



ENVIRONMENTAL EMERGENCY PROCEDURE.

GARDEN WALK MALL

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1. DEFINITIONS

Environment

The surroundings in which humans exist and which comprise:

- The land, water and atmosphere of the earth.
- Micro-organisms, plant and animal life.
- Any part or combination of a) and b) and the interrelationships among and between them.
- The physical, chemical, aesthetic and cultural properties and conditions of the foregoing that can influence human health and well-being.

Environmental Authorisation

The written statement from the relevant environmental authority in terms of the National Environmental Management Act (Act 107 of 1998), with or without conditions, that records its approval of a planned activity and the implementation thereof and the mitigating measures required to prevent or reduce the effects of environmental impacts during the life of a contract.

Environmental Management Programme (EMPr)

An environmental management tool used to ensure that undue or reasonably avoidable adverse impacts of the construction, operation and decommissioning of a project are prevented; and that the positive benefits of the projects are enhanced.

Hazardous waste

Waste that are proven to be toxic, corrosive, explosive, flammable, carcinogenic, radioactive, poisonous or classified as such in legal terms.

Incident

In terms of section 30(1)(a) of the National Environmental Management Act, 107 of 1998 (NEMA), an “incident” means an unexpected sudden occurrence, including a major emission, fire or explosion leading to serious danger to the public or potentially serious pollution of or detriment to the environment, whether immediate or delayed. In line with section 24 of the Constitution of the Republic of South Africa (Act No. 108 of 1996), “serious” is taken to be a measure of the impact of an incident where such an incident has had, could have had, is having, or will have a negative impact on human health or well-being

Management actions

Practical actions aimed at achieving management objectives and targets.

Management objectives

Desired outcome of management measures for mitigating negative impacts and enhancing the positive impacts related to project activities and aspects (i.e. risk sources).

Monitoring

A systematic and objective observation of an organization's activities and services conducted and reported on regularly.

Pollution

Any change in the environment caused by substances, radioactive or other waves, or noise, odours, dust or heat, emitted from any activity, including the storage or treatment of waste or substances, construction and the provision of services, whether engaged in by any person or an organ of state, where that change has an adverse effect on human health or well-being or on the composition, resilience and productivity of natural or managed ecosystems, or on materials useful to people, or will have such an effect in the future. Furthermore, pollution can also be regarded as an undesirable state of the natural environment being contaminated with harmful substances as a consequence of human activities.

Protected Plants

Plant species officially listed on the Protected Plants List (each province has one), and which may not be removed or transported without a permit to do so from the relevant provincial authority.

Reinstatement

Reinstatement is defined as the return of a disturbed area to a state, which approximates the state (where possible), which it was before disruption.

Sensitive environmental features

Environmental features protected by legislation (e.g. heritage resources), or identified during the EIA as sensitive through specialists' findings and input received from Interested and Affected Parties.

Veld

Unimproved areas of natural vegetation.

Weeds and Invader Plants

Weeds and invader plants are defined as undesirable plant growth that shall include, but not be limited to all declared category 1, 2 and 3 listed invader species as set out in the Conservation of Agricultural Resources Act (No 43 of 1983) regulations. Other vegetation deemed to be invasive should be those plant species

that show the potential to occupy in number, any area within the defined construction area.

Wetland

Land where a surplus of water (i.e. waterlogging) is the key factor determining the nature of the soil development as well as the types of plants and animals living at the soil surface.

2. PURPOSE

The purpose of this document is to describe measures to effectively manage environmental emergencies relevant to the Mapleton Pump Station Project.

3. SCOPE OF WORK

This procedure will apply to environmental emergencies and the procedures to follow in case of an emergency. Applicable environmental emergencies to the Mapleton Pump Station Project are as follow:

- Uncontrolled fires; and
- Accidental spillages of hydrocarbon or hazardous substances and cement.

4. REFERENCES

This procedure must be read in conjunction with the following project related method statements:

- Hazardous Substance Storage and Handling.
- Waste Management.
- Construction EMPr.

5. GENERAL MANAGEMENT MEASURES

Enviro Serve will be contracted for the disposal of any spillage that occurs on site.

5.1 CONCRETE WORKS:

- Concrete trucks delivering ready mix concrete to site will wash and empty dirty water from their drums into a confined, lined sump with an overflow into a separator to separate clean and dirty concrete containing water. Such separator to be approved by the engineer and ECO prior to construction and use thereof.

- Cement bags stored on site will be stored in a weatherproof facility designated for such use. Cement bags being stored on site will also not be stored directly on the soil surface and pallets will be used if not stored inside an enclosed container.
- Where shutter boards are used the storage and use of shutter oil will conform to the Hazardous Substance Use Method Statement.

5.2 HAZARDOUS SUBSTANCES

- Suitable storage facilities will be available for the storage of hazardous substances at the site camp.
- Storage facilities will be lockable, ventilated, lined up and bunded with a capacity of 110% of the volume of its contents.
- Should a diesel bay be required the bund wall thereof will be fitted with a controllable outlet which drains into a lower lying sump. The bund wall and sump will be kept dry.
- All contaminated rainwater drained from the bunded facility will be stored as hazardous waste and be disposed of at a licensed hazardous waste disposal facility.
- All hazardous substance containers will be labeled to identify the contents thereof.
- The storage facility will have the requisite signage displayed i.e. No Open Flames, No Smoking and be marked as a Hazardous Substance Storage Facility. A fire extinguisher will also be made available at the facility with the relevant signage.
- No refueling of construction vehicles or equipment will be allowed within the 100m buffer zone surrounding the wetland.
- Hazardous substance containers kept on site during daytime e.g. 20l petrol containers, will be placed within a drip tray whilst on site.
- All hazardous substance containers will be kept always closed.
- An emergency spill kit will be kept available at the site camp.
- Emergency contact numbers to be displayed at the site camp.

