

Appendix G

CONSTRUCTION PHASE ENVIRONMENTAL MANAGEMENT PROGRAMME

Environmental Management Programme (EMPr)

Environmental Management Programme (EMPr) (referred to in this report as the Construction Environmental Management Programme or CEMP)



**WORKING FOR WETLANDS
REHABILITATION PROGRAMME
CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN
(CEMP)**

**Date: September 2015
CEMP Version: 3**

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REVISION AND AMENDMENTS

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| | | |

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- Annexure 2 General Authorisation for Water Use



ACRONYMS

| | |
|-------|---|
| ASD | Assistant Director: Wetlands Programme ¹ |
| BAR | Basic Assessment Report |
| CEMP | Construction Environmental Management Programme |
| DAFF | Department of Agriculture, Forestry and Fisheries |
| DEA | Department of Environmental Affairs |
| DWS | Department of Water and Sanitation |
| EAP | Environmental Assessment Practitioner |
| ECO | Environmental Control Officer |
| EPWP | Expanded Public Works Programme |
| GPS | Global Positioning System |
| OHS | Occupational Health and Safety |
| NEMA | National Environmental Management Act (Act 107 of 1998) |
| NRM | Natural Resource Management |
| PIP | Project Implementation Plan |
| PDP | Professional Driving Permit |
| PPE | Personal Protective Equipment |
| PPR | Project Progress Report |
| SABS | South African Bureau of Standards |
| SAHRA | South African Heritage Resources Agency |
| SETA | Sector Education and Training Authority |

DEFINITIONS

Basic Assessment Report (BAR): A report as described in regulation 23 of the EIA regulation, 2006 that describes the proposed activities and their potential impacts.

Best Management Practice (BMP): Procedures and guidelines to ensure the effective and appropriate implementation of wetland rehabilitation by WfWetlands implementers.

Environmental Assessment Practitioner (EAP): The individual responsible for the planning, management and coordination of the environmental impact assessments, strategic environmental assessments, environmental management plans and/or other appropriate environmental instruments introduced through regulations of NEMA.

Eco-log: A cylindrical wire mesh sleeve filled with organic material and/or soil used to prevent and/or repair minor erosion.

Ecosystem Services or 'eco services': The services such as sediment trapping or water supply, supplied by an ecosystem (in this case a wetland ecosystem).

¹ Formally referred to as the Provincial Coordinator.



Environmental Impact Assessment (EIA): A study of the environmental consequences of a proposed course of action via the process of collecting, organising, analysing, interpreting and communicating information that is relevant to the consideration of that application.

Gabion: A structure made of wire mesh baskets filled with regularly sized stones, and used to prevent and/or repair erosion. They are flexible and permeable structures which allow water to filter through them. Vegetation and other biota can also establish in/around the habitat they create.

Interested and Affected Parties (I&APs): People and organizations that have interest(s) in the proposed activities.

Environmental Impact: An environmental change caused by some human act.

Implementer: The person or organisation responsible for the construction of WfWetlands rehabilitation interventions.

Intervention: An engineered structure such as a concrete or gabion weir, earthworks or revegetation that achieves identified objectives within a wetland e.g. raising of the water table within a drainage canal.

Mitigation: Actions to reduce the impact of a particular activity.

Maintenance: The replacement, repair or the reconstruction of an existing structure within the same footprint, in the same location, having the same capacity and performing the same function as the previous structure ('like for like').

Public Participation Process (PPP): A process of involving the public in order to identify issues and concerns, and obtain feedback on options and impacts associated with a proposed project, programme or development. Public Participation Process in terms of NEMA refers to: a process in which potential interested and affected parties are given an opportunity to comment on, or raise issues relevant to specific project matters.

Project: An area of WfWetlands intervention generally defined by a quaternary catchment or similar management unit such as a national park in which a single implementer operates.

Quaternary Catchment: *"A fourth order catchment in a hierarchal classification system in which a primary catchment is the major unit"* and that is also the *"principal water management unit in South Africa"* (DWS Groundwater Dictionary. Available online: http://www.dwaf.gov.za/Groundwater/Groundwater_Dictionary/index.html?introduction_quaternary_catchment.htm).

Rehabilitation: Refers to re-instating the driving ecological forces (including hydrological, geomorphological and biological processes) that underlie a wetland, so as to improve the wetland's health and the ecological services that it delivers.

Rehabilitation: Restoring processes and characteristics that are sympathetic to and not conflicting with the natural dynamic of an ecological or physical system (Wetland Management Series: WET-Origins, WRC Report TT 334/08, March 2008).

Significant impact: An impact that by its magnitude, duration, intensity or probability of occurrence may have a notable effect on one or more aspects of the environment.

Standard Operating Procedure (SOP): Ten SOPs have been developed to ensure that all operating instructions/ procedures and guidelines used by and within the Working for Wetlands Programme are documented in a coherent and comprehensive manner and are written in such a way that anyone reading them can perform the tasks described with minimal supervision.



Weir: A dam-type structure placed across a watercourse to raise the water table of the surrounding ground and trap sediment on the upstream face without preventing water flow. Weirs are generally used to prevent erosion from progressing up exposed gullies.

Wetland: *“Land which is transitional between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is periodically covered with shallow water and which in normal circumstances supports or would support vegetation typically adapted to life in saturated soils.”* (SA Water Act of 1998) **and** *“Land where an excess of water is the dominant factor determining the nature of the soil development and the types of plants living there”* (Wetland Management Series: WET-Origins, WRC Report TT 334/08, March 2008).



1 INTRODUCTION

1.1 Project Overview

Working for Wetlands is a government programme managed by the Natural Resource Management (NRM) Programme of the Department of Environmental Affairs (DEA), and is a joint initiative with the Departments of Water and Sanitation (DWS), and Agriculture and Forestry and Fisheries (DAFF). In this way the programme is an expression of the overlapping wetland-related mandates of the three parent departments, and besides giving effect to a range of policy objectives, it also honours South Africa's commitments under several international agreements, especially the Ramsar Convention on Wetlands.

The programme is mandated to protect pristine wetlands, promote their wise-use and rehabilitate those that are damaged throughout South Africa, with an emphasis on complying with the principles of the Expanded Public Works Programme (EPWP) and using only local Small, Medium and Micro Enterprises (SMMEs). The EPWP seeks to draw significant numbers of unemployed people into the productive sector of the economy, gaining skills while they work and increasing their capacity to earn an income.

1.2 Legal Context

Please refer to the Context Document included in the applicable rehabilitation plan for more information on the applicable environmental legislation.

1.3 Context of the CEMP

As requested by the DEA, this document serves as a guideline for the management of the site by the Environmental Control Officer (ECO)². The purpose of this Construction Environmental Management Plan (CEMP) 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 EPWP and Working for Wetlands are maximised through the projects.

This CEMP has therefore been compiled as a guideline to organise and co-ordinate environmental mitigation, rehabilitation and monitoring during the preparation and construction of engineering interventions such that positive impacts are enhanced and negative impacts are avoided/ minimised. Furthermore, these guidelines include measures in line with best practice management.

This document forms part of the agreement between Working for Wetlands and each project Implementer. It 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.

² The role of ECO will be undertaken by the provincial Assistant Director: Wetlands Programme. This role is further detailed in Section 3.1.3.



THE CEMP MUST REMAIN ON SITE FOR THE ENTIRE DURATION OF THE PROJECT AND 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 Expanded Public Works Programmes (Annexure 1);
- General Authorisation for water use (Annexure 2);
- Project Rehabilitation Plan; and
- Basic Assessment Report (BAR).

1.4 Site Description

1.4.1 Project Location

Refer to the relevant section in the Rehabilitation Plan.

1.4.2 Project and Associated Construction and Operational Activities

Refer to the relevant project chapter of the Rehabilitation Plan.

1.4.3 Affected Biophysical, Economic and Social Environment

Refer to Sections B and D of the applicable BAR.

1.4.4 Potential Issues Identified during the Impact Assessment in the BAR

Refer to Sections C and D of the applicable BAR.

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 Expanded Public Works Programmes (GN R347 of 4 May 2012).
- The Code of Good Practice for Employment and Conditions of Work for Expanded Public Works Programmes (GN R129 of 18 February 2011).

2.1.2 Employment

The Implementer shall not employ any Contractor or staff member who has been dismissed from any other project or Expanded 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 targets in all occupational categories, with respect to employment:

- 55% women
- 55% youth (18 to 35 years)
- 2% disabled

Where these targets are not immediately realised, 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 Working for Wetlands: Assistant Director³ is required when this is not possible.
- Participants are to be paid on the basis of the number of tasks completed.
- Employers will pay Participants rates provided for in the approved Project Implementation Plan (PIP) guideline for the current financial year,
- Contractors shall pay the Participants the wage agreed for the task. The Implementer shall ensure that the Contractor's Participants 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 and be retained by the Contractor and Implementer.
- Disabled team members shall be paid the same amount for the days worked as other Participants, and the Contractor shall claim the half disabled wage back from the Implementer.
- All production bonuses shall be distributed equitably amongst team members when production targets are achieved.
- In situations where tasks are completed before the expected time period, Participants 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 Participants for the full 15 days.
- Payment shall not be made for work that does not comply with contract specifications and is deemed sub-standard.

³ Formally referred to as the Provincial Coordinator.



2.1.5 Employment Contracts

- Contractors shall have an employment contract with each of their Participants.
- Participants 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 Participants.

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 the 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

All Health and Safety measures as directed by the following subsections, must be in line with Standard Operating Procedure (SOP) (specifically the SOP 10: Checklist) of the OHS Act Provisions.

