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ENVIRONMENTAL COMPLIANCE MONITORING REPORT NO.24

FOR

OUTENIKUASBOSCH, FARMS OUTENIKUASBOSCH 149 AND HARTENBOSCH
217, HARTENBOS



Compiled by:

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Reference:

MOS23/455/90

Report Period:

May & June 2023

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Environmental Monitoring Report No. 24

This report monitors compliance against the Environmental Management Plan (Ref.: MOS22/455/48). This monitoring report constitutes the 24th Environmental Monitoring Report and covers inspections done during **May & June 2023** for the **civil services installation of Phases 4, 11, 12, 13 & 14, as well as** individual **house** construction.

This ECO report covers compliance monitoring for all works to date in terms of the EMPr and the EA in relation to civil services installation.

Commencement of **all listed activities** for the development (including the Resort zone) has taken place in accordance with the EA. The main road to the resort area has been constructed and the decking at the first resort unit complies with the aesthetic requirements.

Weekly ECO monitoring takes place during civil services construction phase (**phases 4, 12 & 14**) and monthly during individual **house** construction.

The **Operational phase has started** with some residents residing permanently within Outeniquasbosch. It is now important to ensure that all construction areas are demarcated appropriately to prevent any unauthorised entry or accidental injury (residents and animals). All effort should be made to ensure that the estate is always kept neat and tidy, this includes litter, construction rubble and management of invasive alien plants and weeds.

Garden and private rehabilitation areas of each erf must be approved by the ECO to ensure compliance with the EMPr and EA. This is to avoid property owners planting exotic or invasive plants in their garden or private rehabilitation area.

The HOA's Landscaping committee will assist with and oversee the approval of individual home gardens as well as landscaping and rehabilitation of the development nodes internal green/open spaces. The ECO is part of this HOA committee to ensure that there is compliance with the EMPr and EA at all times.

1. Environmental Induction

Environmental induction is done on a regular basis with individual erf contractors and their construction teams. No new environmental induction sessions were held during this reporting period. The ECO conducts environmental induction with building contractors as and when notified of new construction site commencing.

2. NO-GO Demarcation

In accordance with Section 5.3 of the EMPr for Outeniquasbosch the following is important in terms of Demarcation of No-Go areas:

- J *Civil contractors - all areas outside that of the defined works (roads and pipeline routes) is deemed a no-go area.*
- J *All construction activities must be restricted to the demarcated areas to ensure that no further disturbance into the surrounding vegetation. ECO to indicate the No-Go area applicable to each phase.*
- J *No encroachment or activities may take place outside the work areas.*
- J *No-Go areas will be required to be demarcated by the contractor to ensure that they are visible at all times, to all personnel.*
- J *Methods of demarcation will be agreed with the ECO and may include danger tape tied in a knot to a rod, rope, fencing, mulch bags, wire fencing, shade netting etc.*
- J *In light of the above, should access be required through a no-go area, permission must be obtained from the ECO in writing prior to the use of such an area.*

-)] The areas of special consideration may relate to the external service lines entering and leaving the property, e.g., the water pipes and storm water detention swales. All such activities must first be approved by the ECO prior to commencement of activities. Special conditions will be applied to each of these cases.
-)] Adjacent properties to the construction site may not be entered by any construction staff if permission is not granted by the owner.
-)] The ECO should monitor adherence to the No-Go area policy.
-)] Access into the No-Go areas by personnel is strictly forbidden (i.e., Work breaks such as lunch are not permitted outside the defined work area - no entry into the neighbouring properties or open space areas). A spot fine will be imposed against the contractor in the event of contravention of the no-go policy up to a maximum of R5 000 per incident).

Demarcating open trenches has been disused and the owner is required to do the following:

- Game generally stays away from excavations and therefore the main focus regarding demarcation of excavations (open holes) relate to person safety. Ongoing monitoring of the game movement and activity is the responsibility of the owner and demarcation must be installed upon instruction from the said owner - Health and Safety consultant to monitor person safety requirement.

