# Environmental Impact Assessment of the Used Fuel Transient Interim Storage Facility at Koeberg Nuclear Power Station

# **Final** Scoping Report

**Report Prepared for** 



Order Reference Number: 4600057255

Report Number 478317/<u>05</u>

DEA Ref. No.: 14/12/16/3/3/2/947

**Project Location: Cape Farm Duynefontyn No. 1552** 



**Report Prepared by** 



August 2016

# Environmental Impact Assessment of the Used Fuel Transient Interim Storage Facility at Koeberg Nuclear Power Station

# **Final** Scoping Report

## **Eskom**

SRK Consulting (South Africa) (Pty) Ltd

The Administrative Building Albion Spring 183 Main Rd Rondebosch 7700 Cape Town South Africa

e-mail: sjones@srk.co.za website: www.srk.co.za

Tel: +27 (0) 21 659 3060 Fax: +27 (0) 21 685 7105

SRK Project Number 478317/<u>05</u>

**August** 2016

Compiled by:

Peer Reviewed by:

Sharon Jones Principal Environmental Consultant

Email: sjones@srk.co.za

**Authors:** 

Sharon Jones, Scott Masson

Chris Dalgliesh Partner

#### Note:

This report was updated following the end of the comment period on the Scoping Report (Report No. 478317/04, dated July 2016) released during the Scoping Phase to produce this Final Scoping Report for submission to the Department of Environmental Affairs.

This Final Scoping Report is identical in most respects to the Scoping Report. Changes made to the Scoping Report are underlined and italicised in this report for ease of reference.





# EXECUTIVE SUMMARY: <u>FINAL</u> SCOPING REPORT ENVIRONMENTAL IMPACT ASSESSMENT OF THE USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER STATION

August 2016

SRK Project Number: 478317

<u>This Executive Summary is identical in most respects to the previous version. Changes made to the Executive Summary are underlined and italicised for ease of reference</u>

#### 1 INTRODUCTION

Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of dry casks at the Koeberg Nuclear Power Station (KNPS) (Figure 1). These casks will store used nuclear fuel from the reactors of the power station.

The TISF will comprise of concrete pad(s) within a site footprint of approximately 12 800 m² and will be designed to accommodate storage of not more than 160 casks, for used nuclear fuel generated at the KNPS up to the end of operational life of plant.

SRK Consulting (South Africa) Pty Ltd (SRK) has been appointed by Eskom to undertake the Scoping and Environmental Impact Reporting (S&EIR, also referred to as Environmental Impact Assessment [EIA]) process required in terms of the National Environmental Management Act 107 of 1998, as amended (NEMA), and the EIA Regulations, 2014.

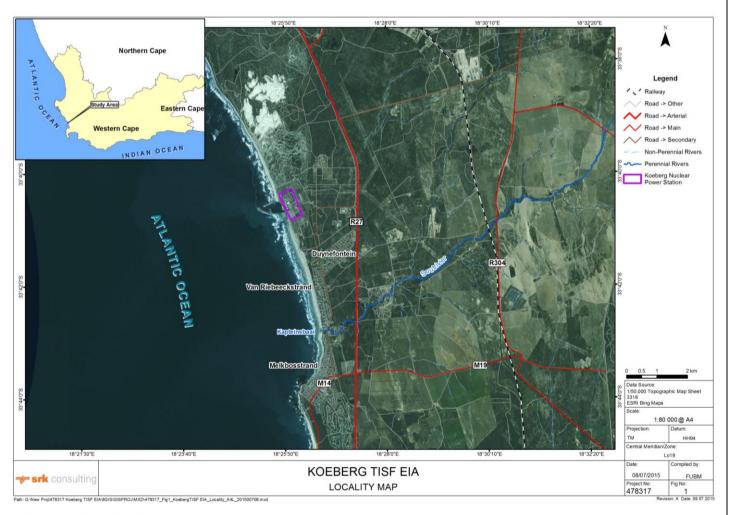


Figure 1: Locality Map

#### 2 GOVERNANCE FRAMEWORK

Sections 24 and 44 of NEMA make provision for the promulgation of regulations that identify activities which may not commence without an Environmental Authorisation (EA) issued by the competent authority. in this case, the National Department of Environment (DEA). The ΕIΑ Regulations, Affairs (Government Notice (GN) R982), promulgated in terms of NEMA, govern the process, methodologies and requirements for the undertaking of EIAs in support of EA applications. The EIA Regulations are accompanied by Listing Notices (LN) 1-3 that list activities that require EA.

The EIA Regulations, 2014, lays out two alternative authorisation processes. Depending on the type of activity that is proposed, either a Basic Assessment (BA) process or a S&EIR process is required to obtain EA. LN 1 lists activities that require a BA process, while LN 2 lists activities that require S&EIR. LN 3 lists activities in certain sensitive geographic areas that require a BA.

SRK has determined that the proposed project triggers activities listed in terms of LN 1, LN 2 and LN 3 of the EIA Regulations, 2014, requiring a S&EIR. The equivalent activities in terms of the EIA Regulations, 2014, are included in Table 1.

Table 1: Listed activities triggered by the project

No	Description		
LN1 (red	LN1 (requiring BA)		
27	The clearance of an area of 1 hectare or more, but less than 20 hectares of indigenous vegetation.		
LN2 (red	quiring S&EIR)		
3	The development and related operation of facilities or		
	infrastructure for nuclear reaction including energy generation,		
	the production, enrichment, processing, reprocessing, storage		
	or disposal of nuclear fuels, radioactive products, nuclear		
	waste or radioactive waste.		
LN3 (red	quiring BA in sensitive areas)		
12	The clearance of an area of 300 square metres or more of		
	indigenous vegetation. (a) In Western Cape:		
	(i) Within any critically endangered or endangered ecosystem.		

Consequently, the proponent is obliged to apply for EA for the project. Since activities listed under LN 2 apply to the project, an S&EIR process is required.

In addition to the EA, various other key authorisations, permits or licences may be required before the project may proceed (see Table 2).

Table 2: Key authorisations, permits and licences required for the project

Application	Authority	Status
Heritage Application	Heritage Western Cape (HWC)	HWC confirmed no further heritage studies required (Ref 16022313AS0224E, 16 March 2016)
Water Use Licence (WUL)	Department of Water and Sanitation (DWS)	DWS confirmed no WUL will be required for the project (Ref. 16/2/7G200/A/8, 10 May 2016)
NNR Licence Amendment	National Nuclear Regulator (NNR)	Planned to be submitted ~ September 2017

#### 3 ENVIRONMENTAL PROCESS

The EIA Regulations, 2014, define the detailed approach to the S&EIR process, which consists of two phases: the Scoping Phase (the current phase) and the Impact Assessment Phase (see Figure 2).

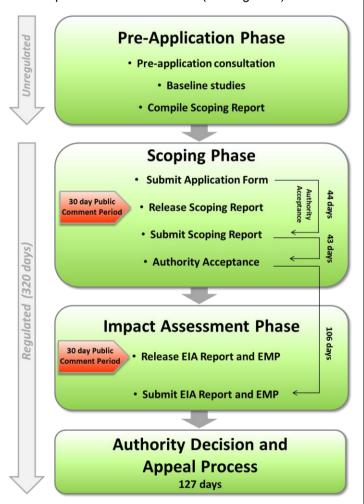


Figure 2: S&EIR Process

The objectives of the Scoping Phase are to:

- Identify stakeholders and inform them of the proposed activity, feasible alternatives and the S&EIR process;
- Describe the affected environment and potential environmental issues and benefits arising from the

proposed project that may require further investigation in the Impact Assessment Phase;

- Develop terms of reference for specialist studies to be undertaken in the Impact Assessment Phase;
- Provide stakeholders with the opportunity to participate in the process and identify any issues or concerns; and
- Produce a Scoping Report for submission to the relevant authorities.

Once the Scoping Phase has been completed, the Impact Assessment Phase will commence, in which the significance of potential impacts will be assessed and measures to avoid and /or mitigate negative impacts and enhance benefits will be determined.

# 4 DESCRIPTION OF THE SITE AND ENVIRONMENT

KNPS is located on Cape Farm Duynefontyn No. 1552 along the sandy coastline of the West Coast, approximately 27 km north of the Cape Town Central Business District and 1.5 km north of the residential area of Duynefontein (Figure 1). Access to the KNPS is via the R27 which runs along the property's eastern boundary or alternatively via Otto du Plessis Drive.

The topography of the area is relatively flat with an active dunefield extending north of the KNPS. A stabilised primary dune inland of the KNPS screens many of the KNPS buildings although the two nuclear reactor units are prominent landmarks in the region (Figure 3).



Figure 3: KNPS as viewed from the Duynefontein residential area

The vegetation of the area consists of low coastal shrub (Cape Dune Strandveld and Atlantis Fynbos), typical of much of the West Coast region (Figure 3). The KNPS is located within the Koeberg Nature Reserve, a 3 000 ha reserve managed by the

Koeberg Managing Authority. The Atlantic Ocean forms the western boundary of the KNPS.

There are a variety of land uses immediately surrounding the KNPS including the Duynefontein residential area to the south, the Koeberg Nature Reserve to the north, south and east.

The KNPS is located within a predominantly natural environment, although there are existing built elements throughout the property including powerlines, office buildings, a visitors centre, weather station, roads and parking areas.

The TISF will be located within the Security Protected Area (SPA) of the KNPS (Figure 5), a flat area disturbed by previous construction activities and by current operations at the KNPS.

#### 5 PROJECT MOTIVATION

At the KNPS, the majority of used fuel assemblies from the nuclear reactors are stored under water in spent fuel pools (SFPs) for cooling. These SFPs are nearing capacity – the KNPS Reactor Unit 1 and Reactor Unit 2 will have filled their SFPs by March 2018 and September 2018, respectively.

Due to the uncertainty regarding the development of a Central Interim Storage Facility (CISF), only likely to be in operation by 2025, it has become imperative for Eskom to investigate interim options for the storage of used fuel on the KNPS site. Additional storage capacity will be required to accommodate any further used fuel generated at the KNPS. Eskom consequently developed the Koeberg Spent Fuel Storage Project strategy which caters for the KNPS' used fuel storage needs until 2025 and comprises of three phases described below:

#### Phase 1:

- o Phase 1A: Procurement of seven metal dry storage casks to ensure the Reactor Units can operate beyond 2018, without exceeding the SFP capacity. A number of used fuel assemblies will be transferred from the SFPs into the new dry storage casks. These casks will be stored with the four existing metal dry storage casks in the on-site cask storage building (CSB).
- Phase 1B: Procurement and placement of spent fuel inserts to gain back the currently unoccupied storage cells in the SFPs due to a checker-boarding arrangement. This will open up previously unusable storage cells in the

SFPs, allowing for an increase in the total number of used fuel assemblies that can be stored in the SFPs.

- Phase 2: Procurement of approximately 30 40 additional dry storage casks to allow ongoing operation of the KNPS until 2025.
- Phase 3: Establishment of the TISF for the storage of the casks procured in Phase 2.

Used fuel assemblies generated beyond 2025 will also be stored in casks at the TISF should the CISF not be available.

#### **6 PROJECT DESCRIPTION**

The TISF will be constructed on a portion of vacant land within the KNPS SPA. The TISF will comprise of concrete pad(s) within a site footprint of approximately 12 800 m<sup>2</sup>.

The **Security Protected Area** is a restricted area surrounding the reactor units to which only authorised personnel have access. The SPA is distinct from the protected area status of Koeberg Nature Reserve.

The TISF will be constructed to accommodate up to 160 dry storage casks, which will be placed on the pad(s) in a modular manner over time.

Dry cask storage is a method of storing used fuel that has already been cooled in the SFP. Casks are typically concrete or steel cylinders which are either welded or bolted closed to provide leak-tight containment of the used fuel. The used fuel assemblies within the casks are surrounded by inert gas and each cylinder is surrounded by additional steel, concrete, or other material to provide radiation shielding to workers and members of the public. Heat generated from used fuel radioactive decay will dissipate through the external surface of the dry casks.

The dry storage casks will be either metal or concrete casks or concrete assemblies and will be approximately 6 m in height and 3 m in diameter (Figure 4). Each cask can hold up to 37 assemblies depending on the cask design. The dry storage casks are robust and can withstand significant external impact forces such as an aircraft crash.

The design of the concrete pad(s) of the TISF lends itself to various types of dry storage casking systems.

The TISF site will also include an auxiliary building to house ancillary equipment.

A secure perimeter fence will be erected around the TISF site with controlled access.

The TISF will meet the requirements of the NNR and will be built and managed in accordance with the International Atomic Energy Agency safety standards. Construction of the TISF will commence in 2018 and will take approximately 12 months to complete. The construction laydown area will be located within the proposed TISF site to reduce the disturbance footprint.



Figure 4: Example of a TISF
Source:http://gttsi.com/wp-content/uploads/2015/01/DryCaskStorage.jpg



Figure 5: Example of a TISF

Source: http://berniesteam.com/wp-content/uploads/2012/12/DSC02774.jpg

**Note**: These images are provided as examples and are not intended to indicate the selected technology.

Temporary site offices and a parking area for construction vehicles and equipment will also be located in this area.

The dry storage casks will be transferred from the SFP to the TISF on the existing KNPS internal road network. A portion of existing gravel road with approximate dimensions (6 m width and 20 m length) will be surfaced / tarred to connect the existing haul road to the TISF at the entrance to Alternative 1.

The TISF will be decommissioned in accordance with the KNPS decommissioning plan.

#### 7 ALTERNATIVES

Appendix 2 Section 2 (h)(i) of the EIA Regulations, 2014, requires that all S&EIR processes must identify and describe feasible and reasonable alternatives. Different types or categories of alternatives can be identified, e.g. location alternatives, type of activity, design or layout alternatives, technology alternatives and operational alternatives. Not all categories of alternatives are applicable to all projects.

Eskom identified six potential sites at Koeberg for the location of the TISF, which were evaluated against various criteria. The site selection process identified two viable site locations for the TISF (refer to Figure 5) - the CSB site, the preferred alternative (Alternative 1), and the Ekhaya site (Alternative 2). Alternative 1 is located adjacent to the CSB on the northern boundary of the KNPS and Alternative 2 is located along the southern boundary of the KNPS next to the Ekhaya Building.



Figure 6: TISF Location alternatives

Alternative 1 is Eskom's preferred alternative because:

- It is situated adjacent to an existing radiological zone (low level waste facility);
- It is located within a more ecologically disturbed area compared to Alternative 2; and
- Less extensive haul road upgrades will be required than for Alternative 2.

The No Go alternative will be considered in the EIA in accordance with the requirements of the EIA

Regulations, 2014. The No Go alternative entails no change to the status quo, in other words the proposed TISF will not be built.

#### 3 STAKEHOLDER ENGAGEMENT

Stakeholder engagement forms a key component of the S&EIR process and is being undertaken in accordance with Chapter 6 of the EIA Regulations, 2014. The stakeholder engagement activities related to the Pre-Application and Scoping Phases are summarised in Table 3. Relevant local, provincial and national authorities, conservation bodies, local forums and surrounding landowners and occupants have been notified of the S&EIR process.

An initial stakeholder registration and comment period was allowed during the Pre-Application Phase, following the release of a Background Information Document (BID).

In March 2016 a (Pre-Application) Draft Scoping Report was released for a 30 day comment period. All registered stakeholders were notified of the release of the Draft Scoping Report for comment.

Following submission of the Application Forms to the DEA, the Scoping Report, addressing issues raised during the Pre-Application Phase, <u>was</u> once again released for a 30 day comment period <u>in July 2016</u> and updated into a Final Scoping Report for submission to the DEA in August 2016.

Table 3: Stakeholder engagement during Pre-Application and Scoping Phases

Activity	Date
Pre-Application	
Advertise release of BID for I&AP registration	08 October 2015
Public comment period	09 October -
	09 November 2015
Public Open Day	27 October 2015
Release Draft Scoping Report for comment	16 - 18 March 2016
Public comment period	18 March - 25 April
	2016
Scoping	
Advertise commencement of EIA process and	4 – 8 July 2016
release Scoping Report to the public	
Public comment period	8 July – 8 August 2016
Public Open Day	21 July 2016

#### 9 POTENTIAL IMPACTS

The impacts of a project are mostly linked to the sensitivity of the receiving environment and proximity of receptors, the extent or footprint and nature of the development, potential risks in an emergency situation and stakeholders' perceptions.

Based on the above considerations as well as the professional experience of the Environmental Assessment Practitioner, the following potential negative impacts and potential benefits of the project in its proposed setting – have been identified.