2.2.1 Medical Examinations

- Prior to employment, all Participants 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 Act (Act 85 of 1993) (OHS).
- Records of all medical examinations shall be kept by the Implementer.
- Whenever possible, team members that resign need to undergo a medical examination and the results must be kept on record.

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 certification.
- Each team shall have at least one trained first aid officer and one alternate.
- The first aid officer will be appointed in writing by the Contractor (construction first aid officer form)

2.2.3 Personal Protective Equipment (PPE) and Clothing

- 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 (South African Bureau of Standards (SABS) approved).
- PPE provided must be maintained and kept in an acceptable condition and shall be replaced when it becomes ineffective through wear and tear.
- The issue of PPE will depend on the hazards and risk identified in a Workplace Risk Assessment. Consideration must be given to the *source of energy* and the *part of the body* involved.
- PPE requirements must be included in the Implementers Health & Safety Plan.
- A Participant shall wear his/her PPE at all times on premises.



- Participants issued with PPE shall undergo training on the safe use, limitations, cleaning, maintenance, storage, replacement and disposal of PPE.
- PPE must be worn and used correctly in accordance with the training standards as mentioned above.
- Records must be kept of all issues of PPE.
- Regular checks must be carried out by the contractor/supervisor on the correct use of PPE. The ECO shall ensure this requirement is complied with during monthly site visits.
- Contractors/supervisors must ensure that Participants are in possession of their PPE before commencing their daily activities.
- No Participant is allowed at the workplace without the correct PPE.
- PPE should be worn at all times where hazards and risk are present, even when a work activity is not performed.
- In order to maintain consistency within the programme, Working for Wetlands shall provide designs to be used on the t-shirts worn by the Participants.
- All foot wear, including water boots must be steel capped.

2.2.4 Occupational Health and Safety

- Each Implementer and Contractor shall have a copy of the OHS Act.
- All relevant OHS standards shall 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 ECO.
- All incidents shall be investigated by a trained incident investigator within 7 days of the incident.
- All near misses shall be recorded and shall be reported to the relevant ECO on a quarterly basis.
- Health and safety meetings shall be held for all Implementers at the quarterly national implementers' forum.
- Each project will have one health and safety meeting per month, minutes should be made available at the project office.
- Health and safety representatives shall carry-out monthly site inspections, necessary forms should be kept at project office.
- Toolbox talks shall be done on a weekly basis.
- The Implementers and ECO shall intervene and 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 an Expanded Public Works Programme (EPWP) to be covered in terms of the Compensation for Occupational Injuries and Diseases Act, (Act 130 of 1993).
- A Participant must report any work-related injury or occupational disease to their employer or manager.
- The employer must report the accident or disease to the Compensation Commissioner.



- The employer (Contractor) shall pay a Participant 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 Implementer 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 must be taken:

- Participants shall be made aware of it immediately.
- If unable to supply appropriate PPE, work shall cease.
- Participants shall not be allowed to drink water directly from the wetland.
- ECOs 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, Implementers 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 the Implementers and Contractors. In high rainfall events where there is an increased risk of sudden floods, Participants shall be withdrawn from the site.

2.2.8 Substance Abuse

- The use of any narcotic substances is prohibited on site.
- The Implementer and Contractors shall ensure that Participants do not perform their duties under the influence of any narcotic or alcoholic substances.
- Participants who are under the influence during work hours shall be dealt with in terms of the appropriate disciplinary procedures.
- Participants shall be made aware of the potential dangers of drug use (also see Section 2.4.1).

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 3500kg. Any vehicle designed or adapted to convey 12 persons or more, including the driver; and
- 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 0,25m² per person standing = 15 persons 0,35m² per person seated = 11 persons



- Long wheelbase bakkie 0,25m² per person standing = 17 persons 0,35m² per person seated = 13 persons.

Minibus taxis shall not carry more than the number of people for which they are certified. Re-treads 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. Canopies will be fastened to at least six points using a suitable and effective method e.g. nuts and bolts. In the absence of a canopy the vehicle should be equipped with suitable legal labour railing

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 be kept in the vehicle. Trailers shall form part of the daily checklist.
- The Implementer shall verify and sign the checklists weekly.
- Faults affecting the roadworthiness of the vehicle shall be repaired immediately or alternative transport must be used.

2.3.3 Drivers' 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 Professional Driving Permit (PDP) for the category of vehicle.
- Drivers shall undergo an annual medical check and the results must be filed with the Implementer.
- Driver's licenses shall be verified annually by the local traffic authority and copies of this verification must be kept on file.

2.3.4 Passenger Safety

Vehicles used for transporting Participants 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 must be properly secured.
- If installed, canopies or tarpaulins shall be properly secured and ventilated.
- Tools, equipment and containers shall be suitable secured and isolated from passengers.
- Participants 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.
- Participants using project vehicles will comply with vehicle and passenger safety regulations.

2.4 Social Development

2.4.1 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 two peer educators per team, one male and one female; project HIV/Aids committees should be established, meeting on quarterly basis – partnership



establishment with local clinic and or Department of Health , Community Based Organisations and Non-Governmental Organisations .

- Measures aimed at reducing the spread of HIV/Aids, including condoms, literature and posters, should be available to all Participants.
- Access of Participants to local clinics should be facilitated wherever possible.
- Training will, where possible, include other aspects of primary health, including nutrition, reproductive health and hygiene.

2.4.2 World Wetlands Day

World Wetlands Day (2 February) should be celebrated in an appropriate way by each Implementer and should be inclusive of all project personnel.

2.4.3 Open Day

Each province should hold at least one open day per year targeting surrounding communities, stakeholders and project partners, where budgets allow.



3 IMPLEMENTATION OF THE CEMP

The CEMP is intended for use on site by the Proponent, Working for Wetlands Programme, the Implementer, Contractor and the Assistant Director: Wetlands Programmes who will play the role of the ECO. Further roles and responsibilities are detailed below in Section 3.1.

This CEMP has been compiled as a request from DEA and is therefore legally binding. The CEMP provides specifications and regulations that must in all instances be adhered to. It is however the responsibility of all people involved committing themselves with the implementation of the CEMP in all phases of the project, or in those instances where specific instructions are provided. The Implementer will be responsible for ensuring compliance of the Contractors with the CEMP, and will rely on the ECO to monitor compliance. The Contractor must in turn monitor his Participants to ensure their compliance with the provisions of the CEMP. The main Contractor shall receive a copy of the CEMP from the client on which he/she will be given the opportunity to clear any misconceptions and uncertainties. The CEMP will 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.

3.1 Role-Players and their Functions

3.1.1 The Proponent

The Proponent (Working for Wetlands Programme) is the ultimate responsible party for the development and all aspects and phases thereof. Working for Wetlands or an appointed representative must 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, Working for Wetlands will ultimately be held liable. Working for Wetlands shall appoint the Contractor, Implementer and a suitably qualified ECO and ensure that they are well versed in the contents of this CEMP. Working for Wetlands should 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. Working for Wetlands is responsible for identifying which local / provincial environmental authority has jurisdiction over the project. Working for Wetlands shall obtain and comply with all the necessary approvals, permits, authorisations and requirements set by the relevant National and Provincial Departments and Local Authority for the construction of engineering interventions for the rehabilitation of wetlands before any site preparation activities are undertaken.

3.1.2 The Contractor

The Contractor is responsible for complying with the CEMP during the construction phase of the development on a day-to-day basis and for ensuring that his/her contractors, Participants and sub-contractors appointed by him/her are familiar with the CEMP and that they abide by it. The Contractor will be responsible for any non-compliance with the CEMP and will pay for any remedial work that may result from non-compliance resulting directly from his/her negligence. Failure to comply with the CEMP is addressed in Section 3.4.7. Furthermore, the Contractor shall:

- Ensure that the works on-site are conducted in an environmentally sensitive manner and in accordance with the requirements of the CEMP at all times. Special care shall be taken by the Contractor to prevent irreversible damage to the environment.
- Prepare the site in accordance with the conditions set out in this CEMP ensuring that all work areas, stockpiles and boundaries are located in a manner that complies with the requirements of this CEMP.
- Assist the ECO in providing environmental awareness training to all on-site staff prior to the commencement of any environmentally disturbing activity.



- Ensure that all staff are adequately informed of the requirements of the CEMP pertaining to their site role, and that they have attended an environmental training session (this session must be in the form of an on-site talk and / or a written code of conduct that is clearly explained to and understood by the team).
- Ensure that all subcontractors or visitors to the site are conversant with the CEMP or relevant sections of the CEMP pertaining to their role on site.
- Supply method statements for any activities that are proposed as variations to the SOPs.

3.1.3 The ECO

The ECO (who in this case is the ASD) is responsible for communicating environmental issues associated with the site to the Contractor, and therefore must have adequate environmental knowledge to understand the detailed environmental issues associated with the project and be well versed in the contents of the CEMP. Should any non-compliance with the CEMP take place, the ECO must communicate this with the party responsible for the non-compliance as well as the Contractor and Working for Wetlands. If the non-compliance continues after written request by the ECO to rectify the situation, the ECO must inform 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 will be responsible for taking the appropriate action. In terms of specific tasks, the ECO shall:

- Communicate all aspects of the CEMP to the site staff with the assistance of the Contractor prior to the commencement of excavation or any other environmentally disturbing activity. Basic environmental awareness training must be carried out for all Participants and should be included in safety training (See Section 3.3).
- Undertake all auditing activities to ensure compliance with the CEMP.
- Inspect the intervention site prior to any preparation activities commencing; at least once per month during construction, on completion of construction and rehabilitation of site.
- Shall liaise closely with the Contractor and Implementer and shall provide guidance on any environmental management issues, incidents or emergencies that are brought to their attention. Should the ECO be unable to proficiently address an issue, the ECO must seek advice from a person or persons that are educated and experienced in the relevant field.
- Shall assist in providing recommendations for remedial action in the event of any non-compliance.

