials shall be able to handle a minimum of 200 ℓ of hydrocarbon liquid spill.

## 13.4 Safety

The contractor must ensure:

- Compliance with the Occupational Health and Safety Act (Act No. 85 of 1993);
- That reasonable measures are taken to ensure the safety of all site staff;
- That all construction vehicles using public roads are in a roadworthy condition, that drivers adhere to the speed limits, that loads are secured and that all local, provincial and national regulations are adhered to; and
- That all accidents and incidents are recorded and reported to the ECO.

The contractor is to ensure that he/she has the contact details of the nearest emergency rooms (hospitals) to the site, of both private and public hospitals.

## 13.5 Communication

### *13.5.1 Community relations*

The Contractor shall, during site establishment, erect and maintain information boards in the position, quantity, design and dimensions specified. Such boards shall include contact details for complaints by members of the public in accordance with details provided by the Engineer.

The Contractor shall keep a "Complaints Register" on Site. The Register shall contain all contact details of the person who made the complaint, and information regarding the complaint itself.

### *13.5.2 Implementers forum*

A representative from each implementer is required to attend quarterly meetings of the implementers' forum. The purpose of these meetings is to share information, develop links between projects and enhance communication between Working for Wetlands and its implementers. Venues for these meetings will rotate between projects. A national health and safety meeting will form part of this forum.

### *13.5.3 Working for Wetlands logo*

Working for Wetlands encourages its implementers to use the programme's logo in promoting the programme and wetland conservation and sustainable use in general. However, written permission shall be obtained from the programme manager before the logo is used on anything other than the prescribed signage or workers' t-shirts.

### *13.5.4 Signage*

Each project shall erect at least one gate board per property on which work is done and one billboard in a prominent position. The basic designs for this signage will be those prescribed by Working for Wetlands, with provision for the addition of project-specific information.

## 13.6 Hazard identification and risk assessment (HIRA)

In terms of the OHS Act, the HIRA document shall be available on site and be understood by every manager and contractor. An emergency evacuation plan shall be available for each work site.

## 13.7 Erosion and sedimentation control

As stipulated in Section 10.4 the Contractor shall take all reasonable measures to limit erosion and sedimentation due to the construction activities. Where erosion and/or sedimentation, whether on or off the site, occurs despite the Contractor complying with the foregoing, rectification shall be carried out in accordance with details specified by the Engineer. Where erosion and/or sedimentation occur due to the fault of the Contractor, rectification shall be carried out to the reasonable requirements of the Engineer.

Any runnels or erosion channels developed during construction or during the defects liability period shall be backfilled and compacted. Stabilisation of cleared areas to prevent and control erosion shall be actively managed. Consideration and provision shall be made for various methods, namely, brushcut packing, mulch or chip cover, straw stabilising (at a rate of one bale/ 20 $m^2$ and rotovated into the top 100 mm of the completed earthworks), watering, soil binders and anti-erosion compounds, mechanical cover or packing structures (e.g. Hessian cover).

Traffic and movement over stabilised areas shall be restricted and controlled, and damage to stabilised area shall be repaired and maintained to the satisfaction of the Engineer.

# 14 SOCIAL DEVELOPMENT

## 14.1 Primary health

An HIV / Aids information session will be held with each team in conjunction with an approved institution at least once every six months. There will be a minimum of one HIV / Aids peer educator per team.

Measures aimed at reducing the spread of HIV / Aids, including condoms, literature and posters, should be available to all workers.

Access of workers to local clinics should be facilitated wherever possible. Training will, where possible, include other aspects of primary health, including nutrition, reproductive health and hygiene,

## 14.2 World wetlands day

World Wetlands Day should be celebrated in an appropriate way by each implementer and include all project personnel

## 14.3 Open day

Each project will hold at least one open day per year, targeting surrounding communities, stakeholders and project partners

## 14.4 Active employee and contractor participation in project management

Workers will have a formalised forum through which they can make inputs into the overall management of the project (e.g. a workplace committee).

## 14.5 Active forums for public participation in projects (Advisory Committees)

Each project shall have a functional advisory committee, based on the guidelines provided by Working for Wetlands. Where possible and appropriate these committees shall form part of existing Working for Water advisory committees. Advisory committees shall represent all communities from which workers are drawn and in which work is being done.

