

**Exemption Letter – Proposed Filling Station and Associated Infrastructure on Erf 10769, Middelburg X26, Middelburg
Steve Thwete Local Municipality in the Mpumalanga Province.**

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Pearl Star Investments 85 cc intends to develop a filling station and associated infrastructure on Portion 1 of Erf 10769, Middelburg X26, Middelburg. The site is located opposite Barloworld Toyota, south of La Roca Boulevard/Spring Street. The site is 5000 m² in extent. The filling station will comprise of underground tanks, fuel pumps, a canopy covered forecourt and a convenience store.

Figure 1: Locality Map (AdiEnvironmental cc)



Recommendation

This letter serves as a Letter of Exemption. The development will be located on a Formation with a Low Palaeontological sensitivity, therefore there is a low possibility that significant fossils will be present in the bedrock of these geological units. The formation is surrounded by the Dwyka Group of Moderate Sensitivity and the Selons River Formation with a Low Sensitivity, therefore a Desktop Study or Field Study is not necessary (Groenewald and Groenewald 2014).

Geology of the area

The development will be situated on the Loskop Formation consisting of shale, sandstone, conglomerate, and volcanic rocks. It is Vaalian in age (2 100 – 2 200 Ma) and situated above the Rooiberg Group of the Transvaal Supergroup and underlies the Waterberg Group. This formation reaches its maximum thickness of about 1000 m in the area north of Middelburg. It stands as a formation on its own (Kent 1980).

Figure 2: Footprint of development (Walraven 1978)



Legend to Figure

- Pd – Tillite, shale (brown). Dwyka Group, Karoo Supergroup. Permian.
- Vls – Shale, sandstone, conglomerate; volcanic rocks (khaki). Loskop Formation. Vaalian.
- Vs – Volcanic rocks; quartzite xenolith; sandstone and quartzite (amber). Selons River Formation, Rooiberg Group, Transvaal Supergroup.
- – Approximate position of development on the R35 Road.

The Loskop purple-grey shales are sequentially overlain by beige silt derived from in-situ decomposed shale and brown colluvial silty sand. Dolomite, sinkholes or doline areas, watercourses and alluvium do not occur on site.

References

- Groenewald, G. and Groenewald, D., 2014. SAHRA Palaeotechnical Report: Palaeontological Heritage of the Gauteng Province. South African Heritage Resources Agency.
- Kent, L.E. 1980. Part 1: Lithostratigraphy of the Republic of South Africa, South West Africa/Namibia and the Republic of Bophuthatswana, Transkei and Venda. SACS, Council for Geoscience, *Stratigraphy of South Africa, Handbook 8, Part 1*, Pp690.
- Visser, D.J.L. (ed) 1989. *Toeligting: Geologiese Kaart (1:100 000). Die Geologie van die Republieke van Suid Afrika, Transkei, Bophuthaswana, Venda, Ciskei en die Koningkryke van Lesotho en Swaziland*. SACS, Council for Gesoscience.
- Walraven, F. 1978. 1:250 000 Geological Map of Pretoria, 2528. South African Committee for Stratigraphy, Council for Geoscience.

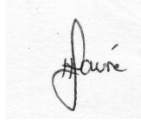
Declaration / Disclaimer (1b)

I, Heidi Fourie, declare that I am an independent consultant and have no business, financial, personal or other interest in the proposed development project for which I was appointed to do a palaeontological assessment. There are no circumstances that compromise the objectivity of me performing such work.

I accept no liability, and the client, by receiving this document, indemnifies me against all actions, claims, demands, losses, liabilities, costs, damages and expenses arising from or in connection with services rendered, directly or indirectly by the use of the information contained in this document.

It may be possible that the Exemption Letter may have missed palaeontological resources in the Project Area as the presence of outcrops are not known and may only be found once development commences.

This report may not be altered in any way and any parts drawn from this report must make reference to this report.

A small, square image showing a handwritten signature in black ink on a light-colored background. The signature is cursive and appears to read 'Fourie'.

Dr H. Fourie