3.1.4 The Implementer

The Implementer (playing the role of the Project Manager) is responsible for communicating any issues or concerns of the surrounding community regarding the development to the ECO or other responsible party and visa-versa.

3.1.5 DEA

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

3.2 Advisory Committee and Worker Participation

Active Participant and Contractor participation in project management should be encouraged through the establishment of an advisory committee. Furthermore:

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



- Each project shall have a functional advisory committee, based on the guidelines provided by Working for Wetlands. Where possible these should be part of the existing Working for Water advisory committees.
- Advisory committees will represent all communities from which Participants 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 forwarded to the relevant ASD and the Social Development Manager on completion. No reporting on the Project Progress Reports (PPRs) will be accepted without the written minutes, or a site inspection by the landowner and advisory committee.
- Advisory committees shall 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.

3.3 Environmental 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 Implementer 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 Participants 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 Participants 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 refresher 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 Implementer with a copy of the attendance register the day after each course.

The training shall address, but not be limited to, basic environmental awareness, basic health and safety awareness, prevention of water, soil, and air pollution, prevention of soil erosion and sedimentation, basic principles of materials handling and storage, fire risks, protection of fauna and flora, emergencies and incident responses, spill response provisions, social responsibility, and administrative and reporting procedures.

3.3.1 Training Entitlement

- In compliance with EPWP requirements, each Participant shall be entitled to a minimum of two days training for every 22 days worked.
- All training funded through the Department of Public Works shall be planned in conjunction with the department's provincial representatives and the Working for Wetlands Training Manager.
- A minimum of 30% of training shall be accredited and all first aid and health and safety training shall be accredited. Proof of accreditation of service providers shall be kept on file.
- Training Providers must be registered and accredited with Sector Education and Training Authority (SETA) as an accredited training institution utilising the services of qualified facilitator in terms of the South African Skills Development Act (Act 97 of 1998).



3.3.2 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.

3.3.3 Wildlife

Where work takes place in areas containing dangerous game, especially nature reserves and national parks, Participants 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.

3.3.4 Health and Safety Training

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

- All Participants and Contractors must successfully complete phase 1 health and safety training.
- All Implementers must successfully complete phase 2 health and safety training.
- All Implementers need to have at least one person trained as an Incident Investigator.
- Two first aid officers will be trained per team.
- All Participants shall receive basic fire-fighting training in areas where this is appropriate.

3.3.5 Training Records

- Training attendance records shall be kept by the Implementer.
- The Implementer shall be responsible for obtaining all Contractor and Participant training information.
- The Implementer shall conduct skills audits for all project beneficiaries.

3.4 Auditing and Compliance

The development of a CEMP for a project is an important and necessary task that is aimed at assigning responsibilities and mitigation options to a variety of activities. However, it can be an ineffective tool in the absence of auditing or monitoring activities. Auditing or monitoring activities involve the structured observation, measurement, and evaluation of environmental data over a period of time.

3.4.1 Basic Code of Conduct / Implementation

- Private property access is only permitted on previous agreement with the affected landowner, or will be considered trespassing. Trespassing on adjacent properties shall be subject to disciplinary and legal action.
- Ensure that closed gates are kept closed. When in doubt, the landowner should be consulted.
- Teams working outside of the active site, or requiring access to private properties are to carry identification on their persons that includes their name, position, company of employ, and reference to the Working for Wetlands Project. Similarly, such information shall be displayed on vehicle dashboards/exteriors.
- A *WFW 004 Property Inspection Prior to Wetland Rehabilitation* shall be completed by the ASD before work commences. All work shall be based on an approved rehabilitation plan.



- Any deviations from the planned specification need to be approved by the ASD and the relevant Engineer. Approval will only be granted on submission of the *SOP 8: Deviation Request*.
- A construction supervisor shall be appointed. The appointment letter shall be made available on site.
- All persons, including visitors, shall comply with the OHS Act and wear the required PPE.
- Work sites shall be properly planned and marked out, preferably in collaboration with the Contractors. Areas shall be demarcated for vehicle access and parking, off-loading, mixing etc. (refer to Section 7.1).
- No unauthorised person may enter the work site.
- The location and position of all rehabilitation interventions shall be precisely demarcated by the Engineer and the Implementer, according to the rehabilitation plan.
- Dimensions of rehabilitation interventions shall also be marked out where appropriate (e.g. depth of an excavation).
- Any excavation deeper than 1.8m shall comply with the relevant sections of the OHS Act.
- Implementation of all interventions will be done with a focus on cost-effectiveness and efficiency, while maintaining quality and appropriateness.

3.4.2 Responsibility and Timeframes

The overall responsibility to ensure that the CEMP is implemented rests with the Working for Wetlands Programme, who shall appoint appropriate engineering, environmental and contracting teams to undertake the work.

The ECO and Contractors on site are responsible for ensuring compliance with the CEMP. The ECO shall inspect the site prior to commencement of any construction activity, at least once per month during construction and on completion of construction to establish the level of compliance with this CEMP. Monthly site audits shall be undertaken by the ECO and a bimonthly Project Inspection Report submitted to the Working for Wetlands Deputy Director: Planning, Monitoring and Evaluation for review prior to the annual Compliance Audit taking place. The annual 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.

Furthermore, the contract between the Implementer and the Contractor shall be readily accessible to ASDs and Contractors. The Implementer (i.e. the Project Manager) shall ensure that the Contractor and Participants 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;
- CEMP;
- Site plans;
- Environmental Authorisation and/ or Approval; and
- All site setting out documents as supplied by the Engineer.

3.4.3 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



- Vehicle check sheet
- Production 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 Participant contracts

3.4.4 Records, Data and Quality Control

- Daily tasks shall be set and actual production shall be measured and recorded.
- Each Contractor shall maintain an up-to-date timesheet of daily work 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.

3.4.4.1 Fixed-point photography

Monthly fixed-point photography monitoring information shall be undertaken by the project management for each problem site. This information shall be stored in the Working for Wetlands data management system or as specified by the ECO.

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 coordinates of each point, with a mapping grade Global Positioning System (GPS), accurate to less than 2m. 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 as per the requirements of the adopted monitoring framework:

- 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.

3.4.5 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.
- Implementing agents are to verify a minimum of 50% of completed work during each month (the Project Manager is to verify 100% of work completed).
- On completion of an intervention a certificate, *WFW 005: Notification of completion of Rehabilitation Works* shall be completed and submitted to the ASD by the Implementer.
- All structures (gabion and concrete) need to be clearly marked for future identification. The use of a stamped galvanised sheet (10cm x 10cm) for gabions is recommended and for concrete structures the number can be etched on top of the key wall.

3.4.6 Progress / Site Meetings

Environmental issues shall be put on the agenda as a discussion point during these 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.

3.4.7 Failure to comply with the Environmental Considerations

Working for Wetlands, as the holder of the Environmental Authorisation, is responsible for ensuring compliance with the conditions by any person acting on their behalf including an agent, sub-contractor, Participant or any person rendering a service to the holder. The holder shall notify the DEA in writing, within 24 hours thereof, if any condition in the Environmental Authorisation is not being complied with.

The ECO may 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 out below. Failure to show adequate consideration to the environmental aspects of the CEMP as well as the conditions of approval by DEA will result in the suspension of all work until such time as the offending actions or procedures are



corrected. No extension of time will be granted for such delays and all costs will be borne by the Implementer. The Contractor shall be deemed to have not complied with the CEMP if:

- Within the boundaries of the site, there is evidence of contravention of the CEMP and its associated reports.
- Environmental damage ensues due to negligence.
- The Contractor fails to comply with corrective or other instructions issued by the Implementer, ECO or Competent Authority within a specified time.
- The Contractor fails to respond adequately to complaints from the public.

The disciplinary action shall be determined according to the nature of the non-compliance or crime and exact penalties are to the discretion of the ECO, Proponent and DEA according to the severity of the incident. Record of the instructions issued to correct deficiencies shall be kept.

3.5 Public Participation

Public participation was undertaken as a component of the BAR (refer to Appendix E: Public Participation of the BAR). The links to the community that have been established must 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 must maintain close contact with the representatives of the immediate community. This CEMP shall be made available, on request, for the public to peruse. 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. No member of the public may, however, enter the building site without prior approval from the Contractor.

An issues register must be recorded should any member of the public raise a concern. These complaints must 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 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.



4 EMERGENCY REPORTING AND PROCEDURES

The Contractor must ensure that all emergency procedures are in place prior to commencing work. The nearest emergency service provider shall be identified and the up-to-date contact details of this emergency centre, as well as the police and ambulance services shall be displayed on a notice board and shall be made available to staff on-site. Emergency equipment including fire-fighting equipment shall be positioned at accessible locations near to areas where such emergencies may arise.

4.1 Emergency Awareness

The Contractor shall ensure that his Participants are aware of the procedure to be followed for dealing with emergencies, which shall include notifying the Implementer and relevant authorities of the event. All site staff shall be briefed regarding the requirements for dealing with potential emergencies including fires, accidental leaks and spillage of pollutants (also see Section 7.7.2), as well as accidents to Participants. Education of site staff shall focus not only on the prevention of emergencies but also on proactive and appropriate interventions where such emergencies occur.

4.2 Incident Recording

The Contractor shall keep an Environmental Incident Report File, which shall document any environmental emergencies, accidents or incidents (including near misses). The ECO shall monitor that the necessary procedures and responses are followed to close out any entries in the Environmental Incident Report File.

4.3 Fire

The Contractor must 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). Where possible, all work done in the dry season shall be organised in liaison with the landowners so that it fits into their firebreak/ fire protection programme. No large open fires are permitted on site. Measures to address planned fire management are included in Section 8.3.

Basic functional fire-fighting equipment (one back pack and at least five beaters) shall be made available at each work site at all times. In forestry areas there must also be two rake hoes per team. The Contractor shall appoint a member of his staff to be responsible for the installation and inspection of this equipment. Where work will take place in a peatland or wetland with a high organic soil content, a Method Statement shall be prepared for the ECO's approval, detailing all the actions that will take place should a fire occur, as well as the relevant emergency contacts.

Where fuels and machines are used on site, the prescribed fire extinguishers in working condition must be made available by the Contractor.

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 include having an approved fire extinguisher immediately available at the site of any such activities.

The Contractor is to ensure that he/she has the contact details of the nearest fire station in case of an emergency.



5 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.

5.1 Hydrological Impacts

The construction of interventions within watercourses is likely to have difficulties associated with the presence of water, under both normal and/or 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 such as:

- Ensuring storage areas are located outside of floodable areas; and
- Minimising the extent of disturbed/exposed areas to reduce extensive damage during flood events.

5.2 Ecological Disturbances

5.2.1 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, for use in re-vegetation. Re-vegetation of all exposed soil must be done before the team leaves the site (refer to Section 10 on Site Rehabilitation).

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; and
- Implement 'mosaic' collection to ensure limited disturbance and adequate recovery of the 'borrow' site.

5.2.2 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; and
- 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.

Where required, input from the relevant authority and/or conservation body shall be obtained to inform the design.

The construction of interventions within wetlands and watercourses necessitates the planning of these interventions taking into consideration the migration of fish species where applicable. All in-stream structures shall take into consideration the migration of fish species.

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. *Note that additional permits may be required to transport and/or relocate the species.*

Any bird nests encountered should not be interfered with, and if unable to be avoided, should be relocated by a suitably qualified individual.

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

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

5.2.3 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 ECO 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 landowner.

5.3 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 (refer to Section 10). These activities shall include the closure and rehabilitation of temporary access routes and addressing any potential erosion risks.

5.4 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.

6 SITE ESTABLISHMENT

6.1 Site Plan

The Implementer 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 boundary markers of the type and in the locations directed by the Implementer. Such markers, e.g. danger tape, or suitable equivalent, shall be erected before undertaking designated activities.

6.2 “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, in so far as he/she 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.

6.3 Site Clearance

The Contractor shall ensure that the clearance of vegetation is restricted to that which is 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 ECO’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 topsoil 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.

6.4 Waste Currently on Site

The site must be cleared of all waste prior to any construction related activities and the waste must 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. Waste removal shall be done in accordance with guidelines further described in Section 7.4.

6.5 Vegetation Clearing

Vegetation on the site shall be removed prior to commencement of construction activities. However, care must 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 is not permitted unless specifically authorised by the ECO.

No areas may remain cleared (bare soil exposed) for longer than three 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 10.2).

6.6 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.

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 ECO.

6.7 Removal of Topsoil

Prior to the commencement of construction activities, topsoil (i.e. the top 30 cm of soil) that is removed must be stockpiled for re-use in subsequent landscaping activities. It must be ensured that the topsoil is stockpiled separately from the subsoil and construction materials. The Contractor shall ensure that no remnants of stockpiles have been left in positions or states that may be eroded during and after construction. Stockpiled soil used during landscaping should be enriched with dilute concentrations of fertiliser to reinstate nutrients and encourage biological activity within the soil. Refer to Section 6.13 for actions when working in peatlands.

6.8 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 must, 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 must 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 2m in height.

Stormwater runoff from the stockpile sites and surrounding areas should be directed into the storm water system and may not run freely into the surrounding streets, or create "ponding" or accumulation of water. Stockpiles are to be stabilised if signs of erosion are visible. Erosion control measures such as silt fences must be placed around the stockpiles.

6.9 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, painted for benchmarks or otherwise damaged, even for survey purposes. The latter shall only be done if agreed to by the ECO. Any feature defaced by the contractor shall be reinstated to the satisfaction of the ECO at the cost of the Contractor.

6.10 Heritage Sites and Features

No significant heritage resources within the wetlands were identified during interactions with interested and affected parties or during the site visit. However, if archaeological or heritage sites are exposed during construction work, work must be halted and the area shall be cordoned off until the necessary remedial steps have been implemented and authorisation has been obtained to resume activities. The ECO, South African Heritage Resource Agency (SAHRA) and relevant provincial heritage authority



shall be notified (see Box 1), and arrangements made for the discovery to be examined by an appropriate heritage specialist.

| Box 1: Heritage Agency Contact Information⁴ | |
|---|--|
| National: SAHRA Office in Cape Town Tel: 021 462 4502 Fax: 021 462 4509 Email: info@sahra.org.za | Eastern Cape Provincial Heritage Resources Agency Office in East London Tel: 043 745 0888 Email: smokhanya@ecphra.org.za |
| Heritage Free State Office in Bloemfontein Tel: 051 410 4750 Email: mbatha.npaz@sacr.fs.gov.za | Provincial Heritage Resources Authority Gauteng Office in Johannesburg Tel: 011 355 2574 Email: grant.botha@gauteng.gov.za |
| Amafa/ Heritage KwaZulu-Natal Office in Ulundi Tel: 035 870 2050/1/2 Email: info@heritagekzn.co.za | Limpopo Heritage Resources Authority Office in Polokwane Tel: 015 284 4000 Email: litholek@sac.limpopo.gov.za |
| Mpumalanga Heritage Resources Authority Office in Nelspruit Tel: 013 766 5196 Email: bmoduka@mpg.gov.za | North West Provincial Heritage Resources Authority Office in Mmabatho Tel: 018 388 2826 Email: mosianem@nwpg.gov.za |
| Ngwao-Boswa Jwa Kapa Bokone (Northern Cape) Office in Kimberley Tel: 053 831 2537 Email: rtimothy@nbkb.org.za | Heritage Western Cape Office in Cape Town Tel: 021 483 9598 Email: ceheritage@westerncape.gov.za |

Reasonable precautions shall be taken to prevent any person from removing or damaging any fossils, coins, articles of value or antiquity, structures and other remains for archaeological/ palaeontological / historical interest discovered within or adjacent to any of the proposed sites during construction activities.

6.11 Stabilising 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 10.2 must be implemented in the rehabilitation of steep slopes.

6.12 Removal of Alien Vegetation

Species that are declared invasive species (according to the Conservation of Agricultural Resources Act (Act 43 of 1983) and the National Environmental Management: Biodiversity Act (Act 10 of 2004)) must be recorded and polygons of the affected area must be submitted to the Working for Water national alien invasive plant database.

⁴ The appropriate provincial authority should be contacted as a first step. Should the provincial authority not have capacity, contact SAHRA.

Prior to construction, the Contractor shall ensure that invasive alien vegetation is cleared from the entire site in accordance to the applicable Working for Water guidelines and policies. Follow up clearing may be necessary if the species re-establish following the initial clearing. No trees within the environmentally sensitive areas may be removed, whether alien species or not, unless permitted by the ECO.

Other alien species (non-listed) occurring on site may not be used in the landscaping and should be removed from site where possible.

6.13 Working in Peatlands

Some of the wetlands identified for priority rehabilitation may occur in soils with a high organic composition, known as peat. These soils hold huge importance globally due to their nature to hold high levels of carbon (known as carbon sequestration). The following considerations should be made for site clearance in peatlands:

- Work should only be done in periods with low rainfall.
- Disturbance to in-stream boulders must be minimised. Boulders should not be collected for use in structures unless specifically authorised by a Wetland Specialist and ECO.
- Rock from the side slopes shall not be utilised where the slope is unstable and shall only be used with the express approval of the Wetland Specialists, ECO and landowner as required,
- Compaction of the soil shall be prevented to avoid potential channelling and erosion. Driving into the wetland is forbidden.
- No foreign vegetable matter (e.g. mulch) may be brought into the wetland area (especially from alien species).
- When entering the wetland:
 - Vehicles shall not be allowed to drive into the wetland. Should it however be required, walkways, boardwalks, geotextiles etc. shall be required to prevent compaction.
 - Construction Participants and wheelbarrows shall also use these enforced paths.
- Topsoil shall be removed specifically in the form of sods (20 to 40cm (length) x 20cm (width) x 20cm (depth)):
 - The first sod layer shall include the Rhizome layer.
 - The sods shall be stored in a wet area, on site, in their original orientation and order.
 - Vegetation can be cut short if it will make it easier to handle the sods.
 - Cut vegetation shall be used for mulch.
 - Soil shall be stockpiled according to the different soil layers (i.e. in separate stockpiles) as per the soil profile. Where possible, soils shall be stockpiled as high as possible to retain moisture.
 - Stockpiles shall be covered with mulch or cloth (geotextile) to ensure 40% moisture content.



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.

7.1.1 Temporary Demarcation

An area to be approved by the ECO shall be cordoned off or demarcated for the purpose of temporary staff accommodation facilities during the construction period. The barrier (usually tape) will serve to prevent public access to the camp and prevent sensitive areas been trampled. Tape shall be placed around the sensitive hydrological features to buffer no-go areas on site.