Civil services installation of **phases 12 and 14** are well underway. Due to the distance from the main construction site camp, the contractor stored material at the entrance of phase 12, which have not been demarcated. The contractor undertook to remove excess construction material and stockpile in the main (demarcated) stockpile site near phase 3. The construction material stockpile area **must** be rehabilitated to the satisfaction of the ECO before final handover to the developer.

The open space between phases 12 and 14 have been demarcated with painted wooden poles.

Civil installations in **phase 4** are nearing an end with the main access route almost complete. No additional construction routes may be created without ECO approval.

Regular toolbox talks must be done with all drivers and machine operators to remain on the existing temporary construction roads or new permanent roads where they are complete.

There is currently no demarcation of the construction routes in **phases 4, 12 and 14** – the contractor is requested to demarcate the construction routes (small piles of stones or similar as the zebras tend to bump the demarcation over) – the phase 4 contract is almost complete; therefore the contractor will have to rehabilitate these routes before final handover to the developer/HOA.

Due to the excessive rainfall during the last two months, access to the civil construction site was limited and very difficult, however, any deviations from the approved construction routes must be rehabilitated appropriately before final handover to the developer.

- It is required that the construction routes are demarcated to prevent any unnecessary deviation from the routes – **sales staff and residence must be made aware of the construction site and restricted access.**

Individual house construction is underway in Phases **1, 2, 3, 10, 11, and 13**. Each building site must be demarcated (including stockpile area), the Architectural Control Officer (ACO) monitors daily compliance. Demarcation around construction sites ensure that no construction activity is contained to the development zone and doubles as silt trap in times of heavy rain.



All construction activities (building and storage) must be within the demarcated development area (of each erf) and not within the rehabilitation zone of the erf – **Construction material is not allowed to be stored outside of the house construction demarcation – ACO to monitor daily.**

3. Fauna and Flora

The civil and building contractors must ensure that no harm or damage is done to any fauna or flora during active construction periods. Harm or damage can be mitigated by surveying the area to be excavated or cleared to ensure that no animals or plants are affected.

Ongoing eradication of listed invasive alien plants (Stinkblaar) must be done during construction, especially on the stockpiles.

Plant search and rescue must be done before any new construction (building or civil) starts, ECO to be contacted to confirm that plant search and rescue is complete before proceeding with construction.

4. Soil & Site Management

Topsoil **must** be kept separate from any other subsoil or construction material to prevent contamination. The topsoil must be used for rehabilitation around the construction area. For civil construction this is the road verges, services etc. and home building this is the rehabilitation zone around the house and construction material storage area.

Dust mitigation measures (keeping the roads wet) are implemented when dust becomes an issue.
– the civil contractor is using a water truck on dry and hot days to water the construction haul routes.

Only approved identified temporary construction roads in **phases 4 & 12 & 14** must be used to avoid damage to topsoil and vegetation. Regular toolbox talks must be done with all drivers and machine operators to remain on the existing temporary construction roads.

After and/or during ECO site inspections, disturbance areas/erosion etc. gets reported to the responsible contractor and fixed. See examples below:

The area received plenty of rain during May and June 2023 and it is therefore important to monitor the site(s) carefully as areas susceptible to erosion that was **not** previously identified as high erosion risk areas have subsequently eroded during the heavy rainfall. Areas that did suffer soil erosion will have to be rehabilitated by replacing topsoil (which can be rescued from any building site in the

development) and seeded with the indigenous grass seed mixture and erosion protection as discussed in section 7.

The silt fences that were installed at the stormwater outlets in phases 4, 12 and 14 have proven to work effectively if maintained, the contractor is required to keep the silt fences clean after every rainfall event to ensure that it functions effectively.



(2023.05.12) – The old temporary parking area at the entrance alongside Oupoot Street have been rehabilitated.



(2023.05.12) – Erven that were disturbed during house construction (**phase 2**) have been rehabilitated.



5 May 2023 – contractor busy installing grass blocks in the stormwater channel (phase 11).



(2023.05.12) – Stormwater management (grass blocks) in **phase 11**.



(2023.05.23) – Silt fences at stormwater outlets in phases 4, 12 and 14 proved to be effective **(provided that they are cleaned after rain spell)**



(2023.05.23) – Once the main road and sides/walkways are completed, then the road verges will be rehabilitated **(phase 4)**.



(2023.05.23) - Large areas have been left bare that require immediate rehabilitation **(phase 4)**.

5. Heritage Requirements

Should any heritage remains be exposed during excavations or any actions on the site, these must immediately be reported to the Provincial Heritage Resources Authority of the Western Cape, Heritage Western Cape (in accordance with the applicable legislation). Heritage remains uncovered or disturbed during earthworks must not be further disturbed until the necessary approval has been obtained from Heritage Western Cape. Heritage remains include archaeological remains (including fossil bones and fossil shells); coins; indigenous and/or colonial ceramics; any articles of value or antiquity; marine shell heaps; stone artifacts and bone remains; structures and other built features; rock art and rock engravings; shipwrecks; and graves or unmarked human burials.

A qualified archaeologist must be contracted where necessary (at the expense of the applicant and in consultation with the relevant authority) to remove any human remains in accordance with the requirements of the relevant authority.

- No heritage remains have been discovered to date.

6. Construction Site Management

Contractors (civil and house construction) must provide ablution facilities for all construction personnel working on the site. One facility for every 15 persons on site is required.

- Toilet facilities are available for the civil contractor's staff and at each home building site. Use of the toilet facility must be included as a toolbox talk topic.



(2023.06.09) – Evidence of ablution facility at individual housing construction (note the green net was temporary removed to work on HOA infrastructure).



(2023.05.05) – General view of site camp at **phase 12** with included ablution facility.

Any concrete batching areas are to be approved by the ECO prior to utilization and must be equipped with suitable settling ponds and trapping mechanisms to ensure that contaminated water does not leave the restricted area or contaminate natural veld.

- Home construction – cement mixing must be contained within the disturbance footprint and on a non-permeable layer (wooden sheet/plastic etc) to prevent soil contamination.
- **Ready-mix trucks are not allowed to be washed on site.**
- The cement slab processing area is demarcated to prevent further encroachment into natural areas.



(2023.06.09) – Bunding for cement mixing in place (note that it is required that all construction activities be confined to the demarcated housing construction zone).

There should be a secure access point to the construction site in order to ensure that no unauthorized entry is permitted which may lead to a safety or security risk.

- Access to Outeniquasbosch Eco Estate is controlled through access-controlled gates/booms and via temporary construction haul routes.

Any temporary haul roads or access roads for construction need to be maintained at all times by the contractor.

- The contractor must maintain the current construction haul road. **Driving off the designated haul roads or access roads is not permitted.**
- Construction vehicles must **abide by the speed limit** as this is a wildlife estate with animals roaming freely.
- The temporary haul road next to phase 4 is demarcated with painted stones – **all haul roads must be demarcated**
- *Singular temporary construction roads in **phases 4 & 12 & 14** must be used. Regular toolbox talks must be done with all drivers and machine operators to remain on the existing temporary construction roads.*

7. Civil Construction

) Construction and installation of services for **phases 4, 12 & 14** are ongoing.

- Topsoil and subsoil must be stored separately.
- Minimal vegetation disturbance is allowed during civil services installation – as per the engineering design.
- **No new temporary haul roads may be created without ECO approval.**
- Toolbox talks must include use of toilet and littering as topics.



General view of the construction site – Phase 12

The contractor will be responsible for the rehabilitation of all disturbed areas (including temporary construction haul routes) at the end of construction and before handing the services back to the developer/HOA.

 (2023.06.09) – stormwater swale to be completed and vegetated with indigenous grasses and plants once topsoil is replaced.	 (2023.05.23) – Finalise stormwater outlet structures and rehabilitate and erosion protection.
 (2023.05.23) – All temporary construction roads must be rehabilitated – rip compacted soil, replace topsoil and seed with indigenous grass seeds.	

Rehabilitation: Road reserve/verges of phases 4, 12 and 14 are being rehabilitated by the civil contractor. The following (but not limited to) rehabilitation steps is to be followed:

9.1.1 ROAD VERGES

- Road construction should limit the disturbed area to the minimum within the road reserve.
- Trimming of banks to a suitable grade for vegetation.
- Topsoil from the site stockpile is required on all exposed surfaces.
- Stabilizing seed mix of indigenous grasses on all large exposed slopes.
- Mulch and brushwood should be used to retain moisture on cuttings until germination and seedling establishment have taken place.
- A geofabric and brushwood may be required on steep slopes.
- Watering will improve the success rate of the rehabilitation during dry periods.

The planting of rescued plants onto the grassed slopes will have to take place with extreme care to avoid damage to the geofabric and destabilisation of the slopes.

EMPr Section 9

Additionally, the contractor can use mulch filled sausages staked horizontally to the steeper slopes along the roads to further curtail soil erosion.



Example of mulch filled sausages.

8. Home and/or Unit Construction

Construction of individual houses within the development is ongoing and must comply with the EMPr requirements (as well as with the Outeniquasbosch Construction Guidelines).

- J The construction zone demarcation must be installed (recommended 1-2m around the house footprint) before construction commences and must be maintained throughout the entire construction period and the site must be fully closed off during inactive periods to prevent the animals from entering your site.
- J Adequate litter and waste management (skip, container, bin, etc) must be available on site and must be closed or emptied before leaving the site (evenings/weekends).
- J Cement contaminated runoff water must not be allowed to enter the adjacent properties, open/green corridor or stormwater network.
- J Written confirmation must be obtained from the landowner of the Erf where you intend to stockpile your material if not on the same property as construction, please note that this area must also be demarcated and fully rehabilitated.
- J Environmental Induction must be done with all staff members working on site before construction activity starts – it is the contractor's responsibility to notify the ECO at least one week in advance of when new staff is to start on site.
- J All areas outside the construction zone boundary that is disturbed during construction must be rehabilitated before construction is completed and before the construction completion certificate can be issued.
- J Please take note that all construction vehicles (including and especially delivery trucks) MUST abide by the speed limit. This is a game farm with animals roaming freely and any vehicle spotted that disobey the speed limit will be fined and/or asked to leave the site immediately.
- J Please take note that all construction rubble and litter MUST be contained in a skip or suitable (and closable) container to ensure that NO litter or construction waste gets blown away by the wind. The ECO will monitor this, as this is an Eco estate with antelope roaming freely.

The Operational phase has started with some residents residing permanently within Outeniquasbosch. It is now important to ensure that all construction areas are demarcated appropriately to prevent any unauthorised entry or accidental injury (residents and animals). All effort must be made to ensure that the estate is always kept neat and tidy, this includes litter, construction rubble and management of invasive alien plants and weeds.

Each contractor is responsible for the rehabilitation of all disturbed areas at the end of construction and before occupation is handed over.

9. Conclusion & Recommendations

The civil contractor is aware of the environmental requirements in the EMP. It is advised that the contractors (**civil and home building**) do regular toolbox talks with all staff members with special focus on littering.

The building contractors are also to be reminded to ensure that the No-Go demarcation and safety netting is maintained to ensure that no animals get injured and prevent construction sprawl.

Construction and installation of services in **phases 4 & 12 & 14** are being monitored by the ECO – the contractor is reminded to ensure that singular temporary construction haul routes are used. Road verge and stormwater outlet rehabilitation is ongoing.

Silt fences at the stormwater outlet structures (phases 4, 12 & 14) must be maintained – remove silt and ensure bidim is upright.

ECO monitoring for during **May & June** 2023

Date:	Comment:
5 May 2023	ECO site inspection of the civil contractor & civil construction site meeting
12 May 2023	ECO site inspection of the civil contractor & houses inspection
19 May 2023	Landscape Committee Inspection and ECO site inspection
23 May 2023	ECO site inspection of the civil contractor & houses inspection
1 June 2023	ECO site inspection of the civil contractor & houses inspection
9 June 2023	ECO site inspection of the civil contractor & houses inspection
22 June 2023	ECO site inspection of the civil contractor & houses inspection
24 June 2023	Outeniquasbosch AGM meeting
28 June 2023	ECO site inspection of the civil contractor & houses inspection