Meetings will be run according to the Working for Wetlands guidelines for advisory committees. Minutes of advisory committee meetings will be made available to Working for Wetlands on request

Advisory committees will assist in the identification of potential contractors and target groups for employment. Community-based forums should participate in advisory committees in order to contribute to the prioritisation and implementation of social development activities

# 15 MANAGEMENT AND MONITORING

This section focuses on the systems and procedures required to ensure that the environmental specifications contained in the CEMP are effectively implemented, monitored and recorded.

## 15.1 Location of the construction environmental management plan

All contractors on site shall at all times have a copy of the CEMP in their respective site office (located in the construction camp).

## 15.2 General monitoring and reporting

The ECO and contractors on site are responsible for ensuring compliance with the CEMP. Monthly site audits shall be undertaken by the ECO and a Project Inspection Report submitted to the SANBI for review prior to the following audit. Refer to Annexure B for the Project Inspection Report.

A Compliance Audit Report shall be submitted to the DEA collating the year's completed checklists. It is the responsibility of the ECO to report any non-compliance, which is not correctly rectified to the DEA.

Interested and Affected Parties must be allowed access to the CEMP document. They have the right to monitor specific aspects of the CEMP (e.g. noise regulations, working hours stipulated) in conjunction with the contractor in a reasonable and formal manner without unreasonably disrupting construction activities. However, no member of the public shall enter the building site without prior approval from the contractor.

The contractor shall keep a record of all complaints received from the community in a complaints register and communicate them to the ECO. These complaints shall be addressed and mitigated within reason. Records relating to the compliance/non-compliance with the conditions of the CEMP as well as audits reports, shall be kept in good order and shall be made available to the DEA within seven days after a written request has been

received. It is suggested that all records be kept for at least two years following construction activities for reference purposes.

### *1.1.1 Fixed-point photography*

Monthly fixed-point photography monitoring information shall be undertaken by the project management for each problem site.

**Locating photo-points**

The following guidelines should be followed when locating photographic points across the wetland system for fixed-point photographs:

- photo-points should be selected at various locations throughout the rehabilitation site and at points that will be easily accessible at all times
- record the geographical co-ordinates of each point, with a mapping grade Global Positioning System (GPS), accurate to less than 2 metres. This provides any individual with the information required to navigate to the exact location of each photo point
- a permanent field marker must be placed in the ground at each point, to ensure that photos are always taken from exactly the same point. If possible the orientation of the photo at the point should be recorded on the marker

**Fixed-point photographs**

The following guidelines should be followed when implementing fixed-point photography for monitoring purposes:

- the orientation of the photographer should be recorded
- use the same camera, lens and zoom each time. If this is not possible, record the settings used. The camera should preferably be located on a tripod at a fixed height
- when the frequency of monitoring increases to an annual interval, photographs should be taken at roughly the same time of year and at the same time of the day, and under similar weather conditions. This would limit the variability of the wetland habitat associated with vegetative and hydrological changes linked to seasons
- a standard object, such as a soil auger or a metre rule should be included in the photograph as a reference for scale
- record relevant information about factors that may influence features in the photograph (e.g. a recent fire, late or early rains, etc.), especially those relating to the appearance of the site

## 15.3 Specific roles and responsibilities

The roles of the responsible people on site are included below:

**The SANBI** is the ultimate responsible party for the development and all aspects and phases thereof. The SANBI or an appointed representative shall communicate all issues raised in this CEMP with all personnel undertaking any work on the site. Should any non-compliance with this CEMP take place, SANBI shall ultimately be held liable. SANBI shall include the CEMP as a specific condition within any contract that is to be signed between him/her and any other party involved in the construction of the development. The SANBI is responsible for identifying which local / provincial environmental authority has jurisdiction over the project.

**The Contractor** is responsible for complying with the CEMP during the construction phase of the development. The Contractor is responsible for ensuring that his/her contractors, employees and sub-contractors appointed by

him/her are familiar with the CEMP and that they abide by it. The Contractor shall be responsible for any non-compliance with the CEMP and shall pay for any remedial work that may result from non-compliance resulting directly from his/her negligence.