**Geohydrology** – The construction of the TISF may potentially impact on groundwater levels and quality although this is unlikely as groundwater at the project site is deeper than the proposed TISF excavation depth. Dewatering of excavations will probably not be required during construction;

**Terrestrial ecology** – Due to the ecological sensitivity of both TISF site alternatives and the presence of sensitive vegetation types, the project may negatively impact threatened and/or protected floral species. The project does not pose a threat to threatened or protected faunal species;

Socio-economic – Potential negative impacts on the surrounding communities would be associated with an increase in nuisance factors (e.g. poor noise and air quality conditions during construction). Potential economic benefits are expected due to increased employment opportunities during the construction phase. The TISF will also ensure the continued operation of the KNPS, a significant electricity producer in the Western Cape;

Radiation and Human Health – The potential exposure of Eskom employees as well as individuals in surrounding communities to radiation due to the handling and storage of used fuel at the TISF and the potential negative impacts on human health of is expected to be a key concern to stakeholders;

Heritage – Although the West Coast is known for its wealth of fossil and shell middens, both TISF site alternatives are considered significantly disturbed by previous construction activities and in terms of the heritage landscape, the possibility of finding sites of archaeological or palaeontological importance is highly unlikely; and

Visual – The sense of place of the study area is determined by the KNPS infrastructure located in a predominantly natural setting and influenced by the proximity to the coast. The TISF will be located in the KNPS Protected Area, a substantially modified landscape and is therefore unlikely to have significant negative visual impacts for receptors.

Certain impacts are considered likely to be less significant, including land use, air quality, noise, traffic, surface water and stormwater impacts.

# 10 PLAN OF STUDY FOR THE IMPACT ASSESSMENT

To address the potential issues and impacts identified thus far, the following **specialist studies** are proposed:

- Geohydrology Specialist Study;
- · Terrestrial Ecology Specialist Study;
- Socio-economic Specialist Study;
- Review of Radiological Assessment;
- Human Health Specialist Study;
- · Heritage Specialist Study; and
- Visual Specialist Study.

The update of the Emergency Response Plan for KNPS falls outside the scope of the EIA and Environmental Management Programme (EMPr) and will be undertaken/commissioned at a later stage.

Specialists will be required to provide detailed baseline information and to identify and assess the potential impacts of the proposed project within their particular field of study. In addition, specialists will be required to identify practicable mitigation and optimisation measures to avoid or minimise potential negative impacts and/or enhance any benefits. SRK's standard impact rating methodology will be employed in the assessment of impacts.

Once specialist studies have been completed, the results will be collated into an EIA Report and EMPr. The EIA Report and EMPr will be released for public comment through notifications to registered Interested and Affected Parties (I&APs). Key authorities will also be consulted as part of the process.

All comments received will be incorporated into a Comments and Responses Summary which will be appended to the EIA Report. The EIA Report and EMPr will then be submitted to the DEA for their consideration in decision-making.



Figure 7: KNPS as viewed from the Visitors' Centre

# **Profile and Expertise of EAPs**

SRK Consulting (South Africa) Pty Ltd (SRK) has been appointed by the Koeberg Operating Unit of Eskom (Eskom) to undertake the Environmental Impact Assessment (EIA) process required in terms of the National Environmental Management Act 107 of 1998 (NEMA).

SRK Consulting comprises over 1 500 professional staff worldwide, offering expertise in a wide range of environmental and engineering disciplines. SRK's Cape Town environmental department has a distinguished track record of managing large environmental and engineering projects, extending back to 1979. SRK has rigorous quality assurance standards and is ISO 9001 accredited.

As required by NEMA, the qualifications and experience of the key independent Environmental Assessment Practitioners (EAPs) undertaking the EIA are detailed below and Curriculum Vitae provided in Appendix A.

Project Director and Reviewer: Christopher Dalgliesh, BBusSc (Hons); MPhil (EnvSci)

Certified with the Interim Board for Environmental Assessment Practitioners South Africa (CEAPSA)

Chris Dalgliesh is a Partner and Principal Environmental Consultant with over 22 years' experience, primarily in South Africa, Southern Africa, West Africa and South America (Suriname). Chris has worked on a wide range of projects, notably in the natural resources, Oil & Gas, waste, infrastructure (including rail and ports) and industrial sectors. He has directed and managed numerous Environmental and Social Impact Assessments (ESIAs) and associated management plans, in accordance with international standards. He regularly provides high level review of ESIAs, frequently directs Environmental and Social Due Diligence studies for lenders, and also has a depth of experience in Strategic Environmental Assessment (SEA), State of Environment Reporting and Resource Economics. He holds a BBusSci (Hons) and M Phil (Env) and is a CEAPSA.

Project Manager: Sharon Jones, BSc Hons (Env. Sci); MPhil (EnviroMan)

Certified with the Interim Board for Environmental Assessment Practitioners South Africa

Sharon Jones is a Principal Environmental Consultant with over 18 years' experience. Sharon has managed a broad range of projects in South Africa, Mozambique, Angola, Suriname, Namibia and the DRC, with particular experience in Port and marine-based projects, mining and large infrastructure projects (e.g. airports and dams). In addition to managing various ESIAs, her experience includes the development of Environmental Management Frameworks, Environmental Management Plans and due diligence reviews and gap analysis studies against IFC and World Bank Standards. Sharon holds a BSc (Hons) and MPhil (Env) and is a registered Professional Natural Scientist (Environmental Science) with SACNASP and a CEAPSA.

# Statement of SRK Independence

Neither SRK nor any of the authors of this Report have any material present or contingent interest in the outcome of this Report, nor do they have any pecuniary or other interest that could be reasonably regarded as being capable of affecting their independence or that of SRK.

SRK has no beneficial interest in the outcome of the assessment which is capable of affecting its independence.

## Disclaimer

The opinions expressed in this report have been based on the information supplied to SRK by Eskom. SRK has exercised all due care in reviewing the supplied information, but conclusions from the review are reliant on the accuracy and completeness of the supplied data. SRK does not accept responsibility for any errors or omissions in the supplied information and does not accept any consequential liability arising from commercial decisions or actions resulting from them. Opinions presented in this report apply to the site conditions and features as they existed at the time of SRK's investigations, and those reasonably foreseeable. These opinions do not necessarily apply to conditions and features that may arise after the date of this Report, about which SRK had no prior knowledge nor had the opportunity to evaluate.

# Environmental Impact Assessment of the Transient Interim Storage Facility at Koeberg: EAP Affirmation

Section 16 (1) (b) (iv), Appendix 1 Section 3 (1) (r), Appendix 2 Sections 2 (j) and (k) and Appendix 3 Section 3 (s) of the Environmental Impact Assessment (EIA) Regulations, 2014 (promulgated in terms of the National Environmental Management Act 107 of 1998, as amended - NEMA), require an undertaking under oath or affirmation by the Environmental Assessment Practitioner (EAP) in relation to:

- The correctness of the information provided in the report;
- The inclusion of comments and inputs from stakeholders and interested and affected parties;
- Any information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested or affected parties; and
- The level of agreement between the EAP and interested and affected parties on the Plan of Study for undertaking the Environmental Impact Assessment.

SRK and the EAPs managing this project hereby affirm that:

- To the best of our knowledge the information provided in the report is correct, and no attempt has been made to manipulate information to achieve a particular outcome. Some information, especially pertaining to the project description, was provided by the applicant and/or their sub-contractors. In this respect, SRK's standard disclaimer (inserted in this report) pertaining to information provided by third parties applies.
- To the best of our knowledge all comments and inputs from stakeholders and interested and affected parties have been captured in the report and no attempt has been made to manipulate such comment or input to achieve a particular outcome. Written submissions are appended to the report while other comments are recorded within the report. For the sake of brevity, not all comments are recorded verbatim and are mostly captured as issues, and in instances where many stakeholders have similar issues, they are grouped together, with a clear listing of who raised which issue(s).
- Information and responses provided by the EAP to interested and affected parties are clearly
  presented in the report. Where responses are provided by the applicant (not the EAP), these are
  clearly indicated.
- With respect to EIA Reports, SRK will take account of interested and affected parties' comments on the Plan of Study and, insofar as comments are relevant and practicable, accommodate these during the Impact Assessment Phase of the EIA process.

# **Table of Contents**

1	Intr	oduct	ion	1
	1.1	Backg	round and Introduction	1
	1.2	Purpo	se of the Report	1
	1.3	Struct	ure of this Report	1
	1.4	Conte	nt of Report	3
	1.5	Assun	nptions and Limitations	5
2	Gov	vernaı	nce Framework and Environmental Process	6
	2.1	South	African Legislation	6
		2.1.1	National Environmental Management Act 107 of 1998, as Amended	6
		2.1.2	EIA Regulations, 2014	7
		2.1.3	National Water Act 36 of 1998	8
		2.1.4	National Heritage Resources Act 25 of 1999	9
		2.1.5	National Environmental Management: Biodiversity Act 10 of 2004	10
		2.1.6	National Environmental Management: Protected Areas Act 57 of 2003	10
		2.1.7	National Nuclear Regulator Act 47 of 1999	10
		2.1.8	Nuclear Energy Act 46 of 1999	11
		2.1.9	National Radioactive Waste Disposal Institute Act 53 of 2008	11
	2.2	Plann	ing Policy Framework	12
		2.2.1	Energy Security Master Plan – Electricity (2007 – 2025)	12
		2.2.2	White Paper on the Energy Policy of the Republic of South Africa (1998) and the Nuclea Energy Policy for the Republic of South Africa (2008)	
		2.2.3	Radioactive Waste Management Policy and Strategy for the Republic of South Africa (2	2005)13
		2.2.4	International Atomic Energy Agency Safety Standards	14
		2.2.5	Western Cape Provincial Spatial Development Framework (2014)	14
		2.2.6	City of Cape Town Integrated Development Plan (2012-2017)	15
		2.2.7	City of Cape Town Spatial Development Framework (2012)	15
	2.3	Enviro	onmental Assessment Process	16
		2.3.1	Submission of Applications	18
		2.3.2	S&EIR Process and Phasing	18
3	Pro	ject D	escription	21
	3.1	Introd	uction	21
	3.2	Propo	nent's Project Motivation	22
	3.3	Descr	iption of the Project Area	23
		3.3.1	Site Description	23
		3.3.2	Surrounding Land Use	24
	3.4	Projec	et Alternatives	24
		3.4.1	Location Alternatives	26
		3.4.2	The No Go Alternative	29
	3.5	Projec	ct Construction and Infrastructure	29

		3.5.1	Introduction	29
		3.5.2	The TISF	29
		3.5.3	Perimeter Fence and Security	29
		3.5.4	Access Roads	29
		3.5.5	Construction Laydown Area	29
		3.5.6	Earthworks	29
		3.5.7	Stormwater Management	31
		3.5.8	Water Supply	31
		3.5.9	Power Supply	31
		3.5.10	) Waste Management	31
		3.5.11	Air Quality Management	31
		3.5.12	Noise and Vibration Management	31
		3.5.13	3 Construction Traffic	31
		3.5.14	Workforce	32
		3.5.15	5 Construction Schedule	32
	3.6	Projec	ct Operations	32
		3.6.1	Transfer and Storage of Used Fuel	32
		3.6.2	Transfer Routes	32
		3.6.3	Workforce	32
		3.6.4	Radiation Management	32
		3.6.5	Emergency Response	34
		3.6.6	Stormwater Management	34
		3.6.7	Waste Management	34
		3.6.8	Operational Procedures	34
		3.6.9	SHEQ Policy	34
		3.6.10	Environmental Awareness	34
	3.7	Projec	ct Decommissioning	34
	3.8	Enviro	onmental Factors Influencing Project Design	34
4	Des	cripti	on of the Affected Environment	36
	4.1	Bioph	ysical Environment	36
		4.1.1	Topography	36
		4.1.2	Geology	36
		4.1.3	Climate	39
		4.1.4	Air Quality	40
		4.1.5	Noise	40
		4.1.6	Hydrology and Surface Water	40
		4.1.7	Hydrogeology	42
		4.1.8	Terrestrial Vegetation and Habitats	53
		4.1.9	Fauna	57
		4.1.9.2	2 Avifauna	57
		4.1.9.3	3 Invertebrates	57

		419	4 Amphibians	57
			5 Reptiles	
			6 Arachnids	
			Conservation Areas	
	4.2		economic Environment	
		4.2.1	National Socio-economic Environment	
		4.2.2		
		4.2.3	·	
		4.2.4		
5	Sta		der Engagement	
•	5.1		ctives and Approach to Stakeholder Engagement	
	5.2		cholder Engagement Activities	
	·-	5.2.1	Identification of Key Stakeholders	
		5.2.2	·	
		5.2.3	• •	
			Key Concerns Raised by Stakeholder during Scoping	
6	Pot		Environmental and Social Impacts	
•	6.1		Environmental Issues	
	6.2	-	ation Risks	
7			Study for the EIA	
-	7.1		ription of the Proposed EIA Process	
	7.2		ultation with the Relevant Authorities	
	7.3		ialist Studies	
	7.4		oilation of the Environmental Impact Assessment Report	
	7.5		eholder Engagement	
	7.6		nission of the Final EIA Report and EMPr to DEA	
	7.7		ialist Study Terms of Reference	
		7.7.1	General Terms of Reference	100
		7.7.2	Geohydrology Specialist Study	101
		7.7.3	Terrestrial Ecology Specialist Study	102
		7.7.4	Socio-economic Specialist Study	103
		7.7.5	Review of Radiological Assessment	103
		7.7.6	Human Health Specialist Study	104
		7.7.7	Heritage Specialist Study	104
		7.7.8	Visual Specialist Study	105
	7.8	Less	Significant Impacts	105
	7.9	Impac	ct Rating Methodology	106
	7.10	Cumu	ulative Impacts	107
8	Cor	nclusi	ions and Recommendations	112

	8.1	Conclusions	112
	8.2	Recommendations	113
9	Refe	rences	115
Λ			
H	hhe	ndices	
Αp	pendix	A EAP Curriculum Vitae	
Αp	pendix	B Comment from DWS	
Αp	pendix	C Record of Decision from HWC	
Αp	pendix	D Permission from Department of Energy for the establishment of the TISF	
Αp	pendix	E List of Registered Stakeholders	
Αp	pendix	F Advertisements placed during Pre-Application Phase	
Αp	pendix	G BID and I&AP Registration Form	
Αp	pendix	H Site Notices placed during Pre-Application Phase	
Αp	pendix	Posters and attendance register from Pre-Application Phase Public Open Day	
Αp	pendix	J Notes from Pre-Application Phase Focus Group Meetings	
Αp	pendix	K Notification Letters/Emails to Registered I&APs ( <u>Pre-Application Phase</u> )	
Αp	pendix	L Notification Letters/Emails to Registered I&APs (Scoping Phase)	
Αp	pendix	M <u>Advertisements placed during Scoping Phase</u>	
Αŗ	pendix	N Site Notices placed during Scoping Phase	
Αŗ	pendix	O Notes from Scoping Phase Focus Group Meeting	
Αŗ	<u>pendix</u>	P Written Comments from Stakeholders during Pre-Application Phase	
Αŗ	pendix	<u>Written Comments from Stakeholders during Scoping Phase</u>	
Αŗ	pendix	R Comments and Responses Summary	
Αŗ	pendix	S Posters and attendance register from Scoping Phase Public Open Day	
L	ist o	of Tables	
Та	able 1-1	Content of Scoping Report as per EIA Regulations, 2014	3
Та	able 2-1	NEMA listed activities applicable to the project	8
Та	ble 2-2	EA, permits and licences required for the project	18
Та	able 3-1	Property details	23
Та	ble 3-2	Estimated construction equipment	32
Та	able 4-1	Summary of the Sandveld Group lithostratigraphy	37
Та	ble 4-2	Monthly rainfall data recorded at the KNPS from 1980 to 2014	39
Та	ble 4-3		
Та	able 4-4	Population data for the study area	67
	able 4-5	·	
	able 4-6		
	able 4-7	·	
	able 4-8	•	
	able 4-9	•	
	able 4-1	•	
	able 5-1		
	.~.~ - 1	. Sansingradi diraggoriori, gotivitioo aradritandii aariiga tilo 1 10-7000100tiloii 1 1035	

