



ENVIRONMENTAL METHOD STATEMENT

Project: TDR383/2022/2023: CAPACITY INCREASE OF PINNACLE POINT WWTW

Site/ Structure: PINNACLE POINT WWTW

Location: MOSSEL BAY – PINNACLE POINT WWTW

Client: MOSSEL BAY MUNICIPALITY

Engineer: WEC CONSULT (PTY) LTD

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Date:	<i>11TH Jan 2024</i>	Date:	<i>11th Jan 2024</i>	Date:	

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1. Objective

The objective of this document is to define the manner in which our Company anticipates delivering a quality services that meets the clients expectations and standards with regards to environmental management.

2. Policy

Lasting success for Khubeka Construction depends on its ability to provide continuously improved quality services, and at the same time protecting our employees and the environment in which we work. This commitment is in the best interests of our clients, our employees and our stakeholders.

As management, we confirm that it is our responsibility to ensure compliance, yet we rely on the active commitment and support of all employees, therefore will make every effort to preserve the Environment in the society in which we live and work.

Management is committed to the practical integration of environmental objectives throughout our management systems at all levels. We consider it essential to our business success as it reduces risk and adds value to our services.

3. Client Specified Environmental Requirements

Environmental requirements derived from the main contract document, the EMP specification for this project.

A hard copy will be available on site



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4. Site Specific Details

4.1 Location of construction site:



The Site Camp will be located on site at the Pinnacle Point WWTW as indicated above. The portion of the site located outside the existing works will be demarcated with barrier netting to indicate no go areas, where barrier netting can't be used signage will be placed in the area warning public as well as workers on site.

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4.2 Debris silt & other obstructions:

The site will be cleaned on a daily basis from litter and waste generated throughout the day and placed into Waste bins in accordance with section 4.4 of this Method Statement. Once the bins are full it will be removed and waste that can be recycled will be taken to local recycling business or the transfer station in Mossel bay and any unrecyclable waste to the landfill in Mossel bay, at least once a week.

Concrete debris will also be removed to the Mossel bay landfill site.

If/ when required, spoil sites for natural materials will be pre-approved by the landowner, DEO and ECO.

Sediment traps will be installed if & when required. If any erosion occurs as a consequence of construction activities, eroded areas will be rehabilitated to satisfaction of DEO and ECO.

Dust suppression will be controlled by means of water or straw where authorised

Other obstructions and waste materials generated on site will be dealt with in accordance with DEO & ECO instructions.

4.3 Storage of construction materials and hazardous substances:

Any hazardous materials required, i.e. cement etc. will be kept in a lockable store at the site as indicated on drawing. We envisage two storage containers at this site.

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All other materials to be stockpiled on site so as to encourage free draining, at approximate position as indicated on the locality map. All stockpiles will be kept to demarcated areas and reshaped & sloped during the contract.

Steel will be stored slightly above the ground on a clearly demarcated, cleared area within the demarcated construction zone.

4.4 Solid waste:

An integrated waste management approach will be adopted and implemented which is based on waste minimization. The recycling, reducing and re-using of waste will be considered as an alternative where appropriate. Solid waste will be disposed of at a registered landfill licensed in terms of section 20 of the Environment Conservation Act, 1989 (Act No. 73 of 1989). A demarcated area (or similar) will be provided for the storage of rubble. A bin will be provided in the site camp for waste. All bins will be emptied prior to reaching their capacity.

Steel off-cuts will be removed from site and sold to scrap metal dealers.

A water borne toilet will be erected on site and connected to the existing sewage treatment works

4.5 Wastewater:

We don't envision our works to generate any sewage wastewater, should any wastewater be generated it will be stored in a lined dam and pumped into the existing sewage treatment works for disposal

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4.6 Erosion and sedimentation control:

Access to and from site will be restricted at all times to prevent erosion. Plant, materials and other facilities will be placed so as to promote free draining. No personnel or plant allowed beyond demarcated areas.

Care will be taken not to remove any unnecessary trees, shrubs or bushes. Materials to be handled with care to prevent pollution. If required by the ECO a search and rescue operation (of indigenous plant species) will be conducted prior to construction.

To help minimize erosion, the site will be excavated with drainage channels to freely drain into the natural drainage line.

Sediment traps will also be installed downstream if & when required.

The DEO and ECO will be involved at all stages to ensure proper methods of dealing with possible erosion are in place.

4.7 Access to floodplain and watercourse:

None envisioned for this contract

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4.8 Water diversion/ drainage:

None Envisioned for this Contract.

4.9 Protection of natural features:

Access to and from site will be restricted via approved points only.

No trees or other natural vegetation will be wilfully removed or damaged. If any natural vegetation has to be removed it will not happen without prior consultation with the DEO & ECO.

Any discovery of archaeological artefacts or graves will be reported to the DEO, ECO and ER immediately. Work in these areas will be stopped until further notice.

Any other natural features that may be found will be reported and dealt with in a manner approved by the DEO & ECO.



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4.10 Fire control:

Fire control will be implemented by means of an onsite fire extinguisher. Firefighting equipment will be kept at suitable locations on site for the duration of the contract.

Firefighting will form part of the induction training for personnel and labour, and also form part of toolbox talks.

No one will be allowed to make a fire on site.

4.11 Cement & concrete batching/ on site mixing:

Concrete will be mixed on site over an impermeable surface (i.e. large wooden/steel boards, or similar) to prevent contact with the bare ground.

A wash out pond/ sedimentation trap lined with plastic will be created at every site where concrete mixing takes place. Cement will be ordered in bulk and placed on pallets covered with plastic in close proximity to site. The exact position/ location will be determined once on site with the necessary approval from DEO and ER. Concrete may also be ordered in bulk and be delivered via a mixing truck, and chuted directly into the structure.

All plant/ equipment used in the batching process will be checked daily to ensure they are free of leaks. In addition to this drip trays will be used as extra precautionary measure when plant items are stationary.



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Concrete will be discharged via a chute into place. Mixed concrete will be moved from the batching area to the site in a TLB/ concrete mixer or in wheelbarrows and discharged into the prepared formwork directly or with a chute.

No concrete will be cast prior to the necessary approval by the Engineers Representative.

Any spillage will be removed once set. If contaminated the spilled material will be placed in an area where all the debris is kept and removed to an approved landfill site in Mossel bay.

4.12 Plastering/ packing:

Plastering will be required on this site:

All Plaster will be batched on site by means of a mixer, all controls and stops will be implemented as per 4.11 Batching of Concrete.

All Plaster and Mortar will be stored during use on a hard impervious surface, (mortar boards or equivalent).

Any Excess Mortar or Plaster will be disposed of in the sedimentation trap for concrete mixing, and will be disposed of once a week or when required to the nearest landfill site, currently being Mossel bay.

4.13 Traffic accommodation / Dust Control

No Traffic accommodation is required for this contract.

Dust control where required will be implemented by using a hosepipe and spraying down the area generating the dust to suppress the dust.

If this is not viable and on instruction, we will use straw and spread this over the area to prevent dust generation.



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4.14 Stockpiling of topsoil and Excavated material

At this stage it is not envisaged that topsoil will have to be removed for the purpose of construction. If topsoil is found at any area where construction is required a 150mm layer will be removed.

The topsoil will be stockpiled neatly and maintained throughout the construction period for reuse at the landscaping stage. Topsoil will be stockpiled so that construction activities have no impact on it.

Excavated material will be carted off site, used as backfill to create the access road to the belt press building, and stored for backfilling around structures

4.15 Site rehabilitation:

After construction all remaining rubble, materials and debris will be removed from site.

Areas that are compacted will be ripped to encourage vegetation growth.

If a search and rescue operation was carried out prior to construction the vegetation will be placed back in positions as indicated by the ECO. Further landscaping to be carried out according to the ECO's instructions.

The objective would be to rehabilitate the site to a state that is acceptable to all parties. This process will take place with guidance from the ECO.

5. Environmental Aspects and Impacts Considered

- Pollution of watercourse
- Spillages that may affect the water and/or environment
- Storage of materials to minimize impact on environment
- Waste treatment & hazardous waste
- Dust control



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6. Emergency/ Disaster Incident and Reaction Procedure

Ensure that all personnel and employees are aware of the emergency procedures.

All personnel must evacuate to the designated assembly point

A fire extinguisher will be available on site.

A registered first aider and first-aid kit will be available on site.

An emergency spillage kit will be available on site.

The Foreman will have all the emergency telephone no's with him and contact the Site Agent immediately who in turn will notify the appropriate body/ authority:

Police (Mossel bay) - 044 606 2805

ER 24(Mossel bay) - 084 124

Site Agent (Mark Rennie) - 082 888 5778

Foreman (Ace Marakalla) - 071 323 3614

OHS Officer (Chris Liebenberg) - 060 531 6194

ECO Stefan Delport - 082 305 5097

Dept. Water Affairs - 021 - 941 6000 (Cape Town)
012 - 336 7500 (Pretoria)

Dept. Environmental Affairs - 044 - 805 8600 (George)