ADDENDUM TO FRESHWATER ASSESSMENT REPORT FOR THE PROPOSED RELOCATION OF THE KOEBERG INSULATION POLLUTION TEST STATION AND CONSTRUCTION OF ASSOCIATED INFRASTRUCTURE

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1. BACKGROUND

The Koeberg Insulator Pollution Test Station (KIPTS) is a naturally polluted insulation test station. The test station is located south of the Koeberg Nuclear Power Station which is approximately 30km northwest of Cape Town, on the west coast of South Africa. The purposed of KIPTS is to determine the suitability of composite insulator products for use on the ESKOM system by testing them in field conditions on an ongoing basis. Environmental changes and the promulgation of new environmental legislation has resulted in the KIPTS needing to be relocated in order that it can be operated safely or expanded cost effectively. ESKOM has identified a new site for the KIPTS which exhibits similar field characteristics as the current site. The site is located adjacent to the western edge of the Koeberg power station.

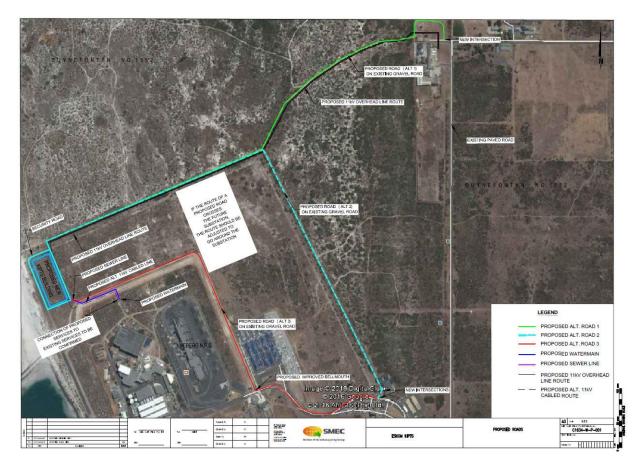


Figure 1. Proposed layout for the new Koeberg Insulator Pollution Test Station

A freshwater assessment report has been compiled for the proposed KIPTS. The access road options assessed in the report are likely to change due to security issues with both of the preferred routes. The access road will however be constructed within the block between the red and blue routes (Alternatives 2 & 3), but the exact route will only be determined much later on once the security issues and the position of the future 400kV substation have been determined. This addendum report to the initial freshwater assessment report is specifically intended to address the altered road option.

2. SUMMARY OF FINDINGS AND RECOMMENDATIONS FROM THE FRESHWATER ASSESSMENT

Below is a summary of the conclusions and recommendations of the freshwater assessment for the project:

Aquatic features within the area of the proposed project activities comprise the following:

- Some dune slack wetland areas are located in the south-western extent of the study area, along the access road to the existing KIPTS site; and
- There are no significant aquatic ecosystems within the proposed KIPTS site, only a small dune slack wetland that occurs along the proposed Alternative 1 access road.

The dune slack wetlands are considered to be largely natural and of a moderate ecological importance and sensitivity. In terms of biodiversity conservation mapping, only the dune slack wetlands near the existing KIPTS are mapped in the City of Cape Town Biodiversity Network wetland mapping. There is no Freshwater Ecosystem Priority Area mapping within the area.

The proposed project is located within a private nature reserve where there is ongoing control of activities as well as the control of invasive alien plants. The existing KIPTS is located within a dune area that is largely surrounded by natural vegetation and dune slack wetlands. The new KIPTS will be located adjacent to the power plant where the area is more disturbed and transformed. Thus once construction, decommissioning and rehabilitation activities associated with the proposed project are complete, a low positive impact can be expected over the longer term.

Construction activities should as far as possible be limited to within the already disturbed areas. The disturbed areas should be rehabilitated after construction is completed by revegetating these areas with suitable indigenous plants if necessary. Monitoring and control of invasive alien plants should be undertaken on an ongoing basis, especially within the disturbed areas.

The potential impact on aquatic habitat would best be mitigated by ensuring that the various elements of the proposed activity avoid these aquatic habitats through the selection of the alternatives that are located away from any aquatic feature. With regards to the various alternatives under consideration:

- Alternative sites: The preferred KIPTS site is likely to have the least potential impact on the aquatic features in the area as there are no aquatic features identified within this site.
- Alternative access roads: Of the proposed access roads, Alternative 3 is likely to have the least (nil) potential impact on the aquatic features, followed by Alternative 2. Alternative 1 has the largest potential

impact due to the location of a small wetland area adjacent to the road that could potentially be impacted on by the proposed activities.

• Alternative power lines: Alternative 1 entails only a short section of underground line close to the water and sewer lines. There are no freshwater features within this area thus this alternative would not have a potential impact on any aquatic ecosystems. Alternative 2 will be located along Alternative 2 Access Road that would also have little to no potential aquatic ecosystem impacts as discussed in the previous bullet.

The risk of the proposed activities degrading the aquatic ecosystems in the area is considered to be low. The water use activities associated with the proposed relocation of the Koeberg Insulator Pollution Test Station are thus such that they can be authorised in terms of the General Authorisations for Section 21(c) and (i) water uses.

Considering that the No-Go Alternative would imply that the existing site that is located near the dune slack wetlands in the site would need to continue to be maintained and operated, posing a greater risk of impacting on these wetland areas than the new proposed site, the proposed relocation of the KIPTS is supported.

3. CONSIDERATION OF PROPOSED AMENDMENT TO THE DEVELOPMENT LAYOUT

Provided the wetland area indicated in the highlighted bullet above is avoided, no additional wetland areas were identified within the area indicated for the new access road alignment (Figure 2). *The proposed changes to the KIPTS and its associated infrastructure are thus not likely to result in an increased level or nature of impact, or result in a change to the significance of the impact assessed in the original freshwater impact assessment for the proposed project.* No additional mitigation measures to those recommended in the original specialist report are required.

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Figure 2. Map providing an indication of the wetland areas (yellow ovals) identified within the study area over and above those mapped in the City Biodiversity Network and the Freshwater Ecosystem Priority Areas. The pink oval shows the area under consideration for the new access road alignment.