- MSDSs will be kept available for all hazardous substances, including cement, and will be communicated to the relevant employees responsible for using it.
- A competent person will be appointed as a Hazardous Substance Controller.

5.3 FIRE PREVENTION:

- Reasonable steps will be taken to mitigate the risk of fires onsite. No uncontrolled fires will be allowed on site or at the construction camp.
- Each construction vehicle will be issued with a fire extinguisher.
- Firefighting equipment in the form of fire extinguishers will be made available at strategic locations across the site.
- A fire break will be kept around the site camp.
- Precautions will be taken when welding or grinding is undertaken near potential sources of combustion, especially on site. Such precautions will include measures such as ensuring sparks are not directed to a source of combustion (e.g. dry grass), availability of a fire extinguisher, relevant training and awareness.
- Packaging and other waste material may not be burned on site under any circumstances.
- A competent person will be appointed and trained as a fire fighter.

6. EMERGENCY PROCEDURES TO FOLLOW:

6.1 CONCRETE SPILLAGES

- Any spillages that occur will be collected and stored as concrete waste for safe disposal at a registered waste disposal site (e.g. Soshanguve Landfill Site).
- The temporary storage facility for concrete waste will be bunded with a soil berm to divert storm water flow from such an area.
- A sign will be displayed at the temporary concrete waste storage facility to define its intended use.
- All large spills will be recorded on the environmental incident register and the ECO be informed thereof.

6.2 EMERGENCY SPILL PROCEDURE

- All small spills to be rehabilitated immediately.
- Large spills which can damage the environment must be reported to the supervisor immediately.
- After identification of a spill, the source of the spill to be identified and relevant measures taken to stop the spill.
- Hazardous chemical spills will be handled together with the instructions from the MSDS of each chemical.
- The contaminated soil to be removed with a shovel and placed into a bag. For small spills remove soil to a depth of 100mm below the visible contaminated soil (wet soil). For larger spills remove soil to a depth of 300mm below the visible contaminated soil.
- Place contaminated soil into a container and treat with Oil cap, or another approved hydrocarbon encapsulator, as per the specifications of the treatment agent. Once clean the soil can be reinstated on the site.
- Should contaminated soils not be treated with a hydrocarbon encapsulate onsite, the contaminated soil will be placed inside an impermeable hazardous waste container for safe disposal at a licensed hazardous waste disposal facility. Safe disposal slips will be filed on site and made available to the Client.
- Spills on impermeable surfaces, e.g. drip trays/ cement slabs can either be cleared by using supazorb or a hydrocarbon encapsulate as mentioned above.
- All large spills will be recorded on the environmental incident register and the ECO be informed thereof.

6.3 UNCONTROLLED FIRES

In case of an uncontrolled fire, whether in the open veld or built-up area, has been identified in the project area the following procedure must be adhered to:

- Sound alarm.
- Notify the fire team immediately.
- Ensure all employees are evacuated from the area where the fire has been identified. Roll calls be taken to ensure all employees have been evacuated.
- If it is a small fire, then fire extinguishers will be used to fight the fire.
- Should it be a larger fire, then fire extinguishers and fire beaters will be used whilst the local fire brigade is notified.
- Any hazardous substances in the vicinity of the fire will be removed and stored at a safe location.

- Once the fire has been put out, the damages will be assessed and reported to the relevant parties.
- Each uncontrolled fire will be recorded in the Environmental Incident Register and will be investigated to identify the cause thereof as well as mitigation measures to be implemented.

7. AWARENESS AND TRAINING

- All employees working with hazardous substances, including cement will be trained on the MSDSs thereof and will be required to sign a register for such training.
- Continual awareness will be done on environmental hazards such as hazards pertaining to hazardous chemical substances, veldt fires, housekeeping, waste management, etc.
- A competent person will be appointed and trained as a fire fighter. Such training will consist of a Basic Fire Fighting Course.
- An emergency response team will be established and appointed consisting of emergency coordinators, first aiders and members of the fire team.
- Emergency drills will be held at least once every six months and a signed participation register will be kept for each drill.

8. START DATE AND DURATION OF CONSTRUCTION

From the 1st of March, up to the end of March 2026.

9. MATERIALS AND EQUIPMENT TO BE USED

Material and Equipment

The following materials and equipment are relevant to the implementation of emergency procedures:

- Signage
- Hazardous waste storage container
- Drip trays
- Spillage kit
- Hazardous wastebins/ skips
- Fire extinguishers
- Fire beaters

10. RESPONSIBILITY

The Site Supervisor, Safety Officer, Environmental Officer and Emergency Response Coordinator will be responsible for ensuring environmental emergency and safety procedures are adhered to.

11. GENERAL

Modification of this method statement may be required from time to time.

Approved by	Revision Number	0
Name	Signature	Date