Table 5 2:	Stakeholder angagement activities undertaken during the Seening Dhase	00
Table 5-2:	Stakeholder engagement activities <i>undertaken</i> during the Scoping Phase	
Table 5-3:	Focus Group Meetings during the Pre-Application Phase	
Table 5-4:	Authorities Focus Group Meeting held during the Scoping Phase	
Table 7-1:	Stakeholder engagement activities planned during the Impact Assessment Phase	
Table 7-2:	Criteria used to determine the consequence of the impact	
Table 7-3:	Method used to determine the consequence score	
Table 7-4:	Probability classification	
Table 7-5:	Impact significance ratings	
Table 7-6:	Impact status and confidence classification	
Table 7-7:	Proposed developments within Koeberg Nature Reserve and their status	.110
List of	Figures	
Figure 1-1:	Locality map	2
Figure 2-1:	S&EIR process	19
Figure 3-1:	KNPS and surrounding landuse	25
Figure 3-2:	Site description and land uses	26
Figure 3-3:	Location alternatives considered in the feasibility phase	28
Figure 3-4:	Examples of TISFs	30
Figure 3-5:	Transfer routes from the SFP to the TISF (Alternative 1 and 2)	33
Figure 3-6:	Existing access road to the TISF (Alternative 1)	33
Figure 4-1:	Simplified geology of the study area	38
Figure 4-2:	Variation in annual rainfall at the KNPS	39
Figure 4-3:	Wetlands occurring in the Koeberg Nature Reserve	41
Figure 4-4:	Aquifer type and borehole yield potential	45
Figure 4-5:	Groundwater elevation and inferred flow direction	46
Figure 4-6:	Groundwater recharge in the study area	47
Figure 4-7:	Groundwater use distribution map	48
Figure 4-8:	Groundwater quality variation in the study area measured as EC	49
Figure 4-9:	Conceptual 3D geohydrological model	51
Figure 4-10:	Conceptual 2D geohydrological model	52
Figure 4-11:	Vegetation types	54
Figure 4-12:	Vegetation associated with Alternative 1	55
Figure 4-13:	Vegetation associated with Alternative 2	56
Figure 4-14:	Wards in subcouncil 1	64
Figure 4-15:	Suburbs in study area (within 20 km arc)	65
Figure 4-16:	Population density	68
Figure 4-17:	Socio-economic status index	70
Figure 4-18:	View of the KNPS from Duynefontein beach (above) and view of the KNPS from Koeberg Nature Reserve with Table Mountain in the background (below)	80
Figure 4-19:	View across Koeberg Nature Reserve from the R27 (above) and view across the coastal platowards the R27 from the primary dune (below)	ain 81

Figure 4-20:	Visual exposure vs distance	82
Figure 4-21:	Viewpoints	84
Figure 4-22:	Views from Viewpoint 1 (above) and Viewpoint 2 (below)	86
Figure 4-23:	Views from Viewpoint 3 (above) and 4 Viewpoint (below)	87
Figure 4-24:	Views from Viewpoint 5 (above) and Viewpoint 6 (below)	88
Figure 4-25:	Views from Viewpoint 7	89
Figure 7-1:	Approved and proposed developments within the Koeberg Nature Reserve	111

# **Acronyms and Abbreviations**

ACP Access Control Point

BA Basic Assessment

BID Background Information Document

Ca Calcium

CBA Critical Biodiversity Area

CISF Centralised Interim Storage Facility

Cl Chloride

CoCT City of Cape Town
CSB Cask Storage Building

DEA National Department of Environmental Affairs

DEA:O&C Department of Environmental Affairs: Oceans and Coasts

DEA&DP Department of Environmental Affairs and Development Planning (Western Cape)

DoE Department of Energy

DWS Department of Water and Sanitation

EA Environmental Authorisation

EAP Environmental Assessment Practitioner

EC Electrical Conductivity

EIA Environmental Impact Assessment

EMF Environmental Management Framework
EMPr Environmental Management Programme

ERP Emergency Response Plan
ESA Ecological Support Area
GDP Gross Domestic Product

GDPR Regional Gross Domestic Product

GN Government Notice

GRU Groundwater Resource Unit

GWh GigaWatt hours
HCO<sub>3</sub> Bicarbonate

HIA Heritage Impact Assessment

HWC Heritage Western Cape

HWM High Water Mark

IAEA International Atomic Energy Agency

I&AP Interested and Affected Party
IDP Integrated Development Plan

IEM Integrated Environmental Management
KIPTS Koeberg Insulator Pollution Testing Station

KNEP Koeberg Nuclear Emergency Plan KNPS Koeberg Nuclear Power Station

kWh Kilowatt hour

LAA Limited Access Area

LPZ Long-term Protective Action Planning Zone

L/s Litres per second

MAP Mean Annual Precipitation
mbgl Metres Below Ground Level

m/d Metres per day
Mg Magnesium

Mm<sup>3</sup>/a Million cubic metres per annum

msl Mean Sea Level

mS/m Millisiemens per metre
MW (e) MegaWatt (electrical)

Na Sodium

NEA Nuclear Energy Act 46 of 1999

NEMA National Environmental Management Act 107 of 1998 as amended
NEM:BA National Environmental Management: Biodiversity Act 10 of 2004
NEM:PAA National Environmental Management: Protected Areas Act 57 of 2003

NEM:WA National Environmental Management: Waste Act 59 of 2008

NFEPA National Freshwater Ecosystem Priority Area
NHRA National Heritage Resources Act 25 of 1999

NID Notice of Intent to Develop NNR National Nuclear Regulator

NNRA National Nuclear Regulator Act 47 of 1999

NRWDI National Radioactive Waste Disposal

NRWDIA National Radioactive Waste Disposal Institute Act 53 of 2008

NWA National Water Act 36 of 1998

OCA Owner Controlled Area

OHSA Occupational Health and Safety Act 85 of 1993

PAZ Precautionary Action Planning Zone

PGWC Provincial Government of the Western Cape

PSA Probabilistic Safety Assessment

PSDF Provincial Spatial Development Framework

S&EIR Scoping and Environmental Impact Reporting

SABAP South African Bird Atlas Project

SAHRA South African Heritage Resources Agency

SCC Species of Conservation Concern
SDF Spatial Development Framework

SES Socio-economic Status

SFP Spent Fuel Pool

SHEQ Safety, Health, Environmental and Quality

SPA Security Protected Area (Inside Access Control Point 2)

SO<sub>4</sub> Sulfate

SRK Consulting (South Africa) (Pty) Ltd

StatsSA Statistics South Africa
ToR Terms of Reference

TISF Transient Interim Storage Facility

UPZ Urgent Protective Action Planning Zone

WCNCLAA Western Cape Nature Conservation Laws Amendment Act 3 of 2000

WUL Water Use Licence

# **Glossary**

An underground body of permeable rock or unconsolidated materials (gravel, sand Aquifer

or silt) which can contain or transmit groundwater.

Avifauna The collective birds of a given region.

Baseline Information gathered at the beginning of a study which describes the environment

prior to development of a project and against which predicted changes (impacts) are

measured.

The broad, northward flowing ocean current that forms the eastern portion of the Benguela Current

South Atlantic Ocean.

**Biodiversity** The diversity, or variety, of plants, animals and other living things in a particular area

or region. It encompasses habitat diversity, species diversity and genetic diversity

Those people who may be impacted upon by the construction and operation of the Community

project. This includes neighbouring landowners, local communities and other

occasional users of the area

Construction Phase The stage of project development comprising site preparation as well as all

construction activities associated with the development.

Consultation A process for the exchange of views, concerns and proposals about a project

through meaningful discussions and the open sharing of information.

Direct and indirect impacts that act together with current or future potential impacts **Cumulative Impacts** 

of other activities or proposed activities in the area/region that affect the same

resources and/or receptors.

Electrical Conductivity (in

water)

Reflects the capacity of water to conduct electrical current, and is directly related to

the concentration of salts dissolved in water.

The study of the interrelationships of organisms with and within their physical **Ecology** 

surroundings.

The interconnected assemblage of all living organisms that occupy a given area and **Ecosystem** 

the physical environment with which they interact.

Environment The external circumstances, conditions and objects that affect the existence of an

individual, organism or group. These circumstances include biophysical, social,

economic, historical and cultural aspects.

Environmental Impact Assessment A process of evaluating the environmental and socio-economic consequences of a

proposed course of action or project.

Environmental Impact Assessment

Report

The report produced to relay the information gathered and assessments undertaken

during the Environmental Impact Assessment.

Environmental Management Programme

A description of the means (the environmental specification) to achieve

environmental objectives and targets during all stages of a specific proposed activity.

Ephemeral (watercourse) A water body that does not flow or contain water year-round, in response to seasonal

rainfall and run-off.

Fauna The collective animals of a particular region, habitat or geological period.

Feasibility study The determination of the technical and financial viability of a proposed project.

Fossil Rare objects that are preserved due to unusual circumstances.

Flora The collective plants of a particular region, habitat or geological period.

Fuel assemblies Bundles of fuel rods, containing nuclear fuel.

Fuel rods Pellets of enriched uranium dioxide encased in long metal tubes.

Geohydrology The study of the character, source and mode of occurrence of groundwater

Heritage Resources Refers to something tangible or intangible, e.g. a building, an area, a ritual, etc. that forms part of a community's cultural legacy or tradition and is passed down from

preceding generations and has cultural significance.

(The study of) surface water flow. Hydrology

A change to the existing environment, either adverse or beneficial, that is directly or **Impact** 

indirectly due to the development of the project and its associated activities.

Independent EAP An independent person with the appropriate qualifications and experience appointed

by the Applicant to manage the Environmental Impact Assessment process on behalf

of the Applicant.

Integrated Environmental Management

The practice of incorporating environmental management into all stages of a project's

life cycle, namely planning, design, implementation, management and review.

Kilowatt hour The kilowatt-hour is a unit of energy equivalent to one kilowatt (1 kW) of power

expended for one hour

Koeberg Nature Reserve

A 3000ha nature reserve surrounding the KNPS, managed by the Koeberg Managing

Authority.

Limited Area Access The area inside the Access Control Point 1 (ACP 1) barrier and includes the entire

intake basin area.

Action Zone

Long-term Protective A pre-designated area, within an 80km radius of the KNPS, where preparations for effective implementation of protective actions to reduce the risk of deterministic and stochastic health effects from long term exposure to deposition and ingestion must be

developed in advance.

MegaWatt A unit of power equivalent to one million watts.

Mitigation measures Design or management measures that are intended to avoid and / or minimise or enhance an impact, depending on the desired effect. These measures are ideally

incorporated into a design at an early stage.

The stage of the works following the Construction Phase, during which the **Operational Phase** 

development will function or be used as anticipated in the Environmental

Authorisation.

Owner Controlled

Area

The total area owned by Eskom SOC Limited at the Koeberg Nuclear Power Station. Access to this area is controlled by the West Coast and Duynefontein entrances. This area includes the Limited Access Area (LAA) and Security Protected Area (SPA).

JONS/DALC

Zone

Precautionary Action A designated area, within a 5km radius of the KNPS, where the risk of deterministic effects is sufficiently high to warrant the establishment of plans for the implementation of pre-emptive protective actions based on plant conditions, before a release or

shortly thereafter.

Radioactive waste Waste that contains, or is contaminated with, radionuclides at concentrations or

activities greater than clearance levels as established by the regulatory body.

Reactor Units Nuclear reactor units in which nuclear fuel is used to generate heat used for the

generation of electricity. The KNPS has two Reactor Units.

The addition of water to the zone of saturation, either by the downward percolation of Recharge

precipitation or surface water and / or the lateral migration of groundwater from

adjacent aquifers.

Release When referring to the PAZ, UPZ and LPZ, it is a radiological release in an accident

that can give rise to an off-site public exposure of 1 milliSievert.

A procedure to consult with stakeholders to determine issues and concerns and for Scoping

determining the extent of and approach to an EIA and EMPr (one of the phases in an EIA and EMPr). This process results in the development of a scope of work for the

EIA, EMPr and specialist studies.

Security Protected

Area

A restricted area surrounding the reactor units to which only authorised personnel have access. This is the area within the ACP 2 security fence. The SPA is distinct from the protected area status of the Koeberg Nature Reserve in terms of the

NEM:PAA.

Specialist study A study into a particular aspect of the environment, undertaken by an expert in that

discipline.

Stakeholders All parties affected by and/or able to influence a project, often those in a position of

authority and/or representing others.

Sustainable development Sustainable development is generally defined as development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs. NEMA defines sustainable development as the integration of social, economic and environmental factors into planning, implementation and decision-making so as to ensure that development serves present and future

generations.

Transfer The movement of filled dry storage casks from the nuclear reactors to the TISF.

inside the boundaries of the Owner Controlled Area.

**Urgent Protective Action Planning** 

Zone

A pre-designated area, within a 16 km radius of the KNPS, where the risks for stochastic effects is sufficiently high to warrant the establishment of plans to implement protective actions based on environmental monitoring or on plant

conditions.

Used fuel Nuclear fuel that has been used in the fission process to the point where it is no

longer useful in sustaining a nuclear reaction.

## 1 Introduction

### 1.1 Background and Introduction

Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of dry casks at the Koeberg Nuclear Power Station (KNPS) (Figure 1-1) to accommodate used nuclear fuel from the reactors of the power station (now referred to as the "project"), thereby ensuring the continued operation of the KNPS. The TISF will comprise of concrete pad(s) within a site footprint of approximately 12 800 m² and will be designed to accommodate storage of not more than 160 casks, for used nuclear fuel generated at Koeberg up to the end of operational life of plant.

The National Environmental Management Act 107 of 1998, as amended (NEMA), and the Environmental Impact Assessment (EIA) Regulations, 2014 (promulgated in terms of NEMA) warrant that listed activities require Environmental Authorisation (EA) from the National Department of Environmental Affairs (DEA). A Scoping and Environmental Impact Reporting (S&EIR, also referred to as an EIA) process is required to support an application for EA.

SRK Consulting (South Africa) (Pty) Ltd (SRK) has been appointed by Eskom to undertake the S&EIR process required in terms of the NEMA and the EIA Regulations, 2014.

### 1.2 Purpose of the Report

This document is intended to guide the EIA process and specialist studies by:

- Providing an overview of the legal requirements with regard to the proposed project, the
  proposed project description and anticipated environmental and social issues and impacts that
  will be further investigated in the EIA; and
- Setting out the scope of the EIA process and the Terms of Reference (ToR) for specialist studies
  and outlining the approach and methodologies to be used in the EIA process, e.g. the proposed
  impact rating methodology.

This report will be submitted to DEA for their acceptance.

## 1.3 Structure of this Report

This report describes the proposed activity and its context, details the stakeholder engagement process, presents the results of the Scoping Phase and sets out the Plan of Study for the Impact Assessment Phase. The report consists of the following sections:

#### Section 1: Introduction

Provides an introduction and background to the proposed project and outlines the purpose of this document and the assumptions and limitations applicable to the study.

#### Section 2: Governance Framework and Environmental Process

Provides a brief summary and interpretation of the relevant legislation as well as pertinent strategic planning documents, and outlines the approach to the environmental process.

#### Section 3: Project Description

Describes the location and current status of the site and provides a brief summary of the surrounding land uses as well as background to and a motivation for the project.



#### Section 4: Description of the Affected Environment

Briefly describes the biophysical and socio-economic characteristics of the affected environment that will be considered in the assessment of potential project impacts.

#### Section 5: Stakeholder Engagement

Details the stakeholder engagement activities conducted during the Pre-Application Phase and planned for the Scoping Phase.

#### Section 6: Potential Environmental and Social Impacts

Identifies the potential impacts associated with the project that will require investigation during the Impact Assessment Phase.

#### Section 7: Plan of Study for the EIA

Presents the proposed approach to the Impact Assessment Phase, outlines the methodology that will be adopted in assessing the potential impacts during the Impact Assessment Phase, identifies the specialist studies that are required and proposes the preliminary ToR for these studies.

#### Section 8: Conclusions and Recommendations

Summarises the key findings of the Scoping Phase and outlines the way forward in the Impact Assessment Phase.

The Scoping Report has been prepared in accordance with Section 21 of the EIA Regulations, 2014.

## 1.4 Content of Report

The EIA Regulations, 2014 (Government Notice (GN) 982, Appendix 2), prescribe the required content in a Scoping Report. These requirements and the sections of this Scoping Report in which they have been addressed, are summarised in Table 1-1.