The Contractor must maintain the demarcation for the duration of the construction period. All temporary barriers and signage must be removed and the site restored on completion of the project.

7.2 Contractor's Camp

The Contractor's camp, offices and storage facilities shall be located within the demarcated 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 fencing will include that of a 10m buffer zone between the site and the 1:100 year flood line of any watercourse and/or dam.

No site staff, other than security personnel and skeleton staff shall be housed on site. Security personnel and skeleton staff shall be supplied (by the Contractor) with adequate protective clothing, ablution facilities, water and refuse facilities (with regular collection) and facilities for cooking and heating. These measures will ensure that open fires are not necessary.

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

All Contractor vehicles will be stored in a location where an oil trap will be installed to prevent soil pollution. The ECO will 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 and his sub-contractors' Participants in refuse bins which he shall supply and arrange to be emptied on a daily basis. These bins must be adequate in number and accessibility.

Waste shall be separated into recyclable and non-recyclable waste, and shall be further 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 are not limited to) oil, paint, diesel, batteries etc., (in addition, refer to Section 4.6).
- 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, metal and hard plastic 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 must also be protected from rain, which may cause pollutants to leach out. Particular caution is to 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 must 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 must be disposed of at a Department of Water and Sanitation (DWS) registered site, which is also approved of by the Contractor and the local authority. Refuse may not be burned or buried on or near the site.

The Contractor shall provide cleaning services to clean up the Contractors camp and construction site 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 is to 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 will 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 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 50m of a watercourse. Should toilets be needed elsewhere, their location must 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 use of 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 must 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 will 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 Participants 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 (refer to Section 4.3).

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 250µm plastic covered in sand). Appropriate signage shall be erected indicating the refuelling and storage areas. Mixing of lubricants will be on the non-previous layer at least 20m from the wetland area.

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 must be carried out so as to minimise the potential leakage and prevent spillage onto the soil.

7.7.1 Equipment

Drip trays must be put in relevant locations (inlets, outlets, points of leakage, etc.) so as to prevent such 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, must 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 200ℓ 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 are only permitted within the demarcated construction camp, as required, to complete their specific task.

All construction vehicles should be in a good working order to reduce possible noise pollution. Local and Provincial Noise Regulations (refer to Section 8.7) shall be complied with at all times.

On-site vehicles must 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 will be limited to normal working hours (as described in Section 8.1), in order to limit disturbance from vehicles and construction activity.

7.9 Hand Tools

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

7.10 Concrete Mixers, Compactors and Other Machinery

- All machinery shall have the required machine guards.
- All nip points, pulleys, fan belts and revolving parts shall be suitably closed.
- Power take offs shall be provided with suitable covers in good condition. Covers shall be chained to non-revolving machinery.
- Only trained operators may operate machinery, and must wear the required PPE.
- Participants, other than machine operators, may not be within two spade lengths of operating machinery.
- Concrete mixers may only operate on a stable, level site.
- Machinery must be in good working order. If owned by the Implementer or Contractor, there shall be a maintenance schedule and record for the machinery.
- Machinery will be used safely and efficiently at all times.
- Correct re-fuelling procedures are to be followed and proper containers used for fuel.



7.11 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 shall verify stock periodically and on a bi-annual basis, stocktakings shall 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.

8 ENVIRONMENTAL CONTROL MEASURES

8.1 Control of Working Hours

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

8.2 Control of Runoff that could cause Pollution

Pollution could 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 must 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.

Runoff from the site itself must be free from oil, waste and litter before joining the storm water system or streams. This must be ensured by securing any containers containing hazardous substances, in order that it cannot enter 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 must be implemented. It is outside the scope of this document to prescribe litter trap designs, but the important aspect is that it should be incorporated into the design of the development.

The Contractor shall only be allowed to draw water from the source/s designated by the ECO. The ECO must ensure that the Contractor is aware of the designated water sources and ensure that this is adhered to. Personnel may not use natural hydrological features for any purpose, including recreation. These areas must 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.

8.3 Fire Management Control

Unplanned fires are addressed in Section 4.3 under Emergency procedures. This section refers to fire management cycles.

Fires in peatlands are prohibited.

With the exception of special treatment areas, as a general rule, for low rainfall regions (<900mm per annum) an area of wetland should be burnt every four to five years. Cool and patchy burns should be promoted where possible by burning when relative humidity is high and air temperatures are low, preferable after rain. Preference should be given to burning of areas with abundant dead (moribund) stem and leaf material that limits new growth.

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

8.5 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 must 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 should be undertaken during the dry season if possible.

8.6 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 seasons.

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 must be given to preventing dust generation during excavation and stockpiling activities. The Contractor is responsible for educating the Participants to report any excessively dusty conditions to the Contractor 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 no transported materials escape from the construction vehicles by providing adequate covering for all load beds.

8.7 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, while Local Municipalities also often have by-laws specific to their area. 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/her with, and adhere to, any by-laws and regulations regarding the control of noise in their municipal areas.

Every effort must be made to limit exceedingly noisy activities. Construction vehicles must be in good working order such that they do not create a noise nuisance. Appropriate directional and intensity setting 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 may not use sound amplification equipment on site, unless in emergency situations.

8.8 Hazardous Materials Control

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

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

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

The Contractor must report major incidents to the ECO immediately. Any spill incidents must be cleaned up immediately and in accordance with the emergency procedure.

The Contractor must 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 that must provide the Contractor with this information.



9 MINIMUM STANDARDS FOR CONSTRUCTION AND MAINTENANCE

Note that maintenance of structures will be part of the planning process and will be included in the Rehabilitation Plan. It is the Implementers responsibility to make provision for it the PIP.

9.1 Cement and Concrete Batching

- Concrete shall be mixed according to the correct MPA as specified in the rehabilitation plan
- Manufacturer's directions for mixing, consistency and treatment after pouring shall 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.
- The batching site shall be located on a smooth impermeable surface (concrete or 250µm plastic covered with 5cm 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
- 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.
- 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.
- The haul distance may not be greater than 150m where sand, stone and cement are transported to their point of placement by means of wheel barrows.
- Where applicable, the location of the batching site (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.
- Water used for mixing purposes will be of suitable quality.



9.2 Concrete Structures:

- Concrete mix design to follow the specification.
- Concrete to be placed in 300mm layers and vibrated using a concrete vibrator.
- Minimum 50mm cover required on all concrete reinforcing and mesh unless otherwise specified.
- 250µm plastic sheets to be placed under structure.
- All concrete walls to be fully supported until they are backfilled to the designed level.
- All mesh reinforcing to have 500mm overlaps between sheets.
- Buttresses and walls to be cast monolithically with footing.
- Construction joints to be used wherever new concrete is cast against previously cast concrete.
- If rebar or mesh crosses a construction joint, it should be continuous through the joint and extend 600mm into each side.
- Foundation improvement to be constructed from 70kg sandbags made of BIDIM A4 and filled with sand or well graded gravel, where indicated.

9.3 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 2.2mm. Lacing shall 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 gabion 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 ECO / Engineer 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 ECO / Engineer.
- 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.
- Participants shall be trained in gabion construction by an accredited organisation.

9.4 Stone Masonry Structures:

- Stone to be packed and mortared in place using concrete.
- Concrete mix design to follow the specification
- 100mm - 200mm stone to be used in all stone masonry, gabions and reno mattresses. Stone fill must be non-friable & insoluble e.g. Granite, basalt, limestone or sandstone.

9.5 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.

9.6 Earth Works

- Excavations may not exceed 1.5m depth without shoring and reinforcement.
- Excavation and compaction must comply with design specifications.
- The ECO / Engineer 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 or mechanical rammers.
- Where excavation material is hauled by means of wheelbarrows, the haul distance shall 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

9.7 Rock Packing

- Stone must be non-friable and insoluble, e.g. Granite, basalt, limestone or sandstone
- Rock packs placed across a stream to be tied min 1m into each bank.
- The ECO must approve the source of rocks
- The haul distance may not be greater than 150m where rocks are transported to their point of placement by means of wheel barrows
- The size of rocks must comply with the specifications shown on the drawings and must be handled in a safe manner particularly during offloading/placing. Heavy duty gloves to be worn when handling rocks.

9.8 Ecologs

- Wooden pegs used to anchor ecologs are to be no less than 40mm diameter and 1000mm in length.
- Pegs should protrude no less than 600mm from the soil @ 1000 c/c.

9.9 MACMAT / MACMAT-R

- MACMAT / MACMAT-R to be installed to manufacturers specifications.

9.10 Working with Wire (Ecologs, fencing, silt traps)

- Wire used must comply with the engineer's specifications.
- The appropriate tools are to be used for safe handling of wire.
- Heavy duty gloves must be worn when handling wire.
- No loose wire/sharp edges are to remain on completed interventions.



- All excess wire must be removed from the site.
- Stakes used for pegging should not present a tripping/piercing risk (as far as practically possible).



10 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 soils, and measures to address any potential erosion risk shall be done before the team leaves the site.

Where project activities include the eradication of invasive alien plants, Working for Water guidelines and policies shall be adhered to.

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

Specific Site Rehabilitation measures have been included in the project specific Rehabilitation Plans and should be referred to for site closure. Due notice of the conditions of Environmental Authorisation and requirements of the General Authorisation for water uses (Annexure 2) must be complied with. Specifically, on the completion of the construction activities:

- All disturbed areas must be re-vegetated with local indigenous vegetation suitable to the area.
- An active campaign for controlling new exotic and alien vegetation must be implemented within the disturbed areas.
- A habitat assessment study must be undertaken annually for three years to ensure that the rehabilitation is stable, failing which, remedial action must be taken to rectify any impacts.
- Structures must be inspected regularly for the accumulation of debris, blockages, instabilities and erosion with concomitant remedial and maintenance actions.

