



**Western Cape  
Government**  
Environmental Affairs and  
Development Planning

Directorate Land Management (Region 1)

**REFERENCE:** 16/3/1/6/B3/28/1046/14  
**ENQUIRIES:** Ms. Arabel McClelland  
**DATE:** 28/03/2014

The Manager  
Boschenmeer Golf Estate  
Paarl Golf Club  
848 Wemmershoek Road  
PAARL  
7646

**Attention: Ms. Marion Stewart**

Tel: (021) 863 1140  
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Dear Madam

**RE: THE PROPOSED DREDGING AND REMOVAL OF SILT FROM DAMS AT BOSCHENMEER GOLF ESTATE, ERF NO. 8434, 19512 AND 19513, PAARL**

1. Your electronic correspondence received on 6 March 2014, refers.
2. Based on the information provided, the following is noted:
  - 2.1. Numerous water bodies exist within the Paarl Golf Club and Boschenmeer Golf Estate.
  - 2.2. The Boschenmeer Golf Estate development, which included a third nine hole golf course and residential component, was completed in 2002.
  - 2.3. Although Paarl Golf Club and Boschenmeer Golf Estate are managed by separate Boards of Directors, the Paarl Golf Club were under the assumption all environmental requirements had been met as part of their continued management of the extended 27 hole course.
  - 2.4. Storage dams, built as part of the development, form a vital part of the effective running of the golf course as well as a source of water.
  - 2.5. In addition to these dams, the Malan Stream crosses the 25<sup>th</sup> and 2<sup>nd</sup> fairways before draining into the Berg River. A second stream, the Wilde Paarde River, runs from the golf club entrance to the outlet under the N1 before also draining into the Berg River.
  - 2.6. Silt levels in the aforementioned dams have risen significantly resulting in an impact on the capacity of the dams as well as proving a flood risk. This siltation has also resulted in the current irrigation system becoming inefficient.
  - 2.7. In order to re-establish the dam levels, the proponent seeks to dredge the dams and remove built-up silt.

2.8. The Department of Water Affairs and the Drakenstein Municipality have, to date, been consulted with regards to the potential for the dredging and removal of the silt from the dams.

3. According to the available information and the Department's records, an environmental application was lodged and a Record of Decision ("RoD"), dated 30 November 1998 (DEA&DP Reference number AN 87/25/4 Erven 8434, 19512 & 19513), was issued. As part of this application, a subsequent Environmental Exemption RoD was issued on 19 June 2000 for the extension of the Boschenmeer Golf Village. This included reference to the approved construction and operational phase Environmental Management Plans ("EMP") that formed a component of the original Boschenmeer Golf Village. These authorisations were issued in terms of Section 22 and Section 28 respectively of the Environment Conservation Act, 1989 (Act No. 73 of 1989).
4. Page 5 of the Operational phase EMP notes the following:

*"The Malan Stream will however continue to carry silt from the farm lands upstream of the estate. This will necessitate periodic silt removal and maintenance in the stream bed and water features fed by this stream.*

*These two small streams [Malan Stream and Wilde Paarde River], where they traverse the estate and golf course, are greatly modified and can be considered as canalised. Approval of this EMP should therefore constitute approval from the relevant authorities of periodic maintenance in the streambeds in the form of silt-removal and hardening where necessary."*

It is, however, noted that in terms of the environmental application and EMP, no further detail or assessment of the proposed silt removal and maintenance measures in the streams are mentioned and no indication is provided with respect to the proposed methods or mitigation measures relating to this activity. Furthermore, no reference is made to dredging and removal of silt from any of the dams elsewhere within the Estate that are not connected to the abovementioned watercourses.

5. Therefore, in light of the above, your attention is drawn to the listed activities in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA") Environmental Impact Assessment ("EIA") Amendment Regulations 2010, as defined in GN No. R544, R545 and R546 of 18 June 2010. Be advised that, based on the information provided, the proposed dredging and removal of silt from the storage dams at the Boschenmeer Golf Estate may constitute a listed activity as defined in terms of the NEMA EIA Amendment Regulations 2010, specifically the following:

**Activity 18 of GN No. R544:**

*"The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from:*

- (i) A watercourse;

- (ii) The sea;
- (iii) The seashore;
- (iv) The littoral active zone, an estuary or a distance of 100m inland of the high-water mark of the sea or an estuary, whichever is greater-

but excluding where such infilling, depositing, dredging, excavation, removal or moving;

- (a) is for maintenance purposes undertaken in accordance with a management plan agreed to by the relevant environmental authority; or
- (b) occurs behind a setback line."