**The ECO** is responsible for communicating environmental issues associated with the site to the Contractor. Should any non-compliance with the CEMP take place, the ECO shall communicate this with the party responsible for the non-compliance as well as the Contractor and the SANBI. If the non-compliance continues after written request by the ECO to rectify the situation, the ECO must inform the DEA in writing. The ECO is responsible for the explanation of environmental issues contained in this CEMP to anyone working on the site. Should any issues arise on the site of an environmental nature or concern, the ECO shall be responsible for taking the appropriate action.

**The Project Manager** is responsible for communicating any issues or concerns of the surrounding community regarding the development to the SANBI PC or other responsible party and *visa-versa.*

**The DEA** is responsible for taking action against any non-compliance with the CEMP by the Contractor and or any of his/her subcontractors. The DEA may request a compliance audit to be undertaken on the site at any time during or after the construction phase of the project.

## 15.4 GUIDELINES

The following guidelines and recommended templates will be made available to all implementers:

1. Guidelines for completing Working for Wetlands business plans and project implementation plans
2. Working for Wetlands risk assessment framework
3. Project management tools:
    - Daily attendance register
    - Vehic1e check sheet
    - Production sheet
    - Project manager's inspection sheet
    - Implementer's inspection sheet
    - Incident report for near misses
    - Format for toolbox talk minutes
    - Receipt of goods
    - Consumables used sheet
    - Pay sheet
    - Personnel update sheet
    - Contractor's invoice
    - Filing of information
    - Safety plan and emergency numbers
    - Tender document
    - Contractor safety policy
    - Risk assessment

- Registration form for Compensation for Occupational Injuries and Diseases Act
- OHS Act notification of construction work
- Construction supervisor appointment letter
- Health and safety construction representative appointment letter
- First aid officer appointment letter
- First aid kit contents
- Training matrix
- Record of completed training
- Grievance procedure and grievance form
- PPE matrix
- Record of PPE issued
- Disciplinary procedure
- Contractor and worker contracts

# Annexure A

## *BASIC CONDITIONS OF EMPLOYMENT ACT, 1997: CODE OF GOOD PRACTICE FOR EMPLOYMENT AND CONDITIONS OF WORK FOR SPECIAL PUBLIC WORKS PROGRAMMES*

GOVERNMENT NOTICES

DEPARTMENT OF LABOUR

No. R. 63
25 January 2002

BASIC CONDITIONS OF EMPLOYMENT ACT, 1997: MINISTERIAL DETERMINATION SPECIAL PUBLIC WORKS PROGRAMMES

I, Membathisi Mphumzi Shepherd Mdladlana, Minister of Labour, hereby in teens of section 50 of the Basic Conditions of Employment Act, 1997, make a Ministerial Determination establishing conditions of employment for employees in Special Public Works Programmes, South Africa, in the Schedule hereto and determine the second Monday after the date of publication of this notice as the date from which the provisions of the said Ministerial Determination shall become binding.

M.M.S. MDLADLANA
Minister of Labour

SCHEDULE

MINISTERIAL DETERMINATION NO: 3: SPECIAL PUBLIC WORKS PROGRAMMES

Index



1. Definitions

1.1 In this determination -

"special public works programme" means a programme to provide public assets through a short-term, non-permanent, labour intensive programme initiated by government and funded from public resources.

1.2 Without limiting subsection (1), the following programmes constitute special public works programmes:

(a) Working for Water

(b) Community based public works

(c) Coastal Care

(d) Sustainable Rural Development (DPLG)

(e) Landcare

(f) Community Water & Sanitation

(g) Arts & Culture poverty relief projects

2. Application

This Determination applies to all employers and employees engaged in public works programmes.

3. The following provisions of the Basic Conditions of Employment Act do not apply to public works programmes -

| | |
|---|---|
| 3.1 Section 10(2) | **Overtime rate** |
| 3.2 Section 11 | **Compressed working week** |
| 3.3 Section 14(3) | **Remuneration required for meal intervals of longer than 75 minutes** |
| 3.4 Section 16 | **Pay for work on Sundays** |
| 3.5 Section 17(1) & (2) | **Payment of night shift allowance and supply of transportation** |
| 3.6 Section 20 | **Annual leave** |
| 3.7 Section 21 | **Pay for annual leave** |
| 3.8 Section 22 | **Sick leave** |
| 3.9 Section 25(2) & (3) | **Commencement of maternity leave and return to work** |
| 3.10 Section 26(2) | **Alternative work for pregnant women** |
| 3.11 Section 27 | **Family responsibility leave** |
| 3.12 Section 29(h) to (p) | **Written particulars of employment** |
| 3.13 Section 30 | **Display of employee's rights** |
| 3.14 Section 33(1)(g) | **Information about remuneration** |
| 3.15 Section 34(1)(a) | **Deduction by individual agreement** |
| 3.16 Section 34(2) & (3) | **Deduction of damages caused by employee** |
| 3.17 Section 37 | **Notice of termination** |
| 3.18 Section 38 | **Payment instead of notice** |
| 3.19 Section 39 | **Notice for employees in employer supplied accommodation** |
| 3.20 Section 40 | **Payments of outstanding amounts on** |

**termination**

3.21 Section 41 **Severance pay**

3.22 Section 42(c) **Certificate of service**

3.23 Sections 51 - 58 **Sectoral Determinations**

3.24 Section 84 **Duration of employment**

4. Conditions

As set out in the ANNEXURE:

ANNEXURE

CONDITIONS OF EMPLOYMENT FOR SPECIAL PUBLIC WORKS PROGRAMMES

1. Introduction

1.1 This document contains the standard terms and conditions for workers employed in elementary occupations on a Special Public Works Programme (SPWP). These terms and conditions do NOT apply to persons employed in the supervision and management of a SPWP.

1.2 In this document -

(a) "department" means any department of the State, implementing agent or contractor;

(b) "employer" means any department, implementing agency-or contractor that hires workers to work in elementary occupations on a SPWP;

(c) "worker" means any person working in an elementary occupation on a SPWP;

(d) "elementary occupation" means any occupation involving unskilled or semi-skilled work;

(e) "management" means any person employed by a department or implementing agency to administer or execute an SPWP;

(f) "task" means a fixed quantity of work;

(g) "task-based work" means work in which a worker is paid a fixed rate for performing a task;

(h) "task-rated worker" means a worker paid- on the basis of the number of tasks completed;

(i) "time-rated worker" means a worker paid on the basis of the length of time worked.

2. Terms of Work

2.1 Workers on a SPWP are employed on a temporary basis:

2.2 A worker may NOT be employed for longer than 24 months in any five-year cycle on a SPWP.

2.3 Employment on a SPWP does not qualify as employment as a contributor for the purposes of the Unemployment Insurance Act 30 of 1966.

3. Normal Hours of Work

3.1 An employer may not set tasks or hours of work that require a worker to work

(a) more than forty hours in any week;

(b) on more than five days in any week; and

(c) for more than eight hours on any day.

3.2 An employer and worker may agree that a worker will work four days per week. The worker may then work up to ten hours per day.

3.3 A task-rated worker may not work more than a total of 55 hours in any week to complete the tasks allocated (based on a 40-hour week) to that worker.

4. Meal Breaks

4.1 A worker may not work for more than five hours without taking a meal break of at least thirty minutes duration.

4.2 An employer and worker may agree on longer meal breaks.

4.3 A worker may not work during a meal break. However, an employer may require a worker to perform duties during a meal break if those duties cannot be left unattended and cannot be performed by another worker. An employer must take reasonable steps to ensure that a worker is relieved of his or her duties during the meal break.

4.4 A worker is not entitled to payment for the period of a meal break. However, a worker who is paid on the basis of time worked must be paid if the worker is required to work or to be available for work during the meal break.

5. Special Conditions for Security Guards

5.1 A security guard may work up to 55 hours per week and up to eleven hours per day.

5.2 A security guard who works more than ten hours per day must have a meal break of at least one hour or two breaks of at least 30 minutes each.

6. Daily Rest Period

Every worker is entitled to a daily rest period of at least eight consecutive hours. The daily rest period is measured from the time the worker ends work on one day until the time the worker starts work on the next day.