10.1 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 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 discard materials of whatsoever 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.

10.2 Landscaping and Preparation for Planting

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

Stabilising measures shall be put in place on steep and unstable slopes 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.

Local indigenous plants shall be used in the landscaping of the site. Plants that are proclaimed as problem plants or noxious weeds (also see Section 6.13) are to be excluded from the landscaping plan and these should be removed immediately, should they occur on site.



The relevant landscaping contractors and excavation contractor must 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 must 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.

10.3 Rehabilitation of Peatlands

Upon rehabilitation, the removed sods and soil stockpiles shall be placed back into the system in the original order/layers (i.e. deeper layers shall be placed first with the rhizosphere layer at ground level), and orientation (according to the natural slope). Should the moisture content of the sods be less than 90% moisture, the Implementer shall be required to peg them with wooden stakes.

The site shall be mulched (alternatively cloth/geotextile may be used) and livestock shall be fenced out for at least two seasons. Alternatively brush packs can be used to keep livestock and/or game away from the site.

If compaction took place, the Implementer shall loosen the soil with a fork on flat surfaces, and create small contour berms on paths with slopes.



ANNEXURE 1

Basic Conditions of Employment Act, 1997: Code of Good Practice for Employment and Conditions of Work for Expanded Public Works Programmes



ANNEXURE 2

General Authorisation in terms of Section 39 of the National Water Act, 1998: Section 21(c) and (i) for the purpose of rehabilitating a wetland for conservation purposes





Government Gazette Staatskoerant

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GOVERNMENT NOTICE

DEPARTMENT OF LABOUR

No. 129

18 February 2011

BASIC CONDITIONS OF EMPLOYMENT ACT, 1997

Code of Good Practice for employment and conditions of work for Expanded Public Works Programmes

Notice is hereby given in terms of section 87(2) of the Basic Conditions of Employment Act, 1997, that the Minister of Labour, after consulting NEDLAC, has issued under section 87(1)(a) of that Act, an amended Code of Good Practice for employment conditions for Expanded Public Works Programmes as set out in the Schedule.

The Code published under Government Notice R64 in Government Gazette 23045 of 25 January 2002 will be superseded by this Code from the date of publication.

SCHEDULE

Code of Good Practice for employment and conditions of work for Expanded Public Works Programmes

1. Preamble

- 1.1 Reducing unemployment is one of the greatest challenges facing South Africa. Government has undertaken a number of initiatives to address unemployment and poverty, including the promotion of labour-intensive Expanded Public Works Programmes (EPWP). An EPWP is a labour intensive programme initiated by government and funded, either fully or partially, from public resources to create a public benefit. A list of EPWP programmes is available from the Department of Public Works (DPW).
- 1.2 Recognising that the acquisition of skills either through accredited or experiential training forms an integral part of the EPWP.
- 1.3 The Code provides guidelines for the protection of workers engaged in EPWPs, taking into account the need for workers to have basic rights, the objectives of the programmes and the resource implications for government.
- 1.4 In addition, the Code encourages:
 - Optimal use of locally-based labour in EPWP.
 - A focus on targeted groups, namely women, female-headed households, youth, the disabled and households coping with HIV/AIDS.
 - The empowerment of individuals and communities engaged in EPWP through the provision of training.

2. Purpose

The purpose of the Code is to:

- Provide good practice guidelines to all stakeholders involved in EPWP in respect of working conditions, payment and rates of pay, disciplinary and grievance procedures.
- Promote a common set of good practices and minimum standards in employment practices among the different EPWP sub-programmes within South Africa.

3. Application

- 3.1 The Code applies to all employers and to all workers hired to perform work in elementary occupations in EPWP.
- 3.2 Employers in EPWPs must comply with relevant legislation such as the –
- Basic Conditions of Employment Act 75 of 1997
 - Labour Relations Act 66 of 1995
 - Employment Equity Act 55 of 1998 (Chapters 1 & 2)
 - Occupational Health and Safety Act 85 of 1993
 - Compensation for Occupational Injuries and Diseases Act 130 of 1993
 - Unemployment Insurance Act 63 of 2001
 - Skills Development Act of 1998.
- 3.3 The Code does not impose any legal obligation in addition to those in the Basic Conditions of Employment Act or any other Act referred to in the Code. Its purpose is to give guidance to employers on key legal provisions in those Acts.
- 3.4 The Code must be read in conjunction with a Ministerial Determination for Expanded Works Programmes issued by the Minister of Labour in terms of Section 50(1) of the Basic Conditions of Employment Act and the standard terms and conditions of employment which are annexed to this Code.
- 3.5 The Code includes provisions for work to be task-based/service-based. In a task-based system the worker is paid a fixed rate in return for a fixed quantity of work. Tasks may be set for an individual or a group of people. Payment for work performed on a task-based system will be subject to 9.1.

4. Beneficiaries of expanded public works programmes

- 4.1 The beneficiaries of the programmes should be locally-based (as close to the project site as possible) individuals prepared to work on the specific EPWP.
- 4.2 In order to spread the benefits as broadly as possible in the community, a maximum of one person per household should be employed, taking local available labour into account.
- 4.3 Workers from other areas may be employed if they have skills that are required for a project and there are not enough persons in the local communities who have those skills or who could undergo appropriate skills training. However, workers from other communities should not exceed 20% of all persons working on a programme. A proper

skills audit should be conducted, where possible, in an area where an EPWP is in operation.

4.4 Programmes should set participation targets for employment with respect to women, youth, and people with disabilities.

4.6 The proposed targets are:

4.6.1 55% women;

4.6.2 40% youth from 16 to 35 years of age; and

4.6.3 2% people with disabilities.

4.7 EPWPs should seek to achieve these targets in all occupational categories.

5. Recommended exclusions

5.1 Persons under sixteen years of age may not be employed on EPWP.

6. Selection of Workers

6.1 The local community, through all structures available, must be informed of and consulted about the establishment of any EPWP.

6.2 Members of the community who are unemployed and who form part of the targeted groups will be given an opportunity to apply for work.

6.3 Preference must be given to the targeted groups in selecting workers.

6.4 In addition the following criteria are suggested to help target the poorest of the poor:

6.4.1 People who come from households where the head of the household has less than a primary school education;

6.4.2 People who come from households that have less than one full time person earning an income;

6.4.3 People who come from households where subsistence agriculture is the source of income.

7. Maximising Participation

7.1 Expanded Public Works Programmes seek to provide as many people as possible with the opportunity to participate in the programme.

7.2 Work should be distributed amongst the unemployed as practically and equitably as possible.

8. Forced labour is prohibited

- 8.1 No forced labour is permitted on an EPWP.
- 8.2 Forced labour includes forms of coercion such as patronage or demanding sexual or other kinds of favours for work.
- 8.3 Programmes should monitor whether or not there is forced labour, particularly when intermediaries such as labour contractors or management agencies are involved.

9. Payment

- 9.1 Employers must pay workers at least the minimum rate as stipulated in the Ministerial Determination: Expanded Public Works Programme
- 9.2 Workers can be paid on the basis of the number of tasks completed. These workers are referred to as “task-rated workers”. Alternatively, workers can be paid on a daily rate.
- 9.3 There are jobs where it is not possible to pay workers on the basis of tasks performed. These workers must be paid on the basis of the amount of time they worked. They are referred to as “time-rated workers”.
- 9.4 On the task-based system, a worker is paid for each task completed or part thereof.
- 9.5 If workers are informed a day before that work will not take place the next day, they should not be entitled to any payment.
- 9.6 Workers will be paid a training allowance in case they are required to attend agreed training programmes. This should be equal to 100% of the daily task rate for task-rate workers or 100% of the daily rate of pay for time-rated workers. All the costs of training will be covered, for example, travel, trainers, material, tuition fees.
- 9.7 Where a worker participates in a learnership the relevant learnership determination must be used to determine the training allowance whilst on training.
- 9.8 Each worker must be given written particulars of employment and verbal explanations in an appropriate language of their rate of pay and how this is to be calculated.
- 9.9 Where a project is completed earlier than anticipated the worker should receive the full agreed remuneration for the stipulated period of the contract if the pay for the task was to be calculated on the basis of time. Where such work was to be performed on a task-based system, the full agreed remuneration for the task should be paid for early completion.

10. Hours of Work

- 10.1 Normal hours of work, as is customary in the applicable sector, apply but limited to 40-hours a week.
- 10.2 For task-based workers tasks must be set based on a 40-hour week in which the workers work five 8-hour days, excluding time spent travelling to and from work. Once at work, time spent getting to the site that is to be worked on that day must be included in

the 8-hour period. A worker may not spend more than 55 hours in any week completing tasks.

- 10.3 Starting and finishing times may be determined in the light of factors such as the nature of the project, the distance workers have to travel and other local factors such as climate, season and terrain.
- 10.4 Depending on local conditions work may be spread over more than 8 hours. For example, in hot weather workers may work from 05h00 to 09h00 and then again from 15h00 to 19h00. The finishing time must not be more than 12 hours after the start and workers may not work more than 55 hours per week.

11. Attendance

- 11.1 A 'no work-no pay' rule must apply except in the following circumstances:
- A worker is absent due to illness or injury and proof of illness/injury as required by section 23 of the Basic Conditions of Employment Act is provided. A maximum of 1 day sick leave for every full month worked is payable for workers who work four or more days per week.
 - Workers who report for work and are unable to work due to the sole fault of the employer, shall be entitled to be paid –
 - (a) in the case of task-rated workers, the daily task rate;
 - (b) in the case of time-rated workers, the daily rate.