Table 1-1: Content of Scoping Report as per EIA Regulations, 2014

GN 982, App 2 Ref.:	Requirement	Section Ref.:
(2) (a)	Details of:	
(2) (a) (i)	The EAP who prepared the report	Page i
(2) (a) (ii)	The expertise of the EAP, including a Curriculum vitae	Page i and Appendix A
(2) (b)	Location of the activity, including:	
(2) (b) (i)	21 digit Surveyor General code of the property	3.3
(2) (b) (ii)	Physical address and farm name (where available)	3.3
(2) (b) (iii)	The coordinates of the boundary of the property (where (2) (b) (i) and (2) (b) (ii) are not available)	n/a
(2) (c)	A plan indicating the location of the proposed activity and associated infrastructure, or:	3
(2) (c) (i)	For linear activities: a description and coordinates of the corridor in which the proposed activity is to be undertaken	n/a
(2) (c) (ii)	On land where the property has not been defined, the coordinates within which the activity is to be undertaken	n/a
(2) (d)	A description of the scope of the proposed activity, including	
(2) (d) (i)	All listed and specified activities triggered	2.1.2
(2) (d) (ii)	A description of activities to be undertaken, including associated infrastructure	3

GN 982, App 2 Ref.:	Requirement	Section Ref.:
(2) (e)	A description of the policy and legislative context	2
(2) (f)	Motivation for need and desirability for the proposed development	To be provided in EIA Report
(2) (h)	A full description of the process followed to reach the proposed preferred activity, site and location within the site, including	
(2) (h) (i)	Details of all alternatives considered	3.4
(2) (h) (ii)	Details of public participation process undertaken, including copies of the supporting documents and inputs	5 and associated Appendices
(2) (h) (iii)	A summary of the issues raised by interested and affected parties, and an indication of the manner in which the issues were incorporated, or the reasons for not including them	5.2 and Appendix J
(2) (h) (iv)	The environmental attributes associated with the alternatives focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects	4
(2) (h) (v)	The impacts and risks identified, including the nature, significance, consequence, extent, duration and probability of the impacts, including the degree to which these impacts can be reversed, may cause irreplaceable loss of resources, and can be avoided, managed or mitigated	To be provided in EIA Report
(2) (h) (vi)	The methodology used in determining and ranking the nature, significance, consequences, extent, duration and probability of potential environmental impacts and risks	7.9
(2) (h) (vii)	Positive and negative impacts that the proposed activity and alternatives will have on the environment and on the community that may be affected, focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects	6
(2) (h) (viii)	Possible mitigation measures that could be applied and level of residual risk	To be provided in EIA Report
(2) (h) (ix)	Outcome of the site selection matrix	3.4
(2) (h) (x)	If no alternative development locations for the activity were investigated, the motivation for not considering such	n/a
(2) (h) (xi)	A concluding statement indicating the preferred alternative development location within the approved site	3.5
(2) (i)	A plan of study for the EIA, including:	
(2) (i)	A description of the alternatives to be considered and assessed including the option of not proceeding	3.5
(2) (i) (ii)	A description of the aspects to be assessed as part of the environmental impact assessment process	7.7 & 7.8
(2) (i) (iii)	Aspects to be assessed by specialists	7.7
(2) (i) (iv)	A description of the proposed method of assessing the environmental aspects, including a description of the proposed method of assessing the environmental aspects including aspects to be assessed by specialists.	
(2) (i) (v)	A description of the proposed method of assessing duration and significance	
(2) (i) (vi)	An indication of the stages at which the competent authority will be consulted	7.9
(2) (i) (vii)	Particulars of the public participation process that will be conducted during the environmental impact assessment process	
(2) (i) (viii)	A description of the tasks that will be undertaken as part of the environmental impact assessment process	
(2) (i) (x)	Identify suitable measures to avoid, reverse, mitigate or manage identified impacts and to determine the extent of the residual risks that need to be managed and monitored	To be provided in EIA Report
(2) (j)	Undertaking under oath or affirmation by the EAP in relation to:	Page ii
(2) (j) (i)	The correctness of the information provided in the report	raye II

GN 982, App 2 Ref.:	Requirement	Section Ref.:
(2) (j) (ii)	The inclusion of comments and inputs from stakeholders and interested and affected parties	
(2) (j) (iii)	Any information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested or affected parties	
(2) (k)	An undertaking under oath or affirmation by the EAP in relation to the level of agreement between the EAP and interested and affected parties on the plan of study for undertaking the environmental impact assessment	Page iii
(2) (I)	Any specific information required by the competent authority	To be confirmed

## 1.5 Assumptions and Limitations

As is standard practice, this Scoping Report is based on a number of assumptions and is subject to certain limitations. These are as follows:

- It is assumed that information provided by Eskom and other consultants and specialists is accurate;
- A more detailed project description will be presented in the EIA Report;
- Detailed assessment of the potential positive and negative environmental impacts of the proposed development will only be undertaken during the Impact Assessment Phase;
- The EIA does not constitute a risk assessment addressing e.g. risk of rupture, explosion and/or fire; and
- This facility will be decommissioned in accordance with the approved Koeberg Decommissioning Plan. Decommissioning of the facility has not been considered in this EIA.

Notwithstanding the above, SRK is confident that these assumptions and limitations do not compromise the overall findings of this report.

# 2 Governance Framework and Environmental Process

## 2.1 South African Legislation

There are a number of regulatory requirements at local, provincial and national level with which the proposed project must conform. Some of the key environmental legal requirements include the following:

- National Environmental Management Act 107 of 1998, as amended (NEMA);
- EIA Regulations 2014, promulgated in terms of NEMA;
- National Water Act 36 of 1998 (NWA);
- National Heritage Resources Act 25 of 1999 (NHRA);
- National Environmental Management: Biodiversity Act 10 of 2004 (NEM:BA);
- National Environmental Management: Protected Areas Act 57 of 2003 (NEM:PAA);
- National Nuclear Regulator Act 47 of 1999 (NNRA);
- Nuclear Energy Act 46 of 1999 (NEA); and
- National Radioactive Waste Disposal Institute Act 53 of 2008 (NRWDIA).

The National Environmental Management: Waste Act 59 of 2008 (NEM:WA) aims to (amongst other things) regulate waste management in order to protect health and the environment by providing reasonable measures for the prevention of pollution and ecological degradation. NEM:WA does not apply to radioactive waste, which is regulated by the NNRA and the NEA, and is thus not discussed further below.

A brief summary of SRK's understanding of the relevant Acts and Regulations that are applicable to this study is provided below. Note that other legislative requirements may also pertain to the project. As such, the summary provided below is not intended to be definitive or exhaustive, and serves only to highlight key environmental legislation and obligations.

#### 2.1.1 National Environmental Management Act 107 of 1998, as Amended

NEMA establishes a set of principles which all authorities have to consider when exercising their powers. These include the following:

- Development must be sustainable;
- Pollution must be avoided or minimised and remedied;
- Waste must be avoided or minimised, reused or recycled;
- · Negative impacts must be minimised; and
- Responsibility for the environmental consequences of a policy, project, product or service applies throughout its life cycle.

Section 28(1) states that "every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring". If such degradation/pollution cannot be prevented, then appropriate measures must be taken to minimise or rectify such pollution.

These measures may include:

- Assessing the impact on the environment;
- Informing and educating employees about the environmental risks of their work and ways of minimising these risks;
- Ceasing, modifying or controlling actions which cause pollution/degradation;
- Containing pollutants or preventing movement of pollutants;
- · Eliminating the source of pollution; and
- Remedying the effects of the pollution.

#### Legal requirements for this project:

Eskom (the proponent) has a responsibility to ensure that the proposed activities and the S&EIR process conform to the principles of NEMA. The proponent is obliged to take actions to prevent pollution or degradation of the environment in terms of Section 28 of NEMA, and to ensure that the environmental impacts associated with the project are considered, and mitigated where possible.

#### 2.1.2 EIA Regulations, 2014

Sections 24 and 44 of NEMA make provision for the promulgation of regulations that identify activities which may not commence without an EA issued by the competent authority (DEA). In this context, the EIA Regulations, 2014 (GN R982, which came into effect on 8 December 2014), promulgated in terms of NEMA, govern the process, methodologies and requirements for the undertaking of EIAs in support of EA applications. Listing Notices 1-3 in terms of NEMA list activities that require EA ("NEMA listed activities").

GN R982 of the EIA Regulations lays out two alternative authorisation processes. Depending on the type of activity that is proposed, either a Basic Assessment (BA) process or a S&EIR process is required to obtain EA. Listing Notice 1<sup>1</sup> lists activities that require a BA process, while Listing Notice 2<sup>2</sup> lists activities that require S&EIR. Listing Notice 3<sup>3</sup> lists activities in certain sensitive geographic areas that require a BA process.

The regulations for both processes – BA and S&EIR - stipulate that:

- Public participation must be undertaken as part of the assessment process;
- The assessment must be conducted by an independent EAP;
- The relevant authorities must respond to applications and submissions within stipulated time frames:
- Decisions taken by the authorities can be appealed by the proponent or any other Interested and Affected Party (I&AP); and
- A draft Environmental Management Programme (EMPr) must be compiled and released for public comment.

GN R982 sets out the procedures to be followed and content of reports compiled during the BA and S&EIR processes.

<sup>2</sup> GN R984 of 2014

<sup>&</sup>lt;sup>1</sup> GN R983 of 2014

<sup>3</sup> GN R985 of 2014

The NEMA National Appeal Regulations<sup>4</sup> make provision for appeal against any decision issued by the relevant authorities. In terms of the Regulations, an appeal must be lodged with the relevant authority in writing within 20 days of the date on which notification of the decision (EA) was sent to the applicant or I&AP (as applicable). The applicant, the decision-maker, interested and affected parties and organ of state must submit their responding statement, if any, to the appeal authority and the appellant within 20 days from the date of receipt of the appeal submission.

The project includes activities that are listed in terms of the EIA Regulations, 2014 and thus need EA (see Table 2-1).

Table 2-1: NEMA listed activities applicable to the project

No.	Listed activity
Listing Notice 1	
27	The clearance of an area of 1 hectare or more, but less than 20 hectares of indigenous vegetation.
Listing Notice 2	
3	The development and related operation of facilities or infrastructure for nuclear reaction including energy generation, the production, enrichment, processing, reprocessing, storage or disposal of nuclear fuels, radioactive products, nuclear waste or radioactive waste.
Listing Notice 3	
12	The clearance of an area of 300 square metres or more of indigenous vegetation.  (a) In Western Cape:  (i) Within any critically endangered or endangered ecosystem.

#### Legal requirements for this project:

As such, the proponent is obliged to apply for EA for these listed activities and to undertake an S&EIR process in support of the application, in accordance with the procedure stipulated in GN R982 under NEMA.

#### 2.1.3 National Water Act 36 of 1998

Water use in South Africa is controlled by the NWA. The executive authority is the Department of Water and Sanitation (DWS). The NWA recognises that water is a scarce and unevenly distributed national resource in South Africa. Its provisions are aimed at achieving sustainable and equitable use of water to the benefit of all users and to ensure protection of the aquatic ecosystems associated with South Africa's water resources. The provisions of the Act are aimed at discouraging pollution and wastage of water resources.

In terms of the Act, a land user, occupier or owner of land where an activity that causes or has the potential to cause pollution of a water resource has a duty to take measures to prevent pollution from occurring. If these measures are not taken, the responsible authority may do whatever is necessary to prevent the pollution or remedy its effects, and to recover all reasonable costs from the responsible party.

Section 21 of the NWA specifies a number of water uses, including:

- (a) taking water from a water resource; and
- removing, discharging or disposing of water found underground if it is necessary for the efficient continuation of an activity or for the safety of people.

<sup>&</sup>lt;sup>4</sup> GN R993 of 2014, as amended by GN R205 of 2015.

These water uses require authorisation in terms of Section 22 (1) of the Act, unless they are listed in Schedule 1 of the NWA, are an existing lawful use, fall under a General Authorisation issued under section 39 or if the responsible authority waives the need for a licence.

#### Legal requirements for this project:

The proposed project activities may trigger water use activities in terms of Section 21 (j) of the NWA for the dewatering of the excavations during construction. If part of the water removed for this reason is not disposed of or discharged into a water resource, but used for some purpose, this water use may also be considered to be taking of water from a water resource in terms of Section 21 (a). It is expected that a Water Use Licence (WUL) may be required for the project from the competent authority, in this case DWS.

In a letter dated 10 May 2016, DWS confirmed that the proposed project activities do not trigger a water use in terms of Section 21 of the NWA, and therefore a WUL is not required (**Appendix B**).

#### 2.1.4 National Heritage Resources Act 25 of 1999

The protection and management of South Africa's heritage resources are controlled by the NHRA. The enforcing authority for this act is the South African National Heritage Resources Agency (SAHRA). In the Western Cape, SAHRA has delegated this authority to Heritage Western Cape (HWC). In terms of the Act, historically important features such as graves, trees, archaeological artefacts/sites and fossil beds are protected. Similarly, culturally significant symbols, spaces and landscapes are also afforded protection.

Section 38 of the NHRA requires that any person who intends to undertake certain categories of development must notify SAHRA and/or HWC at the very earliest stage of initiating such a development and must furnish details of the location, nature and extent of the proposed development. HWC has designed a Notification of Intent to Develop (NID) to assist the developer in providing the necessary information to enable HWC to decide whether a Heritage Impact Assessment (HIA) will be required.

Section 38 also makes provision for the assessment of heritage impacts as part of an EIA process and indicates that, if such an assessment is deemed adequate, a separate HIA is not required. There is, however, the requirement in terms of Section 38 (8) for the consenting authority (in this case the DEA) to ensure that the evaluation of impacts on the heritage resources fulfils the requirements of the relevant heritage resources authority (HWC), and that the comments and recommendations of the heritage resources authority are taken into account prior to the granting of the consent.

Section 38(1) of the NHRA specifies activities that trigger the need for a NID. The proposed project triggers a number of these activities, including:

(c) Any development or activity that will change the character of a site (i) exceeding 5 000 m<sup>2</sup> in extent.

#### Legal requirements for this project:

A NID was submitted to HWC in February 2016. The proposed development will change the character of the project site, in addition to which transfer routes will be required to move casks to the TISF. These are, however, likely to follow existing roads.

Since there is no reason to believe that the proposed development will impact on heritage resources, HWC confirmed that a further application process under Section 38 of NHRA will not be required (Appendix C).

#### 2.1.5 National Environmental Management: Biodiversity Act 10 of 2004

The purpose of the NEM:BA is to provide for the management and conservation of South Africa's biodiversity and the protection of species and ecosystems that warrant national protection. The NEM:BA makes provision for the publication of bioregional plans and the listing of ecosystems and species that are threatened or in need of protection. Threatened or Protected Species Regulations (2007), Guidelines for the determination of bioregions and the preparation and publication of bioregional plans (2009) and a National List of Ecosystems that are Threatened and in Need of Protection (2011) have been promulgated in terms of NEM:BA.

A published bioregional plan is a spatial plan indicating terrestrial and aquatic features in the landscape that are critical for conserving biodiversity and maintaining ecosystem functioning. These areas are referred to as Critical Biodiversity Areas (CBAs) in terms of NEM:BA. Bioregional plans provide guidelines for avoiding the loss or degradation of natural habitat in CBAs with the aim of informing EIAs and land-use planning (including Environmental Management Frameworks [EMFs], Spatial Development Frameworks [SDFs], and Integrated Development Plans [IDPs]).

Permits to carry out a restricted activity involving listed threatened or protected species or alien species may only be issued after an assessment of risks and potential impacts on biodiversity has been undertaken.

#### Legal requirements for this project:

Although no CBAs or Ecological Support Areas (ESAs) are located in the project area, the KNPS is located in the original extent of an endangered ecosystem and the impacts of the project on the biodiversity of the area will need to be assessed.

#### 2.1.6 National Environmental Management: Protected Areas Act 57 of 2003

The protection and management of South Africa's protected areas are controlled by the NEM:PAA. The Act provides for:

- Declaration of nature reserves and determination of the type of reserve declared;
- Cooperative governance in the declaration and management of nature reserves;
- · A system of protected areas to manage and conserve biodiversity; and
- The utilization and participation of local communities in the management of protected areas.

In designating a protected area, the relevant competent authority is obliged to follow an appropriate consultation process. The Act requires that local protected areas must be managed by the relevant Management Authority. A management plan for the protected area must be approved by the provincial MEC.

#### Legal requirements for this project:

The KNPS is located within the Koeberg Nature Reserve, proclaimed as a private nature reserve in 1991. The Koeberg Nature Reserve Management Plan has been submitted to CapeNature for approval by the MEC. The construction and operational phases of the TISF will adhere to the conditions of the Koeberg Nature Reserve Management Plan (once approved by CapeNature).

#### 2.1.7 National Nuclear Regulator Act 47 of 1999

The NNRA establishes and enforces procedures to protect people who work with radioactive materials.

The National Safety Standards and Regulatory Practices of South Africa require that authorised practices involved in nuclear related activities shall perform a prospective radiological public hazard assessment. Radiological protection standards are criteria set to ensure compliance with the basic principles of radiation safety. The National Nuclear Regulator (NNR) of South Africa adopted these standards and promulgated regulations to ensure the protection of individual members of the public and their surrounding environment.

All used fuel storage facilities fall under the regulatory authority of the NNR. The Regulator's responsibilities include exercising regulatory control related to safety over the siting, design, construction, operation, manufacture of component parts, and decontamination, decommissioning and closure of nuclear installations.

#### Legal requirements for this project:

Eskom operates the KNPS in accordance to the existing NNR license NIL-001. The proponent must amend their existing NNR licence to include the TISF and must undertake a radiological assessment (safety case) to determine the potential radiological effects on the public. Following the approval of the licensing strategy for the development of the TISF, it is anticipated that the licence amendment application will be submitted to the NNR in September 2017. The stakeholder engagement processes associated with this application will take place following completion of the preliminary review by the NNR of the safety case submitted by Eskom, approximately 24 months after submission of the application.

#### 2.1.8 Nuclear Energy Act 46 of 1999

The NEA stipulates that the Minister of Energy has the authority over the management and disposal of radioactive waste and the storage of used nuclear fuel.

Section 34 (b) (v) stipulates that authorisation by the Minister is required for any person, institution, organisation or body to be in possession of a nuclear-related equipment and material.