7. Weekly Rest Period

Every worker must have two days off every week. A worker may only work on their day off to perform work which must be done without delay and cannot be performed by workers during their ordinary hours of work ("emergency work").

8. Work on Sundays and Public Holidays

8.1 A worker may only work on a Sunday or public holiday to perform emergency or security work.

8.2 Work on Sundays is paid at the ordinary rate of pay.

8.3 A task-rated worker who works on a public holiday must be paid -

(a) the worker's daily task rate, if the worker works for less than four hours;

(b) double the worker's daily task rate, if the worker works for more than four hours.

8.4 A time-rated worker who works on a public holiday must be paid -

(a) the worker's daily rate of pay, if the worker works for less than four hours on the public holiday;

(b) double the worker's daily rate of pay, if the worker works for more than four hours on the public holiday.

9. Sick Leave

9.1 Only workers who work four or more days per week have the right to claim sick-pay in terms of this clause.

9.2 A worker who is unable to work on account of illness or injury is entitled to claim one day's paid sick leave for every full month that the worker has worked in terms of a contract.

9.3 A worker may accumulate a maximum of twelve days' sick leave in a year.

9.4 Accumulated sick-leave may not be transferred from one contract to another contract.

9.5 An employer must pay a task-rated worker the worker's daily task rate for a day's sick leave.

9.6 An employer must pay a time-rated worker the worker's daily rate of pay for a day's sick leave.

9.7 An employer must pay a worker sick pay on the worker's usual payday.

9.8 Before paying sick-pay, an employer may require a worker to produce a certificate stating that the worker was unable to work on account of sickness or injury if the worker is -

(a) absent from work for more than two consecutive days; or

(b) absent from work on more than two occasions in any eight-week period.

9.9 A medical certificate must be issued and signed by a medical practitioner, a qualified nurse or a clinic staff member authorised to issue medical certificates indicating the duration and reason for incapacity.

9.10 A worker is not entitled to paid sick-leave for a work-related injury or occupational disease for which the worker can claim compensation under the Compensation for Occupational Injuries and Diseases Act.

10. Maternity Leave

10.1 A worker may take up to four consecutive months' unpaid maternity leave.

10.2 A worker is not entitled to any payment or employment-related benefits during maternity leave.

10.3 A worker must give her employer reasonable notice of when she will start maternity leave and when she will return to work.

10.4 A worker is not required to take the full period of maternity leave. However, a worker may not work for four weeks before the expected date of birth of her child or for six weeks after the birth of her child, unless a medical practitioner, midwife or qualified nurse certifies that she is fit to do so.

10.5 A worker may begin maternity leave -

(a) four weeks before the expected date of birth; or

(b) on an earlier date

(i) if a medical practitioner, midwife or certified nurse certifies that it is necessary for the health of the worker or that of her unborn child; or

(ii) if agreed to between employer and worker; or

(c) on a later date, if a medical practitioner, midwife or certified

nurse has certified that the worker is able to continue to work without endangering her health.

10.6 A worker who has a miscarriage during the third trimester of pregnancy or bears a stillborn child may take maternity leave for up to six weeks after the miscarriage or stillbirth.

10.7 A worker who returns to work after maternity leave, has the right to start a new cycle of twenty-four months employment, unless the SPWP on which she was employed has ended.

11. Family responsibility leave

11.1 Workers, who work for at least four days per week, are entitled to three days paid family responsibility leave each year in the following circumstances -

(a) when the employee's child is born;

(b) when the employee's child is sick,

(c) in the event of a death of

(i) the employee's spouse or life partner;

(ii) the employee's parent, adoptive parent, grandparent, child, adopted child, grandchild or sibling.

12. Statement of Conditions

12.1 An employer must give a worker a statement containing the following details at the start of employment -

(a) the employer's name and address and the name of the SPWP;

(b) the tasks or job that the worker is to perform; and

(c) the period for which the worker is hired or, if this is not certain, the expected duration of the contract;

(d) the worker's rate of pay and how this is to be calculated;

(e) the training that the worker will receive during the SPWP.

12.2 An employer must ensure that these terms are explained in a suitable language to any employee who is unable to read the statement.

12.3 An employer must supply each worker with a copy of these conditions of employment.

13. Keeping Records

13.1 Every employer must keep a written record of at least the following -

(a) the worker's name and position;

(b) in the case of a task-rated worker, the number of tasks completed by the worker;

(c) in the case of a time-rated worker, the time worked by the worker;

(d) payments made to each worker.

13.2 The employer must keep this record for a period of at least three years after the completion of the SPWP.

14. Payment

14.1 An employer must pay all wages at least monthly in cash or by cheque or into a bank account.

14.2 A task-rated worker will only be paid for tasks that have been completed.

14.3 An employer must pay a task-rated worker within five weeks of the work being completed and the work having been approved by the manager or the contractor having submitted an invoice to the employer.

14.4 A time-rated worker will be paid at the end of each month.

14.5 Payment must be made in cash, by cheque or by direct deposit into a bank account designated by the worker.

14.6 Payment in cash or by cheque must take place

(a) at the workplace or at a place agreed to by the worker;

(b) during the worker's working hours or within fifteen minutes of the start or finish of work,

(c) in a sealed envelope which becomes the property of the worker.

14.7 An employer must give a worker the following information in writing

(a) the period for which payment is made;

(b) the numbers of tasks completed or hours worked;

(c) the worker's earnings;

(d) any money deducted from the payment;

(e) the actual amount paid to the worker.

14.8 If the worker is paid. in cash or by cheque, this information must be recorded on the envelope and the worker must acknowledge receipt of

payment by signing for it.

14.9 If a worker's employment is terminated, the employer must pay all monies owing to that worker within one month of the termination of employment.

15. Deductions

15.1 An employer may not deduct money from a worker's payment unless the deduction is required in terms of a law.

15.2 An employer must deduct and pay to the SA Revenue Services any income tax that the worker is required to pay.

15.3 An employer who deducts money from a worker's-pay for payment to another person must pay the money to that person within the time period and other requirements specified in the-agreement law, court order or arbitration award concerned.

15.4 An employer may not require or allow a worker to -

(a) repay any payment except an overpayment previously made by the employer by mistake:

(b) state that the worker received a greater amount of money than the employer actually paid to the worker; or

(c) pay the employer or any-other person for having been employed.

16. Health and Safety

16.1 Employers must take all reasonable steps to ensure that the working environment Is healthy and safe.

16.2 A worker must -

(a) work in a way that does not endanger his/her health and safety or that of any other person;

(b) obey any health and safety instruction;

(c) obey all health and safety rules of the SPWP;

(d) use any personal protective equipment or clothing issued by the employer;

(e) report any accident, near-miss incident or dangerous behaviour by another person to their employer or manager.

17. Compensation for Injuries and Diseases

17.1 It is the responsibility of the employers (other than a contractor) to arrange for all persons employed on a SPWP to be covered in terms of the Compensation for Occupational Injuries and Diseases Act, 130

of 1993.

17.2 A worker must report any work-related injury or occupational disease to their employer or manager.

17.3 The employer must report the accident or disease to the Compensation Commissioner.

17.4 An employer must pay a worker who is unable to work because of an injury caused by an accident at work 75% of their earnings for up to three months. The employer will be refunded this amount by the Compensation Commissioner. This does NOT apply to injuries caused by accidents outside the workplace such as road accidents or accidents at home.

18. Termination

18.1 The employer may terminate the employment of a worker for good cause after following a fair procedure.

18.2 A worker will not receive severance pay on termination.

18.3 A worker is not required to give notice to terminate employment. However, a worker who wishes to resign should advise the employer in advance to allow the employer to find a replacement.

18.4 A worker who is absent for more than three consecutive days without informing the employer of an intention to return to work will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period.

18.5 A worker who does not attend required training events, without good reason, will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period.

19. Certificate of Service

19.1 On termination of employment, a worker is entitled to a certificate stating

(a) the worker's full name,

(b) the name and address of the employer;

(c) the SPWP on which the worker worked;

(d) the work performed by the worker;

(e) any training received by the worker as part of the SPWP;

(f) the period for which the worker worked on the SPWP;

(g) any other information agreed on by the employer and worker.

# Annexure B

## *Project Inspection Report*