This shall not apply where the reason that workers are unable to work is that tasks have not been set.

12. Health and Safety

- 12.1 Every worker has the right to work in a working environment that is safe and without risk to his or her health.
- 12.2 The management and every employer (contractor) engaged in an EPWP are required to do everything that is reasonably practicable to ensure the health and safety of persons working on programme.
- 12.3 Workers are required to perform their duties in a manner that does not endanger their health or safety or that of other workers or persons.
- 12.4 Behaviour that endangers the health and safety of others is a serious disciplinary offence for which a worker can be dismissed.
- 12.5 The management of an EPWP and each employer must:
- ensure that all workers are informed of any risks and dangers associated with their tasks;
 - inform and train workers about the precautions and steps that must be taken to avoid or minimise risks and dangers to them or others;
 - ensure all possible precautions and safety measures are in place to avoid risk and minimise dangers;

- not permit workers to perform tasks for which they have not been trained;
- provide workers with the necessary protective clothing such as hard hats, goggles, ear-plugs, boots and outer clothing required, as applicable, to complete their tasks in safety. These must be supplied free of charge and must be maintained, by the worker, in a clean state and in working order for use;
- provide First Aid kits on site;
- ensure that at least one person per site is trained to act as a First Aid Officer and that they are capable of providing First Aid to injured or ill workers;
- provide sufficient clean drinking water to all workers for the duration of the project;
- ensure that adequate sanitation is available to workers; and
- ensure all safety standards set are adhered to.

12.6 Workers must –

- perform their duties in a safe manner;
- wear all protective clothing issued;
- obey all safety rules and instructions;
- report any accident or near-miss incident to their employer (supervisor); and
- report any dangerous conduct by another worker to their employer (supervisor).

12.7 Employers must take particular care to ensure workers with a disability, pregnant workers or workers who are breast-feeding are not required to perform work that may endanger their health and safety or that of their child.

13. Compensation for Occupational Accidents and Diseases

The Compensation for Occupational Injuries and Diseases Act 130 of 1993 (COIDA) applies to all EPWPs.

13.1 Administrative Obligations

Every employer must –

- register with the Compensation Commissioner and cover all workers in the EPWP (this is done by submitting a completed W AS 2 form);
- notify the Commissioner of any changes in particulars;
- keep a register of wages, time worked and payment (this is the same register described above);
- submit a return of wages paid each March; and
- pay assessments (contributions) as required by the Commissioner.

13.2 Obligations in respect of accidents and occupational diseases

Every employer must report to the Compensation Commissioner –

- accidents within 7 days (W CI 3 form); and
- occupational diseases within 14 days (W CI 14 form).

13.3 An employer must pay a worker who is injured in an accident at work and who is unable to work 75% of their wages for a period of up to three months or until the end of

the worker's contract, whichever comes first. The Compensation Fund will refund the employer this money.

- 13.4 The family of a worker who is killed in an accident at work (or who dies from an occupational disease) is entitled to receive compensation in terms of the provisions of COIDA. An employer should help them to lodge their claim and, wherever possible, provide employment for another member of the family.
- 13.5 A worker who is injured in an accident that is caused by the negligence of an employer is entitled to claim additional compensation in terms of section 56 of COIDA.

14. Training

Training is regarded as an important component of EPWP. EPWPs are encouraged to have a clear training programme in place that strives to:

- 14.1 ensure that workers obtain all the skills required to complete their work or tasks;
- 14.2 establish links to training institutions and opportunities to enable workers to access further training with a preference to SETA accredited training where available; and
- 14.3 identify possible career paths available to workers exiting the EPWP.

15. Discipline, dismissal and termination

- 15.1 Every EPWP must have a disciplinary code and a grievance procedure. The purpose of these procedures is to –
- (a) ensure that employers exercise discipline in a fair and consistent manner;
 - (b) protect workers from arbitrary action; and
 - (c) provide a mechanism for managing grievances and complaints.
- 15.2 The disciplinary code and grievance procedures apply to all persons employed in the EPWP.
- 15.3 Employers should make use of the Code of Good Practice: Dismissal (Schedule 8 to the Labour Relations Act 66 of 1995) as a guideline when exercising their powers of discipline and dismissal.
- 15.4 An employer may only dismiss a worker if –
- (a) there is a good reason for the dismissal; and
 - (b) the employer has followed a fair procedure.
- 15.5 The reason for a dismissal or termination may relate to –
- (a) the worker's misconduct (e.g. late coming, drunkenness);
 - (b) the worker's capacity (i.e. the worker does not have the skills or ability to perform a job despite receiving training); and
 - (c) the worker's unexplained failure to attend required training programmes.

- 15.6 A fair procedure means that the employer should –
- (a) investigate the charge;
 - (b) notify the worker of any allegations against the worker in a form and language that the worker can understand; and
 - (c) give the worker an opportunity to respond to the allegations. A fellow worker may assist the worker, if the worker chooses.
- 15.7 There is no requirement that the employer hold a formal inquiry. However, the employer may decide to give a worker, charged with a serious offence, a formal hearing at which the worker can test the evidence on which the charge is based.
- 15.8 An employer must exercise discipline in a consistent and clear manner.
- 15.9 A worker may only be disciplined for contravening a workplace rule or standard that the worker was aware of or should reasonably have been aware of. Therefore, it is important that an employer informs workers of workplace rules and standards. A worker will be assumed to know that conduct such as late-coming, leaving early, drunkenness, fighting or disobeying instructions are disciplinary offences.
- 15.10 An employer should keep a written record of any disciplinary action taken.

16. Disciplinary Sanctions

An employer may take the following steps when exercising discipline –

16.1 Verbal Warning

A verbal warning may be issued for minor disciplinary offences. The purpose of the warning is to explain to the worker what the rules are, encourage the worker to comply with them and advise that if the conduct is repeated the employer may take more serious action. Only one verbal warning is required before moving to written warnings.

Examples of minor offences:

- Late-coming.

16.2 Written warning

17.2.1 A written warning may be issued for repeated minor offences or for more serious offences. The employer should investigate the charge before issuing a warning. The worker should be asked to respond and explain his or her conduct. The warning should state the offence and the period for which the warning is valid. Generally, this should be for six months, although warnings for more serious offences could be issued for a year or for the remainder of the worker's employment on an EPWP. If the employer believes that the offence is serious, the warning should state that it is a final written warning and that a repeat of the offence could lead to the worker's dismissal). Otherwise, two written warnings are suggested prior to dismissal.

16.2.2 A written record of the charge, the explanation and the agreed change in behaviour or performance is dated, signed and handed to the worker as a written warning. A copy of the written warning is kept in the worker's file for the period of its validity.

Examples of offences in which a written warning may be appropriate:

- Repeated minor offences.
- Drunkenness (if it does not affect work performance).
- Fighting, swearing.
- Abusive behaviour.
- Non co-operation as a team member.
- Negligent use of programme equipment (if it does not affect health and safety).
- Failure to attend a training event.

16.3 Dismissal

16.3.1 Generally, an employer should not dismiss a worker for a first offence. However, a worker may be dismissed if it is a serious offence that would make continued employment intolerable even if the worker has previously had a clean record. Before dismissing a worker, the employer must consider whether dismissal is the appropriate sanction.

16.3.2 Examples of serious offences which may warrant dismissal:

- Wilful and/or negligent damage to equipment, machinery and vehicles.
- Actions which could lead to criminal charges being laid – e.g. serious assault; theft; fraud.
- Sexual harassment, including rape.
- Actions which create a danger to the health and safety of co-workers.
- Any offence for which the worker has received a final written warning.
- Drunkenness, if it affects the ability to work, for instance, a driver or a chain-saw operator being drunk.
- Repeated less serious offences – drunkenness, fighting, swearing, failure to properly perform tasks, etc.
- Misuse of programme equipment, for instance, a worker using it for their own benefit.

16.4 Poor work performance

16.4.1 An employer may take action against a worker for poor work performance. Workers must be informed of the standard of work performance expected of them. If they do not meet this standard, the employer should consider ways of helping them meet the standard. This could include counselling or guidance, training or giving clearer instructions. The worker must be given a reasonable opportunity to improve their work performance. If their performance does not improve, the employer can take corrective action, including dismissal if considered appropriate.

16.4.2 If a worker is not performing adequately in a job requiring special skills, the employer should consider transferring the worker to another job.

17. Grievance Procedures

- 17.1 A grievance is a serious dissatisfaction on the part of a worker with the actions or behaviour of the employer or another worker.
- 17.2 A worker with a grievance should bring the grievance to the attention of the employer, either in writing or verbally. If the grievance concerns another worker, the worker should raise the issue with that worker before raising it with the employer.
- 17.3 The employer must listen to the submissions made by the complaining worker and attempt to settle the matter by discussion within 5 days.
- 17.4 Where the matter cannot be resolved to the satisfaction of the complaining worker, the employer may conduct an investigation or, if the employer considers it appropriate, conduct an inquiry at which the affected parties can make submissions.
- 17.5 The employer must notify the grievant and any other person affected of the decisions within a reasonable time. If the employer decides to take disciplinary action, the employer must follow the disciplinary procedure described above.

