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Dr Ragna Redelstorff
Heritage Officer Archaeology, Palaeontology & Meteorites Unit
South African Heritage Resources Agency
111 Harrington Street
Cape Town 8001

Dear Dr Redelstorff

RE: Request for Exemption of any Palaeontological Impact Assessment for the proposed Steynsrus SEF on three farms, northwest of Steynsrus, Free State Province

In my capacity as a professional palaeontologist, I am requesting exemption for palaeontological impact assessment in terms of the National Heritage Resources Act (Act 25 of 1999) and the National Environmental Management Act (Act 107 of 1998) which requires that the proposed development must be preceded by the relevant impact assessment, in this case for palaeontology.

CR Renewables is proposing to develop the Steynsrus 10MW Solar PV Facility on portions of three farms, Kleindeel 1342, Arbeid 2154 and Weltevrede 2151, to the northwest of the town Steynsrus (Figure 1). The solar array facility will be placed just south of the railway line.

The entire area of the three farms is on non-fossiliferous Jurassic dolerite. This is a volcanic rock that intruded through the sediments of the Karoo Supergroup at the same as time as the Drakensberg basalts were emplaced. Volcanic rocks do not preserve fossils; in fact they tend to destroy any fossils that might occur in their near vicinity. There is no chance of finding fossils in the current project footprint but a Fossil Chance Find Protocol has been added to this letter for the northern Adelaide Subgroup and the southeastern Tarkastad Subgroup (both in the Beaufort Group) that might preserve fossil bones of extinct vertebrates (Figure 2) (Johnson et al., 2006). The SAHRIS palaeosensitivity map supports the zero palaeosensitivity (grey colour, Figure 3).

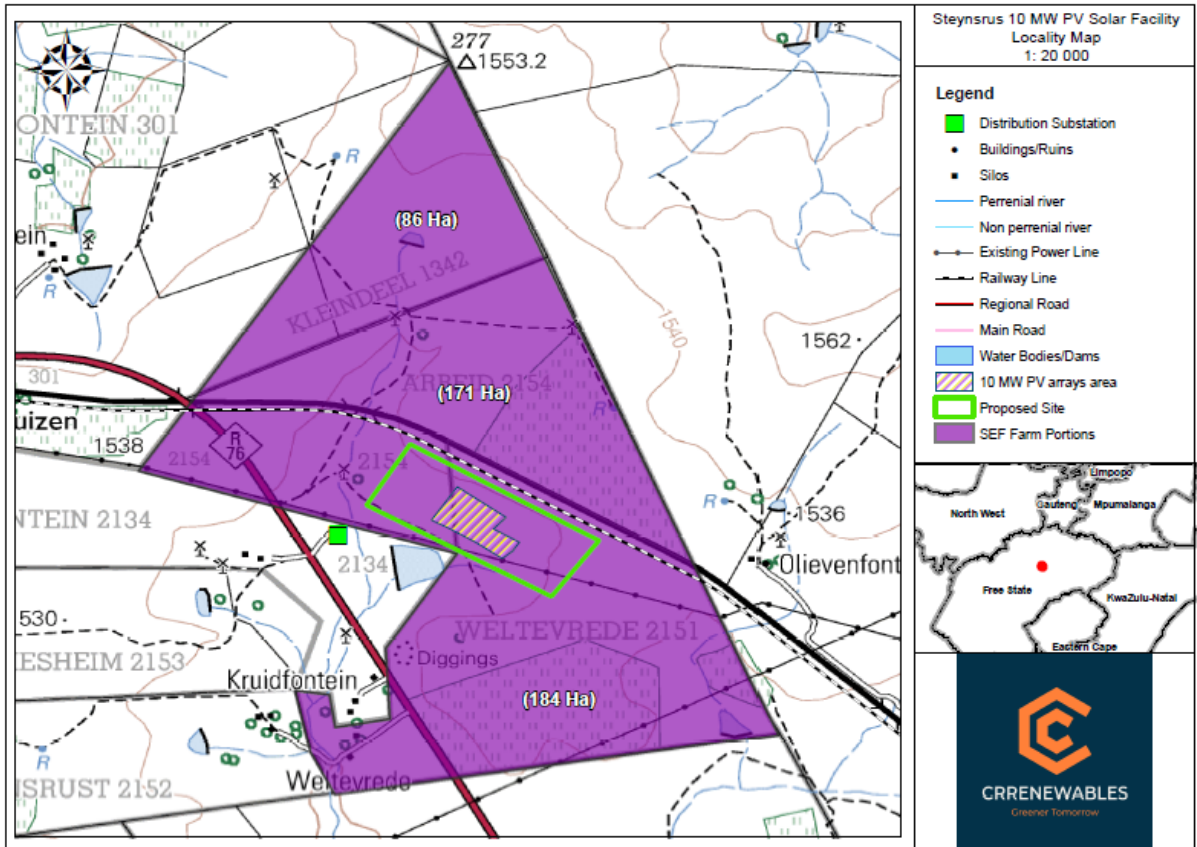


Figure 1: Locality map for the Steynsrus 10MW SEF.

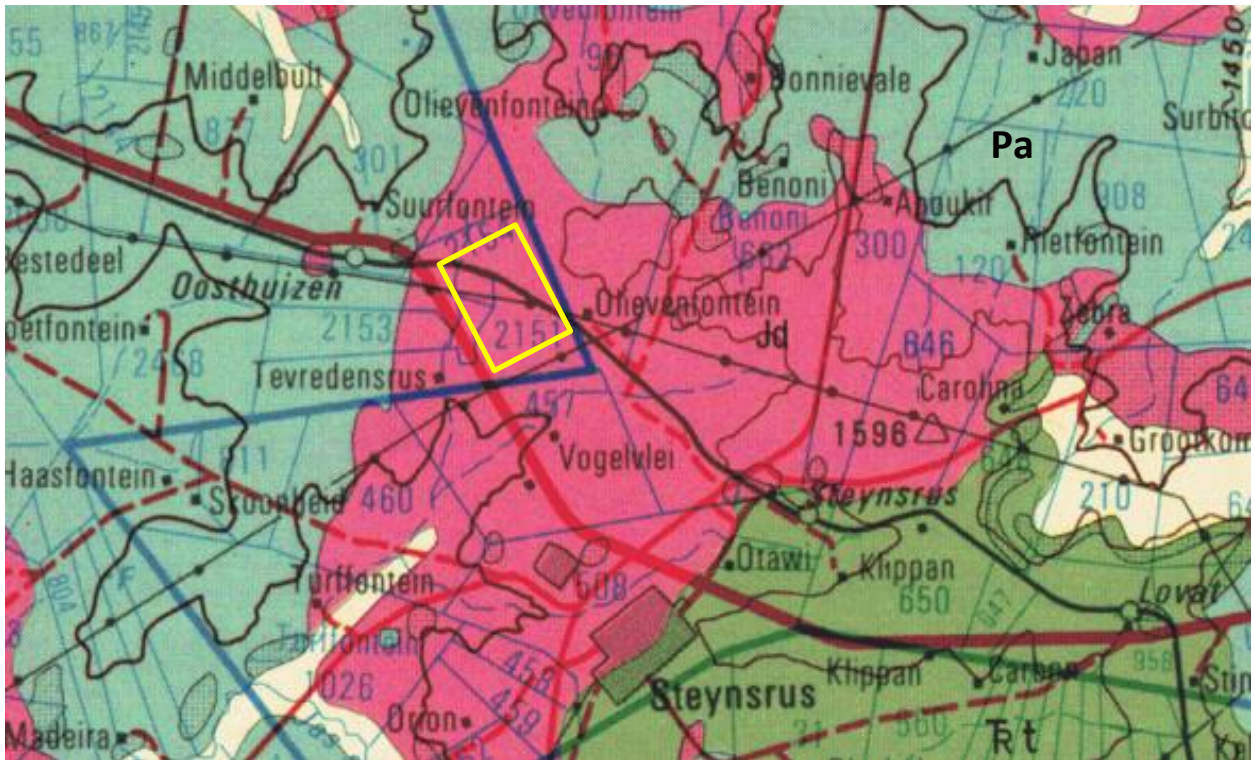


Figure 2: Geological map of the area around the proposed Steynsrus SEF, shown within the yellow rectangle. Abbreviations of the rock types are: Jd = Jurassic dolerite; Pa =

Adelaide Subgroup; Tr-t = Tarkastad Subgroup. Map enlarged from the Geological Survey 1: 250 000 map 2726 Kroonstad.

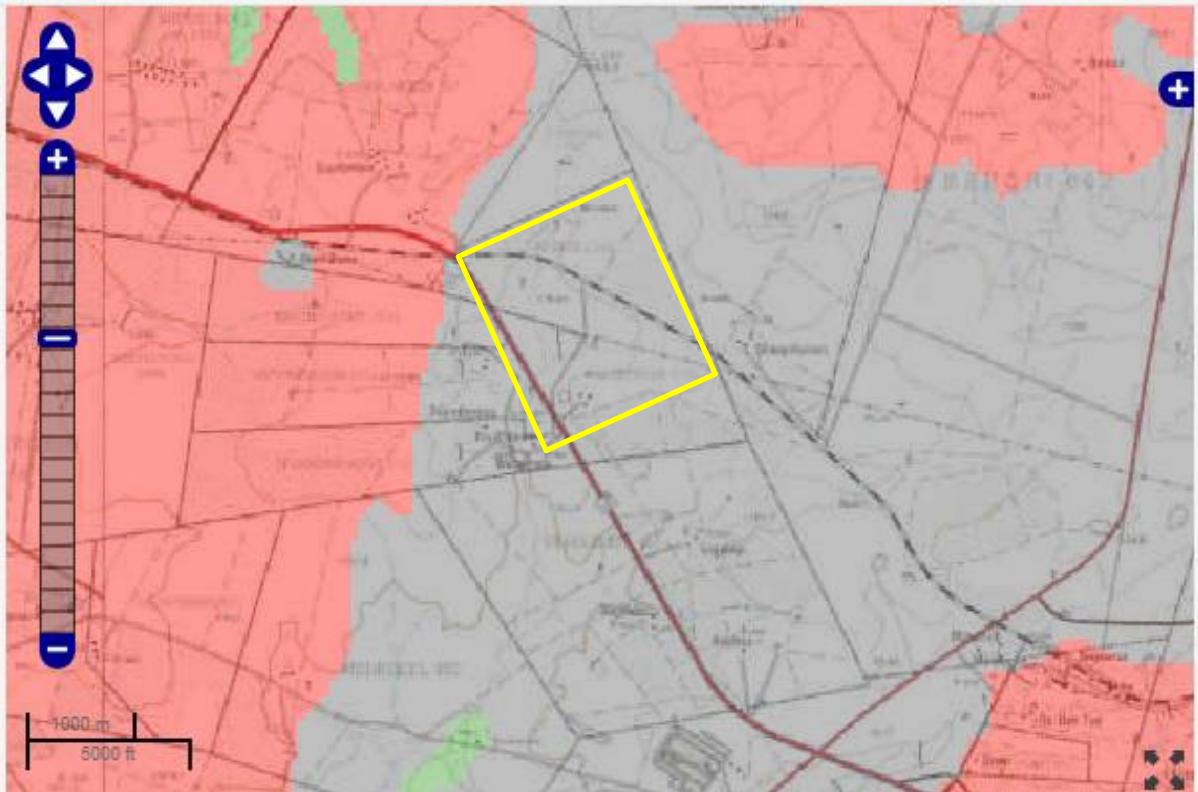


Figure 3: SAHRIS palaeosensitivity map for the site for the proposed Steynsrus SEF shown within the yellow rectangle. Background colours indicate the following degrees of sensitivity: red = very highly sensitive; orange/yellow = high; green = moderate; blue = low; grey = insignificant/zero.

Yours faithfully

A handwritten signature in blue ink, which appears to read 'M Bamford'. The signature is written in a cursive style and is positioned above a horizontal line.

Prof Marion Bamford
Palaeobotanist; PhD (Wits 1990)

Chance Find Protocol

Monitoring Programme for Palaeontology – to commence once the excavations and construction activities begin.

1. The following procedure is only required if fossils are seen on the surface and when excavations commence.
2. When excavations begin the rocks and must be given a cursory inspection by the environmental officer or designated person. Any fossiliferous material (trace

fossils, stromatolites, plants, insects, bone or bone fragments) should be put aside in a suitably protected place. This way the project activities will not be interrupted.

3. Lists of possible fossils can be provided to the developer to assist in recognizing them.
4. Photographs of the putative fossils can be sent to the palaeontologist for a preliminary assessment.
5. If there is any possible fossil material found by the contractor, developer or environmental officer then the qualified palaeontologist sub-contracted for this project, should visit the site to inspect the selected material and check the dumps where feasible.
6. Fossil plants or vertebrates that are considered to be of good quality or scientific interest by the palaeontologist must be removed, catalogued and housed in a suitable institution where they can be made available for further study. Before the fossils are removed from the site a SAHRA permit must be obtained. Annual reports must be submitted to SAHRA as required by the relevant permits.
7. If no good fossil material is recovered then no site inspections by the palaeontologist will be necessary. A final report by the palaeontologist must be sent to SAHRA once the project has been completed and only if there are fossils.
8. If no fossils are found and the excavations have finished then no further monitoring is required.

Reference cited:

Johnson, M.R., van Vuuren, C.J., Visser, J.N.J., Cole, D.I., Wickens, H.deV., Christie, A.D.M., Roberts, D.L., Brandl, G., 2006. Sedimentary rocks of the Karoo Supergroup. In: Johnson, M.R., Anhaeusser, C.R. and Thomas, R.J., (Eds). The Geology of South Africa. Geological Society of South Africa, Johannesburg / Council for Geoscience, Pretoria. Pp 461 – 499..

Palaeosensitivity map:

<https://sahris.sahra.org.za/map/palaeo>

Declaration of Independence

This letter has been compiled by Professor Marion Bamford, of the University of the Witwatersrand, sub-contracted by AHSA (Pty) Led, Pretoria, South Africa. The views expressed in this report are entirely those of the author and no other interest was displayed during the decision making process for the Project.

Specialist: Prof Marion Bamford

Signature:

