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SITE CLOSURE REPORT

FOR THE

EXTENSION OF A CAR PARK AT KOEBERG NUCLEAR
POWER STATION ON CAPE FARM 1552,
DUYNEFONTYN, CAPE TOWN.

PREPARED FOR: ESKOM HOLDINGS SOC LIMITED
Koeberg Nuclear Power Station
R27 Off West Coast Road
Melkbosstrand

DATE: November 2021

REPORT NO: ECO/Koe/CLOSURE/11/2021

DEA EIA REF NO: 14/12/16/3/3/1/1687

COPY TO: ESKOM: Deon Jeannes (Nuclear Environmental Manager), Jana Klopper (Power station EO / environmental manager), Tshililo Ramaru (Nuclear Environmental Manager), Jurina Le Roux (Nature reserve EO / manager), Melvin van Rooyen, Ilse Coop (Safety, Health and Environmental Coordinator)
GRIDBOW: Project Team



PROJECT DETAILS

TITLE: The extension of a car park at Koeberg Nuclear Power Station on Cape Farm 1552, Duynefontyn, Cape Town.

LOCATION: Koeberg Nuclear Power Station
R27 Off West Coast Road
Melkbosstrand

ENVIRONMENTAL CONSULTANCY: Sharples Environmental Services cc.

PRIMARY ECO & AUTHOR: Mr Lloyd Barnes (ECO)

EXPERTISE: Lloyd has a Bachelor of Technology Degree and Diploma in Environmental Management from the Cape Peninsula University of Technology in 2016. He has 3 years' experience in the environmental field, including the extensive auditing of several open-cast mines, basic environmental assessments, on-site compliance monitoring, environmental management plans, maintenance management plans and business sustainability. In his time as a consultant, he has compiled a number of environment audits and management plans for a range of developments.

CHECKED AND APPROVED BY: Ms Betsy Ditcham (Supervising ECO)

EXPERTISE: Betsy has a Bachelor of Science Honours Degree in Wildlife Management from the University of Pretoria and a Bachelor of Science Degree (Zoology and Ecology) obtained from the University of Cape Town in 2005. She has 9 years' experience in the environmental field, including environmental assessments, legal compliance, on-site compliance monitoring, cleaner production and business greening and sustainability (carbon and environmental footprinting). In her time as a consultant, she has compiled a number of environment assessments and management plans for both private and governmental clients. Betsy is co-owner of SES and is registered with EAPASA (Reg no. 1480)

CLIENT: ESKOM HOLDINGS SOC LIMITED

REPORT CLASSIFICATION: Environmental Audit Report.

SES REFERENCE NUMBER: ECO/Koe/CLOSURE/11/21

Contents

Introduction..... 4
Description of Activity..... 4
Location..... 4
Site Closure 5
Conclusion..... 8
Photo record – aspects to be addressed..... 9

List of Figures

Figure 1: Locality of Koeberg Nuclear Power Station (site)..... 4
Figure 2: Site locality within Koeberg Nuclear Power Station. 5

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Section	
1	Introduction

Sharples Environmental Services cc (SES) was appointed by Gridbow Engineers & Technical Services on behalf of *ESKOM HOLDINGS SOC LIMITED* (the client), as the Environmental Control Officer (ECO) to monitor the construction of a new car park at Koeberg Nuclear Power Station (KNPS) on Cape Farm 1552, Duynfontyn, Cape Town. SES was appointed to undertake monitoring inspections for the duration of the contract period, to ensure that measures outlined in the Environmental Management Programme (EMPr) are implemented and that environmental degradation is kept to a minimum. This report has been compiled to indicate compliance with the Environmental Authorisation (EA) issued by the Department of Environmental Affairs (DEA) (dated 11th July 2017) and the EMPr compiled by *Advisian* (dated 5th of May 2017).

Section	
2	Description of Activity

The proposed project was a two Phased project. Phase 1 included the maintenance of the entrance road off the R27 towards ACP1. Phase 2 encompassed the expansion of the existing car park area.

Section	
3	Location

The construction was conducted on the following farm:

- Cape Farm Duynfontein No 1552, portion 0



Figure 1: Locality of Koeberg Nuclear Power Station (site).



Figure 2: Site locality within Koeberg Nuclear Power Station.

Section	Site Closure
4	

SES has conducted frequent Environmental site visits since the commencement of construction activities (July 2020) to monitor compliance with the approved EA and EMPr. Construction activities have been completed on site, with only minor snags being addressed. .

According to the approved EMPr, an environmental site-close out report is required to be compiled and submitted to the relevant authorities. Upon vacating site, it is important to ensure that measures outlined within the approved EMPr relating to site closure are followed in order to ensure that the surrounding environment is not impacted detrimentally as a result of negligent site closure.

The following checklist has been compiled in accordance with the approved EMPr, in reference to site closure and rehabilitation. The checklist was compiled to be utilised by the contractor to ensure compliance with the approved EMPr during and after the closure of site in order to receive final environmental compliance sign off on the site.

A final site visit was conducted by the ECO on the **19th of November 2021**.

November 2021	COMPLIANCE WITH THE EMPR, METHOD STATEMENTS AND EA		
	Compliance Full/Part/Non	Comments/ Observations	Action to be taken
Areas which remain cleared are to be top soiled and re-vegetated.	Non-compliant	On the 19 th of November 2021, the ECO noted various areas along the parking lot and the V-drain had not been revegetated. As a result of this, erosion gullies have started to form on the V-drain.	The contractor is to ensure that provisions are made for the gullies to be backfilled with an appropriate topsoil. Furthermore, the contractor is to ensure that provisions are made for cleared areas to be appropriately revegetated. Alternatively, it falls on the Applicant (Eskom) to perform these duties.
All inert waste and rubble, including surplus rock, foundations and discarded concrete aggregates must be removed from site.	Full		
All domestic waste removed from site.	Full		
All construction related materials (barricade netting, wire, perimeter fence ect) must be removed from site.	Full		
All ablutions must be removed from site.	Full		
All signage removed from site.	Full		
All final records of waste generated on site is to be filed in the Environmental file.	<i>Eskom to confirm</i>		<u>Eskom to confirm that the Environmental File has been submitted and contains the necessary waste and ablation cleaning information.</u>
All final weigh slips for each waste type are to be filed within the Environmental file.	<i>Eskom to confirm</i>		
All final ablation cleaning slips are to be filed within the Environmental file.	<i>Eskom to confirm</i>		
All hazardous waste must be removed from site and disposed of at a	Non-compliant	On the 19 th of November 2021, the	The contractor is to ensure

ECO: EXTENSION OF A CAR PARK AT KOEBERG NUCLEAR POWER STATION ON CAPE FARM 1552, DUYNFONTEIN CAPE TOWN

registered hazardous waste facility.		ECO noted the presence of a used concrete bag partly buried on site	that provisions are made for hazardous waste found on site to be removed from site and disposed of at a licenced landfill facility.
All excavations must be backfilled with <i>in situ</i> material.	Full		
All erosion gullies and runnels must be backfilled with <i>in situ</i> material.	Non-compliant	On the 19 th of November 2021, the ECO noted the presence of gullies formed on the V-drain by water erosion, due to soil be exposed without an appropriate cover crop.	In the short-term, the contractor is to ensure that provisions are made for the gullies formed on site to be backfilled with appropriate topsoil. However the contractor must ensure that an appropriate cover crop is planted on the V-drain to avoid future gullies from forming. Alternatively, it falls on the Applicant (Eskom) to perform these duties.
The final shaping shape of the ground should mimic the natural topography of the surrounding landscape (and Koeberg Nature Reserve).	Full		
Temporary access points are to rehabilitated and future access from this point prohibited.	Full		
Any infrastructure owned by Koeberg Nuclear Power Station accidently damaged to be repaired.	Full		

Section	
5	Conclusion

SES has compiled this Site Closure Report to detail compliance with the EA and EMPr for the closure of the Car park expansion site at KNPS. During the final site visit conducted by the ECO on the 19th of November 2021, evidence of hazardous waste, and the presence of gullies, formed as a result of exposed surfaces remaining unvegetated, was noted on site.

It is required that the contractor submit the environmental file, with the waste slips, to the applicant.

A local tortoise was found to be trapped within the parking lot. It must be noted that no routes for trapped tortoises to escape the parking lot has been incorporated into the final design of the parking lot. If trapped, the tortoise will not be able to leave, or have access to water and it is advised that a solution is found for this, such as an exit ramp.

Site visit-19 November 2021



Image 1: Construction of pathway



Image 2: Construction materials for the construction of the pathway



Image 3: Construction materials for the construction of the pathway



Image 4: Unvegetated V-drain



Image 5: Erosion gullies on V-drain



Image 6: Used concrete bag found on site



Image 7: Trapped tortoise on site



Image 8: Cleared areas remain unvegetated