#### Legal requirements for this project:

Eskom received written permission (ref E2/5/9/3) from the Minister of Energy (on 21 April 2011) in terms of the Nuclear Energy Act, to establish the TISF at Koeberg, to store used fuel and for the transfer of used fuel between the Spent Fuel Pools (SFPs) and the TISF (Appendix D).

#### 2.1.9 National Radioactive Waste Disposal Institute Act 53 of 2008

The NRWDIA provides for the establishment of a National Radioactive Waste Disposal Institute to manage radioactive waste disposal on a national basis. According to the NRWDIA, the proposed establishment of a Centralised Interim Storage Facility (CISF)<sup>5</sup> for the storage of all radioactive waste generated in South Africa at a high level waste disposal facility is the responsibility of the National Radioactive Waste Disposal Institute.

#### Legal requirements for this project:

Eskom has no legal requirement for the CISF associated with disposal of radioactive waste in terms of this Act. However, since the establishment of a CISF is the responsibility of the NRWDI, Eskom has no control over the timing of this, and as such needs to make allowance for the storage of used fuel in the interim.

<sup>&</sup>lt;sup>5</sup> It is possible that a CISF may be constructed in the foreseeable long term future. If constructed, high level nuclear waste and used nuclear fuel from the KNPS may in future be stored at the CISF.

### 2.2 Planning Policy Framework

This section discusses a number of key formal planning policies relevant to the project. The policies and plans briefly discussed below include key industry related policies and regional and local development and spatial plans, including the:

- Energy Security Master Plan Electricity (2007 2025);
- White Paper on the Energy Policy of the Republic of South Africa (1998) and the Nuclear Energy Policy for the Republic of South Africa (2008);
- Radioactive Waste Management Policy and Strategy for the Republic of South Africa (2005);
- International Atomic Energy Agency Safety Standards;
- Western Cape Provincial Spatial Development Framework (2014);
- City of Cape Town Integrated Development Plan (2012 2017); and
- City of Cape Town Spatial Development Framework (2012).

#### 2.2.1 Energy Security Master Plan – Electricity (2007 – 2025)

The Energy Security Master Plan addresses all aspects of the electricity sector including generation, transmission, distribution and energy efficiency initiatives for the period 2007 - 2025.

The goals of the Master Plan are to:

- · Support economic growth and development;
- Improve the reliability of electricity infrastructure;
- Provide a reasonably priced electricity supply;
- Ensure the security of electricity supply as set by a security of supply standard;
- Diversify the primary energy sources of electricity;
- Meet the renewable energy targets as set in the White Paper on Energy Policy;
- Increase access to affordable energy services;
- Reduce energy usage through energy efficiency interventions;
- Accelerate household universal access to electricity; and
- Clarify some of the policy issues in the context of an evolving electricity sector.

# 2.2.2 White Paper on the Energy Policy of the Republic of South Africa (1998) and the Nuclear Energy Policy for the Republic of South Africa (2008)

Nuclear Energy Policy of the Republic of South Africa is guided by the White Paper on Energy Policy (1998), where nuclear energy was retained as one of the policy options for electricity generation. In order to achieve a balance between energy demand and resource availability, the Energy Policy identifies the need to undertake an Integrated Energy Planning process, while also taking into account health, safety and environmental parameters. In terms of the White Paper, the Government is responsible for investigating the long-term contribution nuclear power can make to the country's energy economy and, secondly, how the existing nuclear industrial infrastructure can be optimised.

Some of the main policy objectives of the White Paper relate to decisions regarding:

- Possible new nuclear power stations;
- The management of radioactive waste;

- Safety monitoring of the nuclear industry;
- · Effectiveness and adequacy of regulatory oversight; and
- Review of bodies associated with the nuclear industry.

The Nuclear Energy Policy presents a framework within which prospecting, mining, milling and the use of nuclear materials as well as the development and utilisation of nuclear energy for peaceful purposes by South Africa takes place. Through this Policy, the South African Government aims to achieve the following objectives:

- Promotion of nuclear energy as an important electricity supply option through the establishment
  of a national industrial capability for the design, manufacture and construction of nuclear energy
  systems;
- Establishment of the necessary governance structures for an extended nuclear energy programme;
- Creation of a framework for safe and secure utilisation of nuclear energy with minimal environmental impact;
- Contribution to the country's national programme of social and economic transformation, growth and development;
- To guide in the actions to develop, promote, support, enhance, sustain and monitor the nuclear energy sector in South Africa;
- Attainment of global leadership and self-sufficiency in the nuclear energy sector in the long term;
- Exercise control over un-processed uranium ore for export purposes for the benefit of the South African economy;
- Establishing of mechanisms to ensure the availability of land (nuclear sites) for future nuclear power generation;
- Allow for the participation of public entities in the uranium value chain;
- Promoting energy security for South Africa;
- Improvement of the quality of human life and to support the advancement of science and technology;
- · Reduction of greenhouse gas emissions; and
- Skills development related to nuclear energy.

The Nuclear Energy Policy states that radioactive waste, including used nuclear fuel is to be managed in terms of the Radioactive Waste Management Policy and Strategy for South Africa.

# 2.2.3 Radioactive Waste Management Policy and Strategy for the Republic of South Africa (2005)

The Radioactive Waste Management Policy and Strategy for the Republic of South Africa (2005) establishes a national radioactive waste policy framework setting out the principles and structures for the management of radioactive waste in a coordinated and cooperative manner.

The Policy acknowledges that the disposal of high level waste presents the greatest challenges and investigations into the best long-term option for the management of used fuel are ongoing. In the interim, the Policy states that used nuclear fuel is and shall continue to be stored in authorised facilities within the generator's sites. The Policy does recognise that such storage is finite and storing used fuel on these sites is not sustainable.

The Policy states that Government is responsible for ensuring that investigations are conducted within set timeframes to consider the various options for safe management of used fuel and high level radioactive waste in South Africa. Included in the options for investigation are the following:

- Long-term above ground storage at a central off-site storage facility, e.g. a CISF;
- · Reprocessing, conditioning and recycling; and
- Deep geological disposal.

## 2.2.4 International Atomic Energy Agency Safety Standards

South Africa has been a member state of the International Atomic Energy Agency (IAEA) since it was established in 1957. The Agency works with its member states worldwide to promote the safe, secure and peaceful use of nuclear technologies.

The IAEA safety standards provide a system of Safety Fundamentals, Safety Requirements and Safety Guides, which reflect an international consensus on what constitutes a high level of safety for protecting people and the environment from harmful effects of ionising radiation. The IAEA safety standards are applicable throughout the lifetime of nuclear facilities.

The Safety Fundamentals, General Safety Requirements and General Safety Guides are applicable to all nuclear facilities and activities. These are complemented by Specific Safety Requirements and Specific Safety Guides applicable to specific facilities and activities including:

- Nuclear power plants;
- · Fuel cycle facilities;
- Research reactors;
- Radioactive waste disposal facilities;
- Mining and milling;
- · Application of radiation sources; and
- Transport of radioactive material.

The TISF will be designed and operated to comply with the relevant general and specific safety requirements applicable to used fuel storage facilities and safe transport of radioactive material in accordance to the IAEA safety standards. Since the TISF will be located within the KNPS, it will also comply with requirements applicable to nuclear power plants.

## 2.2.5 Western Cape Provincial Spatial Development Framework (2014)

The Western Cape Provincial Spatial Development Framework (SDF) is a spatial planning document that guides district and local spatial initiatives such as Integrated Development Plans (IDPs) and SDFs. The Western Cape Provincial SDF sets out to put in place a coherent framework for the Province's urban and rural areas that:

- Gives spatial expression to the national and provincial development agendas;
- Serves as basis for coordinating, integrating and aligning 'on the ground' delivery of national and provincial departmental programmes;
- Supports municipalities in fulfilling their municipal planning mandate in line with the national and provincial agendas; and
- Communicates government's spatial development intentions to the private sector and civil society.

The Western Cape Provincial SDF does not discuss the KNPS, but it is assumed that as an approved nuclear facility, consideration is given to the KNPS, its operations and related exclusion zones.

## 2.2.6 City of Cape Town Integrated Development Plan (2012-2017)

The City of Cape Town's (CoCT's) IDP (2012-2017) is a strategic plan that is used to guide the development of the City for a specific period. It guides the planning, budgeting, implementation, management and future decision making processes of the CoCT.

The strategic focus areas (or pillars) of the CoCT's IDP include:

- 1. The opportunity city;
- 2. The safe city;
- 3. The caring city;
- 4. The inclusive city; and
- 5. The well-run city.

These five pillars help focus the City's purpose of delivery. The IDP is the City's principal strategic planning instrument, from which various other strategic documents will flow. It informs planning and development in the City.

The CoCT IDP does not discuss the KNPS, but it is assumed that as an approved nuclear facility, consideration is given to the KNPS, its operations and related exclusion zones.

## 2.2.7 City of Cape Town Spatial Development Framework (2012)

The CoCT SDF (2012) is a long-term plan to guide and manage urban growth, and to balance competing land use demands, by putting in place a "logical development path that will shape the spatial form and structure of Cape Town".

In the medium- to long-term, the CoCT would like to reduce the development impediments and safety risks associated with the KNPS. Specific actions related to this objective include:

- The CoCT, in conjunction with Eskom and the Provincial Government of the Western Cape (PGWC), must update the Integrated Koeberg Nuclear Emergency Plan (KNEP) as required;
- The CoCT, in conjunction with Eskom and the PGWC, must continue to optimise, with a view to sustainability, the requirements in respect of the KNEP; and
- The CoCT must review and update the town planning assessment criteria to ensure that the
  processing and assessment of development applications within the KNPS emergency planning
  zones do not compromise the effective implementation of the KNEP.

Key strategies have been identified to guide the preparation of sector plans, lower-order spatial plans, detailed policies, guidelines and implementation plans, and are used to assess development applications. A sub-strategy within Key Strategy 2 is relevant to this EIA: "Appropriately protect the citizens of Cape Town from hazardous areas/activities" in which Policy 24 advises to: "Direct urban growth away from hazardous areas/activities".

Relevant guidelines to the KNPS within Policy 24 are:

All development within the KNPS exclusion zones: Precautionary Action Planning Zone (PAZ): 5
km and Urgent Protective action planning Zone (UPZ): 5-16km from the nuclear reactors must
comply with the development controls (Policy 24.4); and

 Any new nuclear power station being developed in Cape Town must be located on the Eskom controlled area at the Koeberg site, and its exclusion zones must be smaller or equal to the existing KNPS' 5 km exclusion zone (Policy 24.5).

Development controls on development in exclusion zones around the KNPS:

- No new development is permissible within the PAZ other than development that is directly related to the siting, construction, operation and decommissioning of the KNPS or that is a result of the exercising of existing zoning rights.
- New development within the UPZ may only be approved subject to demonstration that
  the proposed development will not compromise the adequacy of disaster management
  infrastructure required to ensure the effective implementation of the Koeberg Nuclear
  Emergency Plan.

These development controls will be superseded by the national regulations on development in the Formal Emergency Planning Zone of the KNPS, when approved.

## 2.3 Environmental Assessment Process

The general approach to this study is guided by the principles contained in Section 2 of NEMA and those of Integrated Environmental Management (IEM).

NEMA lists a number of principles that apply to the actions of organs of state and that also serve as reference for the interpretation of environmental legislation and administration of environmental processes. The principles most relevant to environmental assessment processes and projects for which authorisation is required are summarised below.

### Principles relevant to the EIA process:

- Adopt a risk-averse and cautious approach;
- Anticipate and prevent or minimise negative impacts;
- Pursue integrated environmental management;
- Involve stakeholders in the process; and
- Consider the social, economic and environmental impacts of activities.

#### Principles relevant to the project:

- Place people and their needs at the forefront of concern and serve their needs equitably;
- Ensure development is sustainable, minimises disturbance of ecosystems and landscapes, pollution and waste, achieves responsible use of non-renewable resources and sustainable exploitation of renewable resources;
- Assume responsibility for project impacts throughout its life cycle; and
- Polluter bears remediation costs.

This S&EIR process complies with these principles through its adherence to the EIA Regulations, 2014, and associated guidelines, which set out clear requirements for, *inter alia*, impact assessment and stakeholder involvement (see below), and through the assessment of impacts and identification of mitigation measures during the Impact Assessment Phase.

In accordance with the IEM Information Series (DEAT, 2004), an open, transparent approach, which encourages accountable decision-making, has been adopted.

Although various environmental authorisations, permits or licences are required before the proposed project may proceed, the regulatory authorities are committed to the principle of cooperative governance and, in order to give effect to this principle, a single S&EIR process is required to inform all applications.

#### The underpinning principles of IEM require:

- Informed decision making;
- Accountability for information on which decisions are made;
- A broad interpretation of the term "environment";
- An open participatory approach in the planning of proposals;
- Consultation with interested and affected parties;
- Due consideration of alternatives;
- An attempt to mitigate negative impacts and enhance positive impacts of proposals;
- An attempt to ensure that the social costs of development proposals are outweighed by the social benefits;
- Democratic regard for individual rights and obligations;
- Compliance with these principles during all stages of the planning, implementation and decommissioning of proposals; and
- The opportunity for public and specialist input in the decision-making process.

The study will also be guided by the requirements of the EIA Regulations, 2014 (see Section 2.1.2), which are more specific in their focus and define the detailed approach to the S&EIR process, as well as relevant guidelines published by the DEA and in the absence of national guidelines, the Western Cape Department of Environmental Affairs and Development Planning (DEA&DP), including:

- DEA's Draft Companion to Environmental Impact Assessment Regulations of 2010 (DEA, 2010);
- DEA&DP's EIA Guideline and Information Document Series (DEA&DP, 2013), which includes guidelines on Generic ToR for EAPs and Project Schedules, Public Participation, Alternatives, Need and Desirability, Exemption Applications and Appeals, an information; and
- DEA&DP's "One Environmental Management System" and the 2014 EIA Regulations Circular (DEA&DP, 2014).

The lead authority for this project will be the DEA. Supplementary applications will be made as required for the remaining authorisations.

## 2.3.1 Submission of Applications

Various environmental authorisations, permits or licences are required before the project may proceed. Some application forms must be submitted at the outset of the S&EIR process (e.g. in terms of the EIA Regulations and NHRA) while licences and permits in terms of the NWA and NNRA are only issued after EA and are submitted towards the end of the EIA process. The required authorisations and their status are listed in Table 2-2.

Table 2-2: EA, permits and licences required for the project

Application	Authority	Status
EA	DEA	Application will be submitted to the DEA in July 2016 in compliance with Section 16 of the EIA Regulations, 2014.
WUL	DWS	DWS confirmed in May 2016 that no WUL will be required for the project (Appendix B).
Heritage Application (NID)	HWC	A NID was submitted to HWC in February 2016. HWC confirmed in March 2016 that no further heritage studies will be required (Appendix C).

An amendment application to include the TISF in the KNPS' licence will be submitted to the NNR. The amendment application, as well as all stakeholder engagement processes required in terms of the NNRA will be separate from those undertaken for the EIA, and falls outside the scope of the EIA.

## 2.3.2 S&EIR Process and Phasing

The S&EIR process consists of three phases, namely the Pre-Application Phase, Scoping Phase (the current phase) and an Impact Assessment Phase (see Figure 2-1 below).

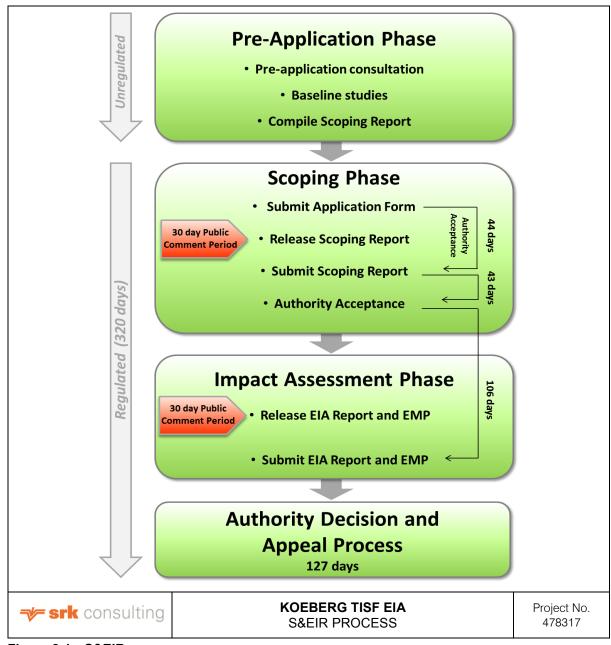


Figure 2-1: S&EIR process

#### The objectives of the Pre-Application Phase are to:

- Identify stakeholders, including neighbouring landowners/ residents and authorities;
- Compile a Scoping Report describing the affected environment and present an analysis of the potential environmental issues and benefits arising from the proposed project that may require further investigation in the Impact Assessment Phase; and
- Develop ToR for specialist studies to be undertaken in the Impact Assessment Phase.

#### The objectives of the Scoping Phase are to:

- Inform stakeholders of the proposed activity, feasible alternatives and the S&EIR process;
- Provide stakeholders with the opportunity to participate effectively in the process and identify any issues and concerns associated with the proposed activity, review specialist study ToR and the Plan of Study for EIA; and
- Submit the Scoping Report to the relevant authorities (in this case, DEA, NNR, DEA&DP, HWC, DWS, Department of Energy (DoE), CoCT and CapeNature).

#### The aims of the Impact Assessment Phase are to:

- Inform and obtain contributions from stakeholders, including relevant authorities, the public and local communities and address their relevant issues and concerns;
- Build capacity amongst stakeholders during the S&EIR process so that they may actively and meaningfully participate;
- Document and contextualise the biophysical baseline conditions of the study area and the socio-economic conditions of affected communities;
- Assess in detail the potential environmental and socio-economic impacts of the project;
- Identify environmental and social mitigation measures to avoid and/or address the impacts assessed; and
- Develop and/or amend environmental and social management plans based on the mitigation measures developed in the EIA Report and EMPr.

## 3 Project Description

#### 3.1 Introduction

The Koeberg Nuclear Power Station (KNPS) is the only nuclear power station on the African continent. Commencing operations in 1984, it has operated safely for over 31 years and has a further active lifespan of 30 - 40 years.

Eskom's KNPS has two nuclear reactor units (Reactor Unit 1 and Reactor Unit 2) each generating in excess of 900 MW (e). The KNPS supplies approximately 6% of South Africa's total electricity needs and the majority of the requirements of the Western Cape (Eskom fact sheet: Koeberg Power Station). The KNPS has produced more than 81 000 million kWh of electricity since 1984.

#### How is electricity generated by a nuclear power station?

A nuclear reactor is essentially a heat source. Heat is generated through the nuclear fission process, making use of uranium which is slightly enriched in the isotope uranium-235. Heat is transferred by the primary coolant (water at the KNPS) to steam generators where water from a secondary loop is turned into steam. This steam drives a turbine which is connected to a generator, which uses the rotational energy to generate electricity (Eskom fact sheet: Koeberg Power Station).

Nuclear fuel in the reactor core consists of pellets of enriched uranium dioxide encased in about 4 m long metal tubes, called fuel rods. These fuel rods are bundled in an array to form fuel assemblies. Each reactor at the KNPS uses approximately 157 assemblies over a period of approximately 1.5

years. The KNPS refuels its reactors approximately every 18 months, at which stage approximately one third of the fuel is replaced with new fuel. On average, fuel stays in the reactor for three cycles (i.e. 5 years).

Used fuel is nuclear fuel that has been used in the fission process to the point where it is no longer useful in sustaining a nuclear reaction. The KNPS generates approximately 32 tons of used fuel each year i.e. 1 280 tons over a 40 year lifetime. At the KNPS, the volume of Nuclear waste is classified as low, intermediate or high level waste. Vaalputs, situated approximately 600 km north of Cape Town, is the national nuclear waste disposal site for low and intermediate level waste. (Eskom fact sheet: Nuclear Waste). There is currently no national nuclear waste disposal site for high level waste.

used fuel generated is small by industrial standards and is stored safely so that it does not constitute a health risk to surrounding communities.

At the KNPS, used fuel assemblies are stored under water in storage racks in SPFs. Each reactor has a dedicated SFP which can hold approximately 1 500 assemblies. Water cools the used fuel

assemblies and serves as an effective shield to protect workers from radiation in the fuel storage building. A limited number of used fuel assemblies are also stored in the Cask Storage Building (CSB) at the KNPS in 4 dry storage casks.

The used fuel will ultimately either be sent to a reprocessing facility when uranium and

The Centralised Interim Storage Facility is a proposed central storage facility for used nuclear fuel and waste, to be established by the National Radioactive Waste Disposal Institute.

plutonium extraction becomes economically viable, or it will be disposed of at an approved repository or the long-term off-site storage facility, such as the proposed CISF.

#### What is Radiation?

Radiation is the process whereby certain atoms emit energy in the form of electromagnetic waves or particles in order to become more stable. Radiation that can produce charged particles ("ions") in both inanimate and living matter can present a health hazard. There are various types of ionising radiation: alpha, beta, neutron and gamma radiation. Alpha radiation is unable to penetrate clothing or skin but can penetrate eyes and open wounds or alpha-emitting substances can be taken into the body by inhalation or with food/water. Beta radiation can pass through 1-2 cm of water or human flesh but a sheet of aluminium a few millimetres thick can stop beta radiation. Neutron radiation occurs inside a nuclear reactor, but efficient shielding against neutrons can be provided by, for example, water. Gamma radiation can pass through the human body but would be almost completely absorbed by one metre of concrete.

Radiation from used fuel assemblies starts decreasing immediately after the fission reaction has stopped and will have decreased by more than 95% within approximately 10 years. (Eskom fact sheet: Radiation).

## 3.2 Proponent's Project Motivation

The SFPs in which used fuel assemblies are stored at the KNPS are nearing capacity. The SFPs

serving Reactor Unit 1 and Reactor Unit 2 will reach capacity by March 2018 and September 2018, respectively.

The Radioactive Waste Management Policy and Strategy for the Republic of South Africa (2005) states that Government is responsible for investigating long-term options for the "safe management of used fuel and high level radioactive waste in South Africa" including the option of a CISF.

Due to the uncertainty regarding the development of the CISF, only likely to be in operation by 2025, it has become imperative for Eskom to investigate interim options for

Dry cask storage is a method of storing used fuel that has already been cooled in the SFP. Casks are typically concrete or steel cylinders which are either welded or bolted closed to provide leak-tight containment of the used fuel. The used fuel assemblies within the casks are surrounded by inert gas and each cylinder is surrounded by additional steel, concrete, or other material to provide radiation shielding to workers and members of the public (www.wikipedia.org).

the storage of used fuel on the KNPS site. Additional storage capacity will be required to accommodate any further used fuel generated at the KNPS. Eskom consequently developed the *Koeberg Spent Fuel Storage Project* strategy to cater for the KNPS' needs until 2025 and comprises three phases described below:

#### • Phase 1:

O Phase 1A: Procurement of seven dry storage metal casks to ensure the Koeberg Reactor Units can operate beyond 2018, without exceeding SFP capacity. A number of used fuel assemblies will be transferred from the SFPs into the new dry storage casks. These casks will be stored with the four existing dry storage casks in the on-site CSB.

- O Phase 1B: Procurement and placement of spent fuel inserts to gain back the currently unoccupied storage cells in the SFPs due to a checker-boarding arrangement. This will open up previously unusable storage cells in the SFPs, allowing for an increase in the total number of used fuel assemblies that can be stored in the SFPs.
- Phase 2: Procurement of approximately 30 40 additional dry storage casks to allow ongoing operation of the KNPS until 2025.
- Phase 3: Establishment of the TISF for the storage of the casks procured in Phase 2.

Used fuel assemblies generated beyond 2025 will also be stored in casks at the TISF should the CISF not be available.

The TISF will comprise of concrete pad(s) within a site footprint of approximately 12 800 m<sup>2</sup> and will be designed to accommodate storage of not more than 160 casks, for used nuclear fuel generated at the KNPS up to the end of operational life of the plant.

It is an objective of Phase 3 to commence construction of the TISF by 2018 for the storage of the above-mentioned casks. It is anticipated that the TISF will be operated under the existing KNPS NNR license in terms of the NNRA.

The facility may be established in a modular manner, depending on the availability of a CISF which is proposed for implementation by 2025. However, due to the uncertainty around the development of the CISF, the TISF may be required through to the end of the expected operational life of the KNPS.

It is important to note that the strategy above assumes the CISF is unavailable for use before 2025.

## 3.3 Description of the Project Area

#### 3.3.1 Site Description

The KNPS is located on a sandy coastline of the West Coast, approximately 27 km north of the Cape Town Central Business District and 1.5 km north of the residential area of Duynefontein. The KNPS is situated on Cape Farm Duynefontyn No. 1552 (previously consisting of Farm Duynefontyn No. 34 and Farm No. 1375 which were consolidated by the City of Cape Town in 2015). Access to the KNPS is via the R27 which runs along the property's eastern boundary or alternatively via Otto du Plessis Drive (Figure 3-1).

Cape Farm Duynefontyn No. 1552 (Table 3-1) is owned by Eskom and measures approximately 1 294 ha and is zoned for *Risk Industry* and *Agricultural*.

Table 3-1: Property details

Farm Name/ Erf Number	Cape Farm Duynefontyn No. 1552				
SG 21 Digit Code	C0160000000155200000				
Physical Address	Koeberg Nuclear Power Station, Off R27 West Coast Road, Melkbosstrand, Western Cape				

The topography of the area is relatively flat with an active dunefield extending north of the KNPS. A stabilised primary dune inland of the KNPS screens many of the KNPS buildings although the two nuclear reactor units are prominent landmarks in the region.

The vegetation of the area consists of low coastal shrub (Cape Dune Strandveld and Atlantis Fynbos), typical of much of the West Coast. The KNPS is located within the Koeberg Nature Reserve, a 3 000 ha reserve managed by Koeberg Managing Authority. The Atlantic Ocean forms the western boundary of the KNPS.

The TISF will be located within the Security Protected Area (SPA) of the KNPS (Figure 3-3), a flat area disturbed by previous construction activities and by current operational activities at the KNPS.

The **Security Protected Area** is a restricted area surrounding the reactor units to which only authorised personnel have access. The SPA is distinct from the protected area status of Koeberg Nature Reserve in terms of the NEM:PAA.

## 3.3.2 Surrounding Land Use

There are a variety of land uses surrounding the KNPS including the Duynefontein residential area to the south (~ 1.4 km from the KNPS), the Koeberg Nature Reserve to the north, south and east, and the R27 along the property's eastern boundary (~ 1.8 km from the KNPS) with agricultural activities further east (Figure 3-2).

The KNPS is located within a predominantly natural environment, although there are existing built elements throughout the property including powerlines, office buildings, a visitors centre, weather station, roads and parking areas (Figure 3-2).

#### **Koeberg Nature Reserve**

The primary drive for proclaiming the Koeberg Nature Reserve (Figure 3-1) was to support the operation of the KNPS while conserving the natural habitat as far as possible; providing a buffer around the KNPS and maintaining land for future development.

The Koeberg Nature Reserve is surrounded by a private nature reserve, *viz*. Witzands Aquifer Nature Reserve (northeast), the R27 West Coast Road (east), the Duynefontein residential area (south) and the Atlantic Ocean (west). The area incorporates a number of environments which include small wetlands, coastal dune fields, strandveld dune vegetation, sand plain fynbos as well as areas infested with alien vegetation.

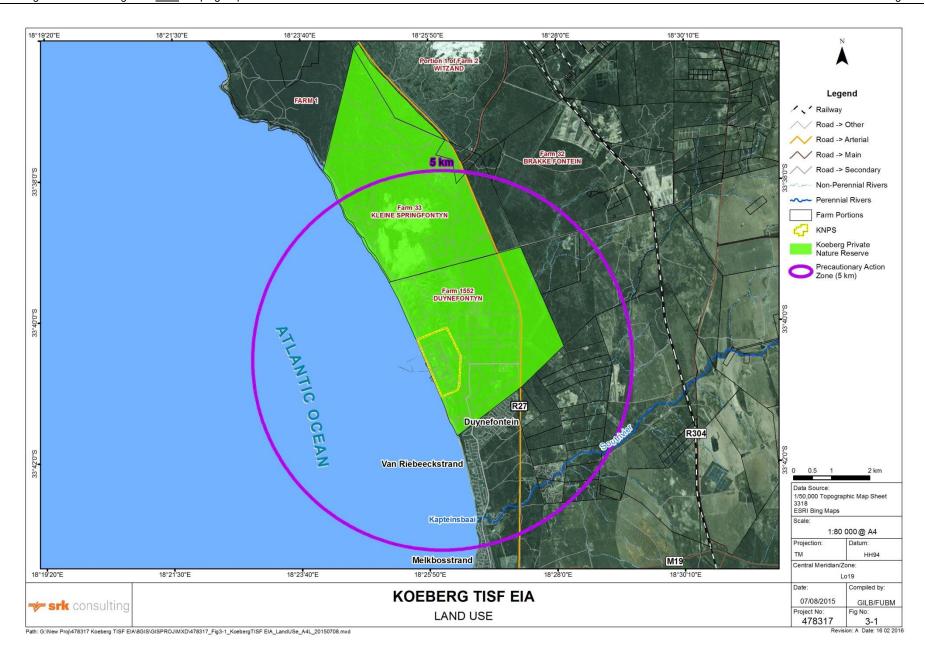
#### The KNPS Emergency Planning Zones

There are three emergency planning zones around the KNPS: the KNPS **Precautionary Action Zone (PAZ)** (area within a 5 km radius of the KNPS) (Figure 3-1) and the **Urgent Protective Action Zone (UPZ)** (area within a 16 km radius of the KNPS). All development within these emergency planning zones must comply with the relevant development controls (see Section 2.2.7) to ensure the integrity of the Koeberg Nuclear Emergency Plan. The **Long Term Protective Action Zone (LPZ)**, within a radius of 80 km of the KNPS has no specific development restrictions but preparations have been made for emergency procedures in this zone.

## 3.4 Project Alternatives

Appendix 2 Section 2 (h)(i) of the EIA Regulations, 2014, require that all S&EIR processes must identify and describe 'alternatives to the proposed activity that are feasible and reasonable'. Different types or categories of alternatives can be identified, e.g. location alternatives, type of activity, design or layout alternatives, technology alternatives and operational alternatives. The 'No Go' or 'No Project' alternative must also be considered.

Not all categories of alternatives are applicable to all projects. However, the consideration of alternatives is inherent in the detailed design and the identification of mitigation measures, and therefore, although not specifically assessed, alternatives have been and will be taken into account in the design and S&EIR processes.





The KNPS from Duynefontein beach



Ridgeline of the primary dune with Duynefontein in the background



Land use east of the KNPS with the R27 in the background



Agricultural land east of the R27 (foreground), Duynefontein left of photo and the KNPS right of photo



Duynefontein right of photo and the KNPS property left of photo



Existing structures in the landscape including administration buildings, radio/cell masts and the KNPS



KOEBERG TISF EIA
SITE DESCRIPTION AND LAND USES

Project No. 478317

Figure 3-2: Site description and land uses

Source: SRK, 2015

#### 3.4.1 Location Alternatives

Six location alternatives on the Koeberg property were identified and considered during the early feasibility phase of the project, and evaluated in an informal matrix. These included (see Figure 3-3):

- Conservation Area Site;
- Old Car Park Site;

- Dog Kennels Site;
- Old KTC Site:
- CSB Site; and
- Ekhaya Site.

The feasibility of the location alternatives was evaluated against the following key criteria:

- Security and safeguards: the need for adequately controlled land with on-site security staff and procedures;
- Radiation protection: aiming to reduce radiation exposure to as low as reasonably achievable, and avoid, reduce or eliminate any adverse effects on the environment, the public and workers at the facility due to storage activities during the storage timeframe;
- Environmental impact and human factors: aiming to develop the TISF on disturbed land, with minimal impact on terrestrial ecology, and aiming to preserve groundwater and air quality.
   Human factors considered included human activities, cultural and historical land uses, heritage resources, political, socio-economic and aesthetic acceptability;
- Site characteristics: compatibility of the site with the construction and operation of the TISF without major constraints e.g. geological faults, flood plains, habitats for endangered species or exploitable mineral or energy resources;
- Land size: adequate land to accommodate storage facilities, infrastructure and heavy vehicle movement;
- Protection of used nuclear fuel: protection of the TISF against external threats and hazards including natural phenomena (e.g. earthquakes, potential tsunamis, ground stability, floods etc.) and man-made hazards (e.g. aircraft crashes and chemical explosions);
- Accessibility of the site: including availability of routes and modes of transport allowing for the stored fuel to be moved off-site in the long term; and
- Cost and development time: offering opportunities for cost effective design of the required infrastructure including radiation protection and security requirements.

The site selection process eliminated four sites and identified two viable site locations for the TISF i.e. the CSB site - the preferred alternative (Alternative 1) - and the Ekhaya site (Alternative 2) (Figure 3-3). Alternative 1 is located adjacent to the CSB on the northern boundary of the KNPS and Alternative 2 is located along the southern boundary of the KNPS next to the Ekhaya Building.

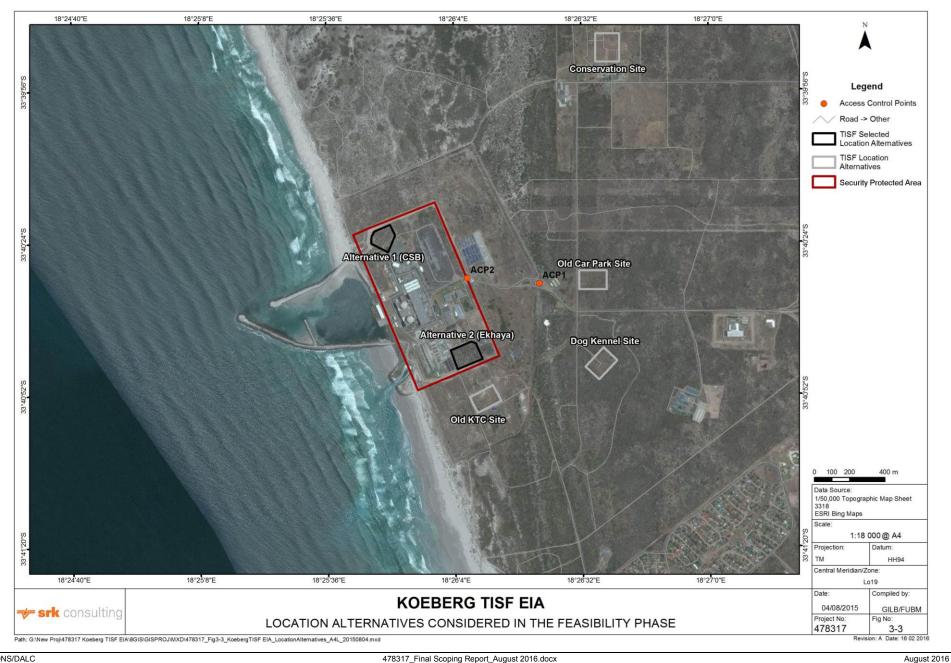
Key characteristics of the two sites that were selected as alternatives are that they are:

- Not situated in geological fault areas, or wetlands;
- Not situated in areas with industries presenting high physical risks;
- In areas meeting the national key point security requirements;
- In areas with existing radiological control infrastructure;
- Vacant unused land within the KNPS, zoned as Risk Industry; and
- Situated on the KNPS site<sup>6</sup>.

Alternative 1 is Eskom's preferred alternative for the following reasons:

- It is situated adjacent to an existing radiological zone (low level waste facility);
- It is located within a more ecologically disturbed area compared to Alternative 2; and
- Less extensive haul road upgrades will be required than for Alternative 2.

<sup>&</sup>lt;sup>6</sup> The identified sites do not include any off-site alternatives.



#### 3.4.2 The No Go Alternative

The No Go alternative will be considered in the EIA in accordance with the requirements of the EIA Regulations, 2014. The No Go alternative entails no change to the status quo, in other words the proposed TISF will not be built.

## 3.5 Project Construction and Infrastructure

#### 3.5.1 Introduction

The project design information in this section reflects the information available at the time of the compilation of the Scoping Report. However, since the detailed design and EIA are being undertaken concurrently, it is possible that the project description will evolve and be refined during the final stages of the EIA process.

#### 3.5.2 The TISF

The TISF will be constructed on a portion of vacant land within the KNPS <u>(SPA)</u>. The TISF will comprise of concrete pad(s) within a site footprint of approximately 12 800m<sup>2</sup>. The TISF will be constructed to accommodate 160 dry storage casks, though the dry storage casks will be placed on the pad in a modular manner.

The dry storage casks will be either metal or concrete casks (see Figure 3-4) or concrete assemblies and will be approximately 6 m in length and 3 m in width or diameter. Each cask can hold up to 37 assemblies depending on the cask design. The dry storage casks are robust and can withstand significant external impact forces such as an aircraft crash.

The design of the concrete pad(s) of the TISF lends itself to various types of dry storage casking systems. The TISF will also have an auxiliary building to house ancillary equipment.

The TISF will meet the requirements of the NNR and will be built and managed in accordance with the IAEA safety standards.

#### 3.5.3 Perimeter Fence and Security

A secure perimeter fence of approximately 2.3 m in height will be erected around the TISF site with controlled security access. The perimeter fence will be a clear view fence with concrete plinths for supporting poles.

### 3.5.4 Access Roads

The existing KNPS internal road network will be used to transfer casks from the SFP to the TISF. <u>A portion of existing gravel road with approximate dimensions (6m width and 20m length) will be surfaced / tarred to connect the existing haul road to the TISF at the entrance to Alternative 1 as indicated on Figure 3-5 and Figure 3-6.</u>

#### 3.5.5 Construction Laydown Area

The construction laydown area will be located within the proposed TISF operational area to reduce the disturbance footprint. Temporary site offices and a parking area for construction vehicles and equipment will be located in this area.

## 3.5.6 Earthworks

Details of the earthworks (cut and fill) required are not yet available and will depend on site-specific conditions of the selected site alternative (once approved). Concrete piling may be required to comply with seismic requirements.



**▼ srk** consulting

**KOEBERG TISF EIA** EXAMPLE OF A TISF

Project No. 478317

Figure 3-4: Examples of TISFs

Source (top figure): http://gttsi.com/wp-content/uploads/2015/01/DryCaskStorage.jpg
Source (bottom figure): http://berniesteam.com/wp-content/uploads/2012/12/DSC02774.jpg
Note: These images are provided as examples and are not intended to indicate the selected technology.

## 3.5.7 Stormwater Management

A conceptual stormwater management plan will be developed to ensure appropriate stormwater management during construction of the TISF. This information will be included in the EIA Report.

## 3.5.8 Water Supply

The volume of fresh water required for the construction of the TISF has not yet been determined. Required water volumes are not expected to be excessive. Water will be supplied by the CoCT.

## 3.5.9 Power Supply

The source of power during the construction phase has not yet been determined.

## 3.5.10 Waste Management

Waste produced during the Construction Phase will be typical construction rubble (rock, sand, soil, asphalt and concrete), general waste, dirty / used oil and grease, polluted material and soil and polluted water. Waste management during construction will be the responsibility of the contractor.

All construction waste will be removed from work areas and disposed of at approved and licensed waste disposal facilities. Where possible, options for the reuse or recycling of waste materials will be favoured over disposal.

General waste and waste classified as hazardous (as per Category A, Section 15 of Schedule 3 of the National Environmental Management: Waste Act, 2008) will be separated on site and stored temporarily before being transported to a licenced disposal facility.

## 3.5.11 Air Quality Management

Sources of emissions during the construction phase will include dust generated by the movement of construction vehicles on cleared areas, drilling and blasting (where required) and bulk earthworks (where required) as well as exhaust emissions from construction vehicles and diesel generators.

Emissions during the construction phase of the project will be limited as far as possible through stabilisation of any exposed areas and watering of cleared areas where dust becomes problematic. Construction vehicles and generators will be maintained in good working order to minimise emissions.

#### 3.5.12 Noise and Vibration Management

Sources of noise and vibration during construction include construction vehicles and generators, as well as drilling and blasting where required. Nuisance impacts of noise, particularly closer to Duynefontein will need to be managed.

## 3.5.13 Construction Traffic

The construction haul routes will use the existing KNPS internal road network. Construction traffic will include large vehicles / trucks for material delivery. The access of passenger vehicles (for construction workers) will be in accordance with the KNPS security procedures within ACP 2. The number of construction vehicle trips per day is unknown at this stage.

The equipment expected during the construction phase is shown in Table 3-2. This equipment would be delivered to the site (via truck, where required) and will remain on the site for the duration of the construction phase.

Table 3-2: Estimated construction equipment

Equipment	Quantity
Mobile crane	2
Earth moving vehicle	1
Front end loader	2
Dump trucks	3
Pump trucks/batching plant	2
Site vehicle	2

#### 3.5.14 Workforce

It is estimated that the construction of the TISF could create 40 direct temporary jobs. Unskilled labour will be sourced from the surrounding communities. Workers will be trained to comply with the Eskom Safety, Health, Environmental and Quality (SHEQ) Policy.

### 3.5.15 Construction Schedule

It is anticipated that construction of the TISF will commence in 2018 and will take approximately 12 months.

Construction activities are expected to occur during normal working hours of 07h30 to 16h35 and will largely be limited to Mondays to Fridays. Construction activities will only be allowed outside these times where unavoidable, subject to the contractor successfully motivating for an extension.

## 3.6 Project Operations

## 3.6.1 Transfer and Storage of Used Fuel

The TISF will accommodate the storage of dry storage casks established in a modular manner as and when required. The 30 - 40 casks procured in Phase 2 of the Koeberg Spent Fuel Storage Project will be progressively placed on the concrete pad(s) once each phase of the TISF construction is complete.

The dry storage casks will accommodate used fuel assemblies removed from the reactor units and cooled in the SFPs. The dry storage system is a passive system which is not reliant on human action or active components to maintain a suitable safety level. Heat generated from used fuel radioactive decay will dissipate through the external surface of the dry casks.

#### 3.6.2 Transfer Routes

The dry storage casks will be transferred from the SFP to the TISF on the existing Koeberg internal road network (Figure 3-5) as well as the new site access road (Section 3.6.4).

#### 3.6.3 Workforce

The number of additional job opportunities created during the operational phase is not known at this stage, however this is unlikely to be significant.

#### 3.6.4 Radiation Management

The current safety case at the KNPS references dry storage casks as Type B(U) packages which are governed by IAEA Safety Standards that includes the implementation of shielding structures. The storage and surveillance of the casks are also performed in accordance with the KNPS RP standard GGS-1304, in order to ensure that the As Low As Reasonably Achievable (ALARA) principle for minimizing radiation exposure, is adhered to. The transportation of casks will be governed by the IAEA Transport Regulations. The edition of the Transport Regulations approved by the NNR at the time of the establishment of the TISF shall be applied.

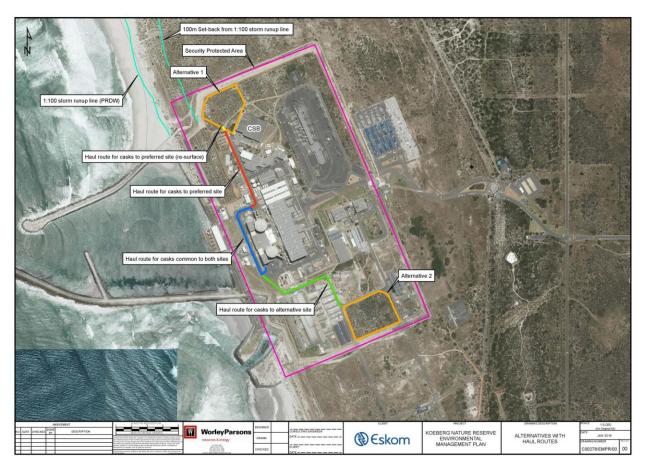


Figure 3-5: Transfer routes from the SFP to the TISF (Alternative 1 and 2)



Figure 3-6: Existing access road to the TISF (Alternative 1)

## 3.6.5 Emergency Response

Eskom has a comprehensive Emergency Response Plan (ERP) for the KNPS, incorporating multiple procedures and interfaces with local authorities and international entities. The purpose of emergency response planning is to identify potential emergency situations and associated impacts and to define and document appropriate responses. The ERP is well documented and exercised/simulated regularly under the guidance of the NNR.

The introduction of the TISF project requires an update to the existing KNPS ERP. The ERP will address various types of emergency situations including security situations, human error and environmental disasters.

## 3.6.6 Stormwater Management

A conceptual stormwater management plan will be developed for each of the site alternatives and will be finalised once development of the preferred site alternative has received environmental authorisation.

Stormwater will be diverted into the existing KNPS stormwater management system, which was designed with spare capacity and which Eskom has indicated will be able to accommodate additional stormwater volumes generated by the TISF.

## 3.6.7 Waste Management

No waste will be generated at the TISF during operations, as the TISF is only a storage facility.

## 3.6.8 Operational Procedures

Eskom has implemented a number of environmental management procedures to prevent the uncontrolled release of pollutants (solid, liquid and gaseous) into the environment, which will continue to be applied during the operational phase. These procedures are implemented by Eskom and its contractors.

## 3.6.9 SHEQ Policy

Eskom has a SHEQ Policy in place, which is implemented and enforced on all Eskom sites (including KNPS). This policy ensures that SHEQ is an integral part of all operations at the KNPS and that no operating condition, or urgency of service, justifies exposing anyone to negative risks, causing an incident or damage to the environment.

#### 3.6.10 Environmental Awareness

Eskom has an effective environmental awareness communication programme (Public Safety Information Forum) in place for KNPS, which ensures that the surrounding community is well informed of existing operations and future development projects at the KNPS. This system will be used to keep the surrounding community informed during the operation of the TISF.

## 3.7 Project Decommissioning

The TISF will be decommissioned in accordance with the approved KNPS decommissioning plan.

## 3.8 Environmental Factors Influencing Project Design

In addition to the potential impact of the proposed project on the surrounding environment, there are a number of environmental factors which could affect the project, and have thus been taken into consideration during the planning and design of the project. Key environmental factors which could influence the project include:

- · Climate change and associated sea-level rise; and
- Geological and founding conditions.

These factors were considered during the early feasibility and design stages of the project. Eskom conducted a study to evaluate the feasibility of location alternatives against key criteria (Section 3.5.1) including the protection of the TISF against external environmental threats and hazards (e.g. earthquakes, potential tsunamis, ground stability, floods etc.) and man-made hazards.

Climate change is expected to raise sea level by approximately 1 m over the next century. The TISF will be located at least 150 m from the HWM (Figure 3-5) and inland of a dune system which provides a natural buffer to sea-level rise and potential storm surges/tsunamis.

The alternative sites for the TISF are both located in the KNPS SPA, for which the geological and related hazard conditions are well understood. The TISF will be constructed to withstand the maximum expected earthquake magnitude of the area.

## 4 Description of the Affected Environment

The following chapter presents an overview of the biophysical and socio-economic environment in which the proposed project is located, to:

- Understand the general sensitivity of and pressures on the affected environment;
- Inform the identification of potential issues and impacts associated with the proposed project, which will be assessed during the Impact Assessment Phase;
- Identify gaps in available information to inform specialist study requirements; and
- Start conceptualising practical mitigation measures.

Where site specific information is not available, information is reported on a regional scale, generally the CoCT municipal area.

## 4.1 Biophysical Environment

## 4.1.1 Topography

The topography of the KNPS site is relatively flat with a gentle slope towards the coast. The coastal strip is characterised by a sandy shoreline and a large dunefield (consisting of ancient dunes stabilised by vegetation, and more recent unconsolidated dunes) extending northward from the KNPS. From the coastline moving inland, the topography rises gently to a dominant north-south ridgeline of a vegetated primary dune approximately 900 m inland, with an elevation of approximately 35 m above mean sea level (msl). A coastal plain extends east beyond this landform.

The topographical landscape of the KNPS, located on the southern extent of the dunefield, has been significantly modified by previous construction activities. The KNPS site is relatively flat, varying in elevation from 5 m above msl near the coast to approximately 20 m above msl along the eastern boundary.

Both alternative sites currently under investigation for the placement of the TISF are relatively flat but site Alternative 1 has a more pronounced, albeit gentle, slope towards the coast.

#### 4.1.2 Geology

The unconsolidated to semi-consolidated sediments underlying the KNPS site belong to the Sandveld Group, which is subdivided into the Elandsfontyn, Varswater, Velddrif, Langebaan, Springfontyn and Witzand formations. The lithostratigraphy of the Sandveld Group is summarised in Table 4-1 and the surface geology is shown in Figure 4-1. The sediment thickness varies considerably and reaches a maximum thickness of between 40 and 70 m (Dyke, 1992). Boreholes drilled at and around the KNPS indicate a sediment thickness of approximately 22 m.