6. Further to the above, in light of the nature of the ongoing maintenance likely to be required in order to dredge and remove silt from the storage dams and watercourses on site to allow for effective management of the golf course, including the improving of on-site water storage capacity and irrigation, the Department recommends that a Maintenance Management Plan ("MMP") is submitted to this Department. Should the Department agree to the proposed MMP, future maintenance work specified within the MMP would not require an Environmental Authorisation prior to the undertaking thereof. Please refer to the attached Guideline for compiling a MMP.
7. Be advised that the MMP only relates to the listed activity mentioned above. If any other listed activities are triggered, an Environmental Authorisation must be obtained before the undertaking thereof. It remains the responsibility of the proponent to determine if any other listed activities are triggered and to ensure that the necessary Environmental Authorisation is obtained.
8. In addition, the Department notes in the correspondence received on 6 March 2014 that the Department of Water Affairs and Drakenstein Municipality have already been consulted. It is requested that written comment is obtained from the Department of Water Affairs confirming the appropriate way forward with respect to the "special emergency dispensation".
9. Notwithstanding this letter, the holder of the authorisation must ensure compliance with any other statutory requirements that may be applicable to the development.
10. Furthermore the holder of the authorisation is reminded of their general duty of care towards the environment in terms of Section 28(1) of NEMA, which states:  
  
*"Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment."*
11. Your interest in the future of our environment is greatly appreciated.

12. The Department reserves the right to revise or withdraw comments or request further information based on any information received.

Yours faithfully



**HEAD OF DEPARTMENT  
DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING**

## **SECTION B: GUIDELINE FOR COMPILING A MAINTENANCE MANAGEMENT PLAN**

*The Maintenance Management Plan (MMP) must be submitted together with the request for agreement to a Maintenance Management Plan in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), and the Environmental Impact Assessment Regulations, 2010 (Section A of this form). This section is intended to give guidance on the content of a MMP. It provides headings for the various sections that a MMP should contain, as well as a brief description of typical content under each heading. The headings in BOLD are sections that a MMP should include, while the other headings give an indication of sections that may be included in the MMP where applicable.*

### **INTRODUCTION**

This section may include an overview, details of the responsible party who will implement the MMP, engineers or other specialists appointed for the maintenance work, the Environmental Assessment Practitioner (EAP) or consultant appointed to compile the MMP. Please also include the expertise of the person who prepared the MMP.

### **DEFINITIONS OF TERMS AND ACRONYMS**

Acronyms and technical terms used in the Maintenance Management Plan should be defined or clarified so that the person who must implement the plan understands the document.

### **1 BACKGROUND**

### **2 RELEVANT LEGISLATION AND POLICIES**

This section gives a brief description of the environmental framework within which the Maintenance Management Plan is prepared, approved and implemented.

Please note that:

- a) The Maintenance Management Plan may be approved in terms of the NEMA EIA Regulations 2010 and only relates to Activity 18, Listing Notice 1 (GN R.544);
- b) This Maintenance Management Plan must also satisfy the statutory requirements of the National Water Act, 1998 (Act 36 of 1998, as amended) and the Conservation of Agricultural Resources Act, 1983 (Act 43 of 1983, as amended), where applicable;
- c) Maintenance work in watercourses, the sea, seashore, littoral active zone or 100m from the high water mark of the sea or estuary is not necessarily restricted only to "the infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock". Other activities might include expansion and construction that require a Basic Assessment to be undertaken.
- d) Approval of the Maintenance Management Plan does not absolve you from your general "duty of care" set out in Section 28(1) of the NEMA which states that "Every person who causes, has caused or may cause significant pollution or

degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment." (Note: When interpreting this "duty of care" responsibility, cognisance must be taken of the principles of sustainability as contained in Section 2 of the NEMA);

### 3 SITE LOCATION AND DESCRIPTION /PROJECT LOCATION & LAYOUT PLANS

3.1 Provide a location map (to appropriate scale e.g. 1:50 000) of the site (clearly indicate the site on the map) and directions to the site.