18. Glossary

| | |
|---------------------|---|
| Contractors | A person or group of persons who is contracted to carry out the work on the Expanded Public Works Programme for the relevant department. |
| Daily rate | A worker is paid a fixed sum each day in return for working a fixed number of hours during that day. |
| Worker | A worker includes anyone working in an elementary occupation on an Expanded Public Works Programme whether they are employed directly by a government department, an implementing agent, a contractor or a sub-contractor. |
| Implementing agents | A business, institution or person who is contracted to implement the Expanded Public Works Programme on the relevant department's behalf. An implementing agent is bound by the same terms and conditions governing the implementation of Expanded Public Works Programmes as a department. |
| Task-based work | A worker is paid a fixed wage in return for a fixed quantity of work, or a task. The task set may be a task for one worker in 8 hours or for several workers over several workdays, based on an 8 hour working day per person. |

**EXPANDED PUBLIC WORKS PROGRAMMES
(Standard Contract for Task-rated workers)**

CONTRACT OF EMPLOYMENT BETWEEN

CONTRACTOR

Name:

Address:

ID:

AND

WORKER

Name:

Details

ID:

1. I am pleased to confirm that you have been appointed to work on a task-based employment contract within an Expanded Public Works Programme (EPWP) project. Within this contract you will undertake numerous groups of tasks.
2. This contract must be read in conjunction with the standard terms and conditions of employment on EPWP attached.
3. The project where you will be employed is located at
4. The contract will start on
5. You must be aware that this contract is a limited-term contract and not a permanent job. The contract may be terminated for one of the following reasons:
 - a) If the contractor does not get additional contracts from the EPWP.
 - b) Funding for the programme in your area comes to an end.
 - c) You repeatedly do not perform in terms of the tasks set out in your work programme.
- 6 You will be employed as a within the team.
- 7 While you are working you will report to
- 8 Payment
 - a) You will be paid a fixed amount of R for completing a fixed amount of work.
 - b) The amount of work required for the agreed rate of pay will vary from task to task. You will be informed at the beginning of each task or group of tasks how much work you are expected to complete per day.
 - c) You will only be paid for work completed.
 - d) You will be paid the amount for the number of days quoted in the contract even if you finish the work before the time or after the estimated date of completion.

- e) A contractor must pay you the production bonus (the extra days if the work is finished early) if you have completed your share of tasks.
- f) The contractor will be paid within 30 days after the work is completed. You will be paid within 5 days of the contractor being paid.

9 In addition to the conditions above all the terms and conditions of employment on EPWP apply to your employment. If you breach any of these terms your contract may be terminated.

10 Signatures:

Signed on this day of 20....

Contractor: Date:

Worker: Date:

Witness: Date:

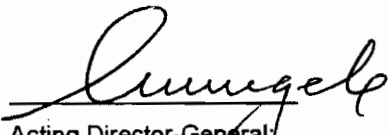
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DEPARTMENT OF WATER AFFAIRS**No. 1198****18 December 2009**

**GENERAL AUTHORISATION IN TERMS OF SECTION 39 OF THE NATIONAL WATER ACT, 1998
(ACT NO 36 OF 1998) IN TERMS OF SECTION 21(c) AND (i) FOR THE PURPOSE OF
REHABILITATING A WETLAND FOR CONSERVATION PURPOSES**

I, Nobubele Ngele in my capacity as Acting Director-General of the Department of Water Affairs and duly authorised in terms of section 63 of the Act, do hereby generally authorise in terms of section 39(1) of the Act the use of water in respect of section 21(c) and (i) of the Act for the purpose of rehabilitating a wetland for conservation purposes to the category of persons as contained in the Schedule hereto.


Acting Director-General**Date: 7-12-09**

SCHEDULE**IMPEDING OR DIVERTING THE FLOW OF WATER IN A WATERCOURSE****[Section 21(c)]****and****ALTERING THE BED, BANKS, COURSE OR CHARACTERISTICS OF A WATERCOURSE****[Section 21(i)]****Purpose of Notice**

1. This Notice relieves a water user from the need to apply for a licence for impeding or diverting the flow of water in a watercourse in terms of section 21(c) or altering the bed, banks, course or characteristics of a watercourse in terms of section 21(i) of the Act for the purpose of rehabilitating a wetland for conservation purposes (a wetland being regarded as a watercourse under the Act), provided that the use is within the provisions set out in this Notice, but does not exempt the water user from compliance with any other provision of the Act or from any other applicable legislation, regulation, ordinance or by-law.

Definitions

2. In this Notice any word or expression to which a meaning has been assigned in the Act shall have the meaning so assigned, and unless the context otherwise indicates—

"altering the bed, banks, course or characteristics of a watercourse" means any change affecting the resource quality or flow components within the riparian habitat or 1:100 year floodline, whichever is the greater distance from the watercourse at the date of commencement of this Notice;

"Constitution" means the Constitution of the Republic South Africa, 1996 (Act No. 108 of 1996);

"diverting the flow" means a temporary or permanent structure causing the flow of water to be rerouted in a watercourse for any purpose;

"impeding the flow" means the temporary or permanent obstruction or hindrance to the flow of water in a watercourse by a structure built either fully or partially in or across a watercourse;

"NEMA" means the National Environmental Management Act, 1998 (Act No. 107 of 1998);

"rehabilitation" means the process of reinstating natural ecological driving forces within part or the whole

of a degraded watercourse to recover former or desired ecosystem structure, function, biotic composition and associated ecosystem services;

“the Act” means the National Water Act, 1998 (Act No. 36 of 1998); and

“water user” means the category of persons contemplated in paragraph 5 of this Notice.

Duration of Notice

3. This Notice is valid from the date of publication for a period of 20 (twenty) years unless —
- (a) the period is extended for a further period by a Notice in the *Gazette*;
 - (b) it is replaced by another general authorisation; or
 - (c) the water user is required to apply for a licence in terms of the Act.

Area of applicability of Notice

4. This Notice applies throughout the Republic of South Africa.

To whom Notice is applicable

5. This Notice is applicable to the category of persons who are organs of state in terms of the Constitution and who are undertaking water use 21(c) and (i) of the Act for the purpose of rehabilitating a wetland for conservation purposes.

Exclusions to Notice

6. This Notice does not apply—
- (a) if the water user must make an application for a licence for any other water use in terms of section 21 of the Act; and
 - (b) to any activity that may have a potential to impact a wetland in terms of NEMA.

Conditions for impeding or diverting the flow or altering the bed, banks, course or characteristics of a watercourse for the purpose of rehabilitating a wetland for conservation purposes in terms of this Notice

General

7. (1) The water user referred to in paragraph 5 must not cause a potential, measurable or

cumulative detrimental impact on—

- (a) the welfare, health or safety of human beings;
- (b) any aquatic or non-aquatic organisms;
- (c) the resource quality;
- (d) property; or
- (e) the socio-cultural and heritage value,
of a wetland.

Authority to enter onto land

(2) Prior to the commencement of the water use, the water user must obtain lawful—

- (a) authority to enter upon land owned or controlled by the State; and
- (b) access to enter upon private owned or controlled land,
on which the proposed water use is to be undertaken.

Rehabilitation planning process

(3) The water user must compile and maintain an initial Planning Report consisting of—

- (a) identification of all persons potentially affected by the rehabilitation of the wetland;
- (b) documentation on the appraisal of the stakeholders to be engaged on the proposed process;
- (c) an assessment of the ecological status, importance and sensitivity (including socio-cultural and heritage) of the wetland;
- (d) identification of the work to be undertaken;
- (e) identification of rehabilitation interventions;
- (f) design of rehabilitation interventions;
- (g) design of draft rehabilitation plans;
- (h) rehabilitation plans; and
- (i) establishment of a monitoring and evaluation process of work that is to be undertaken.

(4) The water user must—

- (a) identify all legal requirements that must be complied with in the rehabilitation process;
- (b) maintain a copy of all published notices; and,
- (c) establish and maintain an Issues and Comments Register.

Rehabilitation plan

(5) A rehabilitation plan must contain the following information—

- (a) rehabilitation objectives;
- (b) rehabilitation problems;
- (c) rehabilitation strategy;

- (d) wetland assessment report;
- (e) draft rehabilitation design drawings;
- (f) final rehabilitation plans;
- (g) rehabilitation intervention;
- (h) maintenance details;
- (i) monitoring and evaluation data;
- (j) construction notes;
- (k) environmental authorisation, if applicable under NEMA; and
- (l) authorisation, if applicable under any other legislation.

(6) Copies of all designs and rehabilitation plans must be submitted to the responsible authority for approval prior to the commencement of any activity under this Notice.

Completion of water use

- (7) Upon completion of the activity relating to the water use—
- (a) all disturbed areas must be re-vegetated with indigenous vegetation suitable to the area;
 - (b) an active campaign for controlling new exotic and alien vegetation must be implemented within the disturbed areas;
 - (c) a habitat assessment study must be undertaken annually for three years to ensure that the rehabilitation is stable, failing which, remedial action must be taken to rectify any impacts; and
 - (d) structures must be inspected regularly for the accumulation of debris, blockages, instabilities and erosion with concomitant remedial and maintenance actions.

(8) A report under subparagraph (7)(c) must be submitted to the responsible authority for approval within 6 months after completion of the work undertaken.

Budgetary provisions

8. (1) The water user must ensure that it has a sufficient budget to complete and maintain the rehabilitation as set out in this Notice.

(2) The Department may at any stage of the process request proof of budgetary provisions.

Registration

9. (1) A person who uses water as contemplated in this Notice, must register such water use with the Department.

(2) Upon completion of registration, the Department will provide a certificate of registration to the

water user.

NOTE: Forms can be obtained from Regional Offices of the Department or from the Departmental website: <http://www.dwaf.gov.za>

Inspection

10. Any property in respect of which a water use has been registered in terms of this Notice is subject to inspection in terms of sections 124 and 125 of the Act.