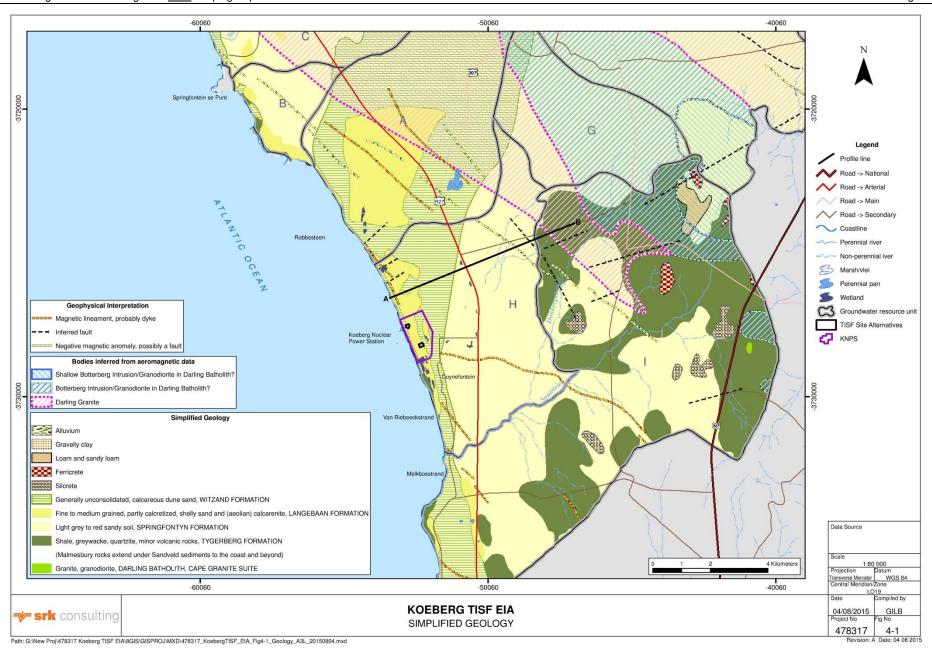
The sediments of the Sandveld Group are underlain by meta-sediments belonging to the Tygerberg Formation of the Malmesbury Group. The Tygerberg Formation consists mainly of alternating greyish, medium to fine grained greywacke and phyllitic shale. Where intruded by the Cape Granite Suite (not present on-site) and narrow dolerite dykes (present on-site), the sediments are baked to massive bluish-grey hornfels along their contacts. These dykes, as well as faults in the vicinity of the site, have been delineated by the Council for Geoscience. The bedrock at the KNPS consists of a steeply dipping, interlaminated and bedded succession of greywacke, siltstone and mudstone, with occasional shale interbeds of the Malmesbury Group. Gradational sequences and contacts are characteristic and the beds grade mainly from coarse to fine grained in upward-fining successions. The degree and depth of weathering varies considerably across the KNPS site. Unweathered greywacke is present within 6 m of the bedrock surface, while weathering of mudstone and siltstone

extends to 26 m below ground level (mbgl) in some places. The bedrock is brecciated along fault zones, and is intensely jointed and often sheared along such fault planes. Quartz veins, pyrite and clay gouges are ubiquitous in the joints and faults, especially where the wall-rocks of the faults are brecciated.

Table 4-1: Summary of the Sandveld Group lithostratigraphy

Formation	Origin	Туре	Description	Epoch	Age (Ma)
Witzand	Aeolian	SAND	Fine- to medium-grained, whitish grey to slightly reddish, calcareous, cross-stratified, dune snails, echinoid spicules, forams and comminuted sea shells	Holocene	0.01 to 0
Springfontyn	Aeolian	SAND	Fine- to medium-grained, quartzitic sand, muddy and peaty in places	Pleistocene to Holocene	1.8 to 0.01
Langebaan	Aeolian	CALCAREOUS SANDSTONE	Cross-bedded, fine- to medium- grained, with calcrete layers	Late Pliocene to Late Pleistocene	2 to 0.2
Velddrif	Shallow marine	GRAVEL and SAND	Shelly and pebbly, cross- bedding	Plio-Pleistocene to Late Pleistocene	1.8 to 0.2
Varswater	Estuarine / shallow-marine	SAND	Phosphatic, quartz-sand	Miocene to Pliocene	23 to 5
	Estuarine / shallow-marine	SAND	Non-phosphatic, carbonaceous clay and lignite lenses	Miocene to Pliocene	23 to 5
	Shallow-marine	GRAVEL	Pebbles and cobbles	Miocene to Pliocene	23 to 5
	Estuarine	SAND	Argillaceous (clayey sand / silt)	Middle Miocene	14
Elandsfontyn	Fluvial	SAND and GRAVEL	Angular clasts, carbonaceous clay and lignite lenses	Early to Middle Miocene	23 to 14

Source: after Johnson et al., 2006 in SRK, 2015a



#### 4.1.3 Climate

The Western Cape has a semi-arid Mediterranean climate, which is strongly influenced by the cold Benguela Current and coastal winds. The Cape Town area is characterised by dry warm summer months (October to April) and wetter cool winter months (from May to September).

#### 4.1.3.1 Rainfall

The average annual rainfall recorded at the KNPS from 1980 to 2014 is 382 mm per annum (Table 4-2), whilst a maximum of 640 mm was recorded in 1987 and a minimum of 242 mm in 2000 (Figure 4-2). Maximum average rainfall occurs during June (c.70 mm), July (c.65 mm) and August (c.57 mm), while the lowest average rainfall occurs during January (c.10 mm) and February (c.8 mm). Maximum monthly rainfall measured during this period occurred during June 1994 (157.4 mm), July 2001 (162.4 mm) and August 2013 (160.7 mm).

Fog is a regular occurrence along the West Coast during the summer months and can drift as far as 3 km inland.

Table 4-2: Monthly rainfall data recorded at the KNPS from 1980 to 2014

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average	10.2	8.5	12.6	32.4	45.6	70.5	64.5	57.1	34.0	18.3	16.6	11.6	382.1
Minimum	0.0	0.0	0.0	2.8	1.3	12.0	22.8	12.8	2.5	0.6	0.4	0.3	242.4
Maximum	67.6	42.0	48.4	107.8	98.2	157.4	162.4	160.7	75.0	114.8	67.8	32.8	640.4
Median	5.5	5.5	7.2	29.0	38.9	68.5	57.3	54.2	30.0	13.4	13.0	8.6	365.0

Source: Eskom, 2014 in SRK, 2015

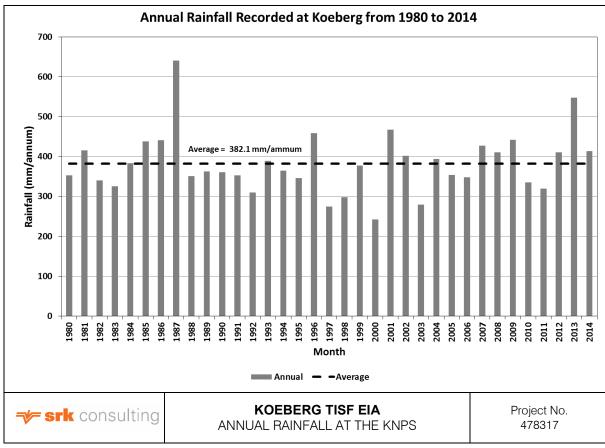


Figure 4-2: Variation in annual rainfall at the KNPS

Source: SRK, 2015

#### 4.1.3.2 Ambient Temperature

Summers are hot and dry with an average daily maximum temperature of 28 °C in summer. Winter months are cold and wet with an average daily maximum temperature of 17°C. July is typically the coldest month and February the hottest month of the year.

#### 4.1.3.3 Wind

The predominant wind in the area is from the south-west in summer, followed by winds from the north-east in winter. Summer wind speeds are generally higher than those during winter.

## 4.1.4 Air Quality

There are no significant sources of air pollution in the area. Farming activities generate limited emissions, mainly airborne particulates. It is therefore expected that air quality in the project area is good.

#### 4.1.5 Noise

There are no significant sources of noise in the area, aside from noise propagated by vehicles travelling along the R27. Along the coast, noise generated by wave action is likely to result in higher than normal ambient noise levels, especially during rough sea conditions.

The residents of Duynefontein are the closest sensitive noise receptors to the KNPS.

## 4.1.6 Hydrology and Surface Water

The KNPS falls within quaternary catchment G21B and in the Berg Water Management Area.

No watercourses flow through the KNPS or the surrounding Koeberg Nature Reserve. The Sout River (and its tributary, the Donkergat River) and Diep River drain the broader area. These rivers all flow in a south-westerly direction towards the coast, but are generally ephemeral in nature. The mouth of the Sout River is at Melkbosstrand, approximately 3.8 km south of the Koeberg Nature Reserve.

The only area in the vicinity of the KNPS where the terrain is sufficiently low-lying to support significant areas of wetland habitat occurs 1.5 km south of the site (SRK, 2014). The slack areas between a series of low lying east-west oriented dunes give rise to a mosaic system of alkaline dune-slack wetlands (Day, 2007a) (Figure 4-3). These dune wetlands are fed primarily by seasonal fluctuations in the water table, forming pools of shallow, brackish water during winter. These wetlands are dry in summer when the water table drops. The wetlands are considered of high local and regional importance, although their similarity to other wetlands north of the KNPS has not yet been established (Day, 2007a). A few other seasonal wetlands occur in isolated areas to the north and east of the KNPS (Figure 4-3).

In addition to the natural wetlands that occur within the nature reserve, the property also includes a number of artificial wetland areas, which are the product of activities associated with the construction of the KNPS e.g. borrow pits (Figure 4-3). A series of coastal infiltration basins, which have been excavated between the dunes 3 km north of the site for disposal of wastewater are highly artificial habitats, comprising deep, permanent, open water bodies, vegetated by species that thrive under conditions of nutrient enrichment (Day, 2007a and Day, 2007b). The coastal infiltration basins are unnatural water features of low quality, but locally rare, permanent freshwater habitat, artificially contributing to plant and animal diversity in the area. They play an important role in terms of providing a hydraulic barrier for the protection of the Atlantis Aquifer from seawater intrusion (Day, 2007a).

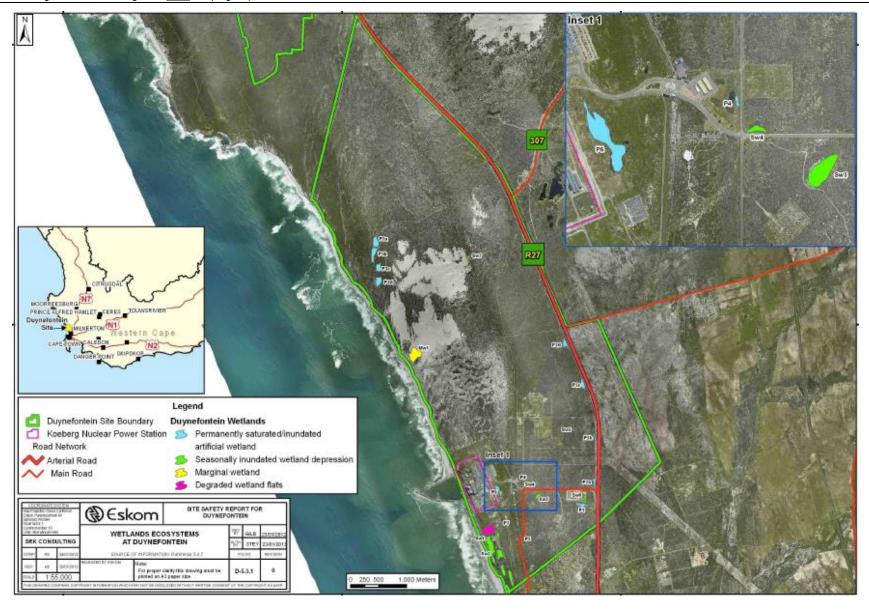


Figure 4-3: Wetlands occurring in the Koeberg Nature Reserve

Source: Koeberg Nature Reserve Management Authority, 2014

## 4.1.7 Hydrogeology

This section is based on the Geohydrology Baseline Assessment by SRK Consulting, 2015.

The KNPS falls within the Duynefontein Groundwater Resource Unit (GRU) which extends from the edge of the Atlantis industrial area southwards to the Sout River near Van Riebeeckstrand. The western and eastern boundaries of the GRU are formed by the coastline and outcrops of the Tygerberg Formation rocks, respectively. The GRU is predominantly covered by geologically younger sediments of the Witzand and Springfontyn formations.

#### 4.1.7.1 Aquifer Types

Groundwater in and around the KNPS occurs in two aquifers (Figure 4-4), namely:

- An upper unconfined primary (intergranular) aquifer locally known as the Atlantis Aquifer; which forms part of the more extensive Sandveld Aquifer, and
- A deeper semi-confined secondary fractured bedrock aquifer known as the Malmesbury Group Aquifer.

The Atlantis Aquifer is an important and significant primary aquifer with two wellfields (Witzand and Silwerstroom) situated >5 km north of the KNPS supplying water to the surrounding towns (predominantly to Atlantis). Numerous boreholes exist around the KNPS (Figure 4-4).

Only the upper Sandveld Aquifer is discussed in the subsections below as the deeper Malmesbury Group Aquifer will not be impacted by the project for the following reasons:

- The Malmesbury Aquifer is separated from the Sandveld Aquifer by a c.5 m thick clay layer. This
  clay layer forms a low permeable confining barrier to downward migration of any potential
  contaminants.
- The Malmesbury Aquifer is a confined aquifer with an upward flow gradient which prevents downward movement of potential contaminants from the upper unconfined Sandveld Aquifer into the Malmesbury Aquifer.

#### 4.1.7.2 Depth to Groundwater

Seasonal rainfall variation does not significantly affect groundwater flow direction or groundwater levels at the site. The influence of tides may impact on temporal variations in groundwater levels. Based on previous observations, groundwater levels west of the KNPS fluctuated by some 0.55 m during construction of the power units and by 0.70 m within the foundation area of the units (Dames and Moore, 1975a and Dames and Moore, 1975b).

Monitoring data for boreholes in close proximity to the KNPS since 1985 show no indication of significantly declining water levels. It is, therefore, apparent that groundwater levels have not been negatively impacted by abstraction from the Witzand or Aquarius wellfields (SRK, 2014). Seasonal trends are evident, as is the temporary influence of pumping.

The water table ranges between 2 and 5 mbgl. The depth to groundwater inversely mimics surface topography i.e. the higher the topography, the deeper the water table. Seasonal and tidal impacts are the dominant factors influencing local groundwater level fluctuations.

The depth to water table at Alternative 1, based on previous measurements in the area, is expected to be between 3 and 4 mbgl. Water depths measured at boreholes close to Alternative 2 indicate the water depth varied between 2.28 and 3.31 mbgl (SRK, 2010).

It is predicted that global warming will cause a future increase in sea levels worldwide (SRK, 2014). Modelling of potential sea level rise at the KNPS indicates a possible rise in sea level of about 1.2 m over the next 50 years (Bates *et al*, 2008). Groundwater levels at Alternative 1 could rise between 0.9 and 0.8 m and at Alternative 2 between 0.7 and 0.6 m, with effects (0.1 m) being propagated up to about 1 000 m inland (SRK, 2014).

#### 4.1.7.3 Groundwater Flow

Using the available water level elevation data from the numerous boreholes around the KNPS, a detailed site groundwater level contour map was compiled (Figure 4-5). These contours indicate the direction of groundwater flow to be from the interior, across the KNPS in a south-westerly direction towards the coast, with discharge into the ocean. Groundwater flows under a relatively low gradient at a calculated flow rate of 2.6 m per day, which indicates a relatively quick migration across the KNPS, towards the coastline.

#### 4.1.7.4 Aquifer Recharge

Estimates of recharge (as a percentage of rainfall) in the vicinity of the KNPS have previously been made by Bredenkamp and Vandoolaeghe (1982), Vandoolaeghe and Bertram (1982), Bertram et al., (1984), Fleisher (1990) and Fleisher and Eskes (1992). Average recharge was estimated to be between 10 and 30 % of mean annual precipitation (MAP). The recharge in the Duynefontein GRU was estimated to be 15 % of MAP (Woodford, 2007). Following a review of all available recharge estimates for this assessment, a site recharge figure of 15 % is considered to be representative.

Due to the unconfined nature of the upper sediments, recharge takes place over the entire area (Figure 4-6).

#### 4.1.7.5 Borehole Yields and Groundwater Use

The Atlantis Aquifer is a highly productive aquifer with borehole yields of >10 L/s being obtained from production boreholes in the Witzand and Silwerstroom Wellfields, which are located >5 km north of the KNPS (Figure 4-7). Borehole yields in the range of 0.5 to 5 L/s are common in the sands underlying the KNPS (SRK, 2014).

The town of Atlantis has been largely dependent on groundwater for its water supply since 1976. Groundwater is abstracted from the aquifer at 40 boreholes in the Witzand and Silwerstroom Wellfields (Figure 4-7), softened at a water treatment plant and then distributed for domestic and industrial use (Flanagan and Parsons, 2005). Two basins situated in the dunes to the south-west of Atlantis, which serve as final retention ponds for intermediate quality stormwater and treated domestic wastewater, provide for the artificial recharge of the aquifer some 500 m up-gradient of the Witzand Wellfield (Wright and Parsons, 1994).

Based on data received from the CoCT, 2.6 Mm³/a of groundwater was abstracted from the two wellfields in 2007, significantly less than what was estimated during previous years (SRK, 2014). The reduced yields and the reduced abstraction productivity of the two wellfields are a result of iron-related clogging. The CoCT is planning to rehabilitate and clean the boreholes to return borehole yields back to their initially determined sustainable yields (SRK, 2014). There are no visible signs of any negative impacts caused by groundwater abstraction from the Atlantis Aquifer, and the Silwerstroom spring is still flowing in spite of continued groundwater abstraction from the Silwerstroom Wellfield (Parsons, 1999). The discharge rate of the Silwerstroom spring was estimated to be 0.5 Mm³/a during 1992 (Fleisher and Eskes, 1992). The Atlantis Aquifer is fully allocated and no further development or increased abstraction (other than rehabilitating the existing boreholes) will be allowed (Van der Berg et al., 2007).

Groundwater is used in the vicinity of the KNPS as a source of water for smallholdings, brickmaking and sand mining (SRK, 2014). Groundwater is predominantly used for small-scale vegetable farming, water for horses and irrigation of commercial lawn. There are approximately 1 000 erven in Duynefontein