3.2 Provide a layout plan (to appropriate scale e.g. 1:10 000) of the site, indicating the existing development footprint, extent of proposed maintenance management work, and proximity to the river course/sea/seashore/littoral active zone. In addition, the 1:100 year flood-line (if known) and/or the 32 m line from its banks or the distance of 100m inland of the highwater mark of the sea/estuary and neighbouring sites/properties must be shown on a map.

3.3 You are required to attach aerial photographs (e.g. Google Earth image) and other supporting pictorial evidence or description that clearly illustrates the information required above.

3.4 Describe the site. Include any relevant information such as:

3.4.1 The type of ecosystem (e.g. valley bottom wetland, seeps, depressional wetland, mountain stream, foothill river, lowland river, estuary, etc.)

3.4.2 Mapped biodiversity features such as Critical Biodiversity Area, Ecological Support area, National Freshwater Ecosystem Priority Area, Threatened Ecosystems listed in Section 53 of the National Environmental Management: Biodiversity Act (NEMBA) etc. Please consult the website [www.bgis.sanbi.org.za](http://www.bgis.sanbi.org.za) to determine mapped features. If the site is included in a mapped biodiversity feature, relevant special input must be obtained.

3.4.3 Condition of the river channel type and river bed (e.g. riffle, fixed/canalised, excavated or dynamic (changes direction or position after floods)) and the condition and slope of the banks of the watercourse (e.g. mostly undisturbed indigenous vegetation or mostly alien plants or trees, or bulldozed or canalised). Include description of existing or previous protection measures or reinforcements (eg. gabions or groynes etc.). Describe any evidence of erosion and/or siltation.

3.4.4 Describe the riparian buffer zones. These are the vegetated areas along both sides of water bodies that generally consist of trees, shrubs and grasses. They act as buffers to protect surface waters from contamination and are habitats for a large variety of animals and birds. This must be supported with recent photographs.

3.4.5 Is the site prone to flooding? Please describe history and effect of past floods and include dates of most recent events. Describe measures that you have taken in the past to prevent erosion.

#### 4 OBJECTIVES OF MAINTENANCE ACTIVITIES/TERMS OF REFERENCE

4.1 Describe the objectives of the Maintenance Management Plan (Need & Desirability)

4.2 The Terms of Reference of the person or EAP appointed to draft this MMP may be included under this section.

#### 5 DESCRIPTION OF MAINTENANCE ACTIVITIES /BRIEF SUMMARY OF THE PROJECT

5.1 Description of proposed tasks (further details for the tasks may be provided in a method statement (a template is provided in the Table 1 and 2 below). The following must be included in this section:

5.1.1 The amount of material that will be deposited, removed or moved;

5.1.2 Location of intermediate and final storage/disposal of the material, and how it will be transported. Also state if any new or temporary access roads will have to be developed.

5.1.3 Approximate commencement date and duration in days for each task. Time periods within which the measures contemplated must be implemented. Indicate whether actions will be repeated, e.g. clearing of silt from under a bridge annually or after flood events.

5.2 Impacts on receiving environment:

5.2.1 A description of positive and detrimental environmental impacts. Describe what investigations or assessments have been undertaken (if any) to inform the Maintenance Management Plan.

5.2.2 Any mitigation or management measures proposed to address the environmental impacts. In terms of the mitigation hierarchy, detrimental impacts must be avoided; where it cannot be avoided, it must be minimised and mitigated.

5.3 Any specialist inputs obtained.

5.4 A description of any activities that have physically commenced on site. List the date of commencement of these activities.

#### 6 RESPONSIBLE PARTIES / ROLES & RESPONSIBILITIES

6.1 Names and details of relevant parties:

6.1.1 Name of Proponent or person who will undertake the maintenance activity; Contact Person (if other); Postal address; Telephone; E-mail;

6.1.2 Name of landowner; Contact person; Postal address; Telephone; E-mail. In instances where there is more than one landowner, please attach a list of landowners with their contact details, together with copies of the notices given to these landowners about the maintenance management plan.

6.2 Responsibilities and Functions of the Proponent / Implementing Agent.

#### 7 ENVIRONMENTAL EDUCATION / ENVIRONMENTAL AWARENESS PLAN

This section describes the manner in which persons undertaking the maintenance work will be informed of any environmental risk which may result from their work, and risks which must be dealt with in order to avoid pollution or the degradation of the environment.

**8 IMPLEMENTATION MANAGEMENT**

Camp Site; Access Routes; Alien Eradication (if not dealt with under "Description of Maintenance Activities").

**9 GENERAL CONTROL**

Refuse; Fires; Services; Erosion control; Demarcation of no-go areas; Noise from Maintenance activities; Fuel Spills; Occupational Health and Safety; Protection of Fauna and Flora.

**10 RESTORATION/REHABILITATION SPECIFICATIONS & SITE CLEAN-UP**

This section should include measures to rehabilitate the affected environment by the maintenance activity to its natural or predetermined state. This could include closure plans and closure objectives where appropriate.

**11 ENVIRONMENTAL MONITORING & REPORTING / AUDITING**

The monitoring programme must detect changes that will inform intervention or remedial measures for good environmental performance. The data collection, management and reporting must be documented and be made available for inspection. The following table can be used as a guide.

**Table for monitoring of actions**

<b>Part of the water course that is monitored</b>	<b>Frequency of monitoring</b>	<b>Monitoring Procedure</b>	<b>How results are analysed and presented</b>	<b>Comments</b>

**12 ANNEXURES:**

**ANNEXURE 1: AERIAL PHOTOGRAPHS AND SUPPORTING DOCUMENTS**

**NOTE:** Please attach aerial photographs and other supporting pictorial evidence that clearly show the site and adjoining property, the development footprint and the water course as an appendix. This includes:

- A locality map with scale at least 1:50 000, indicated on the map. The following must be indicated:



- Position of the project site(s);
  - Road names or numbers of all the major roads as well as access roads to the site(s);
  - North arrow;
  - Legend;
  - GPS co-ordinates for the centre point of the site in degrees and (three) decimal minutes. The projection must be the WGS-84 spheroid in a national or local projection.
- A site map with scale at least 1:10 000 that indicates:
    - Roads that provide access to the site;
    - North arrow;
    - Legend;
    - Locations for various methods, for example,
      - Location and area where material will be moved from and to, or removed;
      - Location where soil/sediment/debris will be stored/loaded, etc.;
    - Extent of indigenous vegetation, if present;
    - The 1:100 year flood line (if known) and the 32 m line from the banks of the watercourse.

## ANNEXURE 2: METHOD STATEMENTS

Please expand or contract the tables that follow for each task listed in 5 above, where necessary.

**NOTE:**

**The Department is entitled to request further information if it believes it is necessary for consideration of this request.**

**Table 1: Method statement that describes immediate proposed tasks, and assessment of their impacts**

Description of tasks and subordinate actions:					
<ul style="list-style-type: none"> <li>• Pre-work required.</li> <li>• Description of work to be done: what, when, where and how.</li> <li>• Access to and from the site.</li> <li>• Disposal of sand, soil, pebbles, shell, rock.</li> </ul>					
Actions	Potential impacts of these actions	Severity of impacts	Measures to mitigate the severity of these impacts	Corrective/remedial measures if mitigation measures are not properly implemented on site	
		<p><b>High:</b> Disturbance of area with important conservation value; destruction of rare or endangered species. No possible mitigation, or mitigation is difficult, expensive, time-consuming.</p> <p><b>Medium:</b> Disturbance of area with potential conservation value or of use as a resource; complete change in species occurrence or variety.</p> <p><b>Low:</b> Disturbance of degraded area with little conservation value; minor change in species occurrence or variety.</p> <p>Mitigation easily achieved or little required.</p>			

**Table 2: Method statement that describes future proposed tasks, and assessment of their impacts**

Description of tasks and subordinate actions:					
Actions	Potential impacts of these actions	Severity of impacts	Measures to mitigate the severity of these impacts	Corrective/remedial measures if mitigation measures are not properly implemented on site	
<ul style="list-style-type: none"> <li>• Pre-work required.</li> <li>• Description of work to be done: what, when, where and how.</li> <li>• Access to and from the site.</li> <li>• Disposal of sand, soil, pebbles, shell, rock.</li> </ul>		<p><b>High:</b> Disturbance of area with important conservation value; destruction of rare or endangered species. No possible mitigation, or mitigation is difficult, expensive, time-consuming.</p> <p><b>Medium:</b> Disturbance of area with potential conservation value or of use as a resource; complete change in species occurrence or variety.</p> <p><b>Low:</b> Disturbance of degraded area with little conservation value; minor change in species occurrence or variety. Mitigation easily achieved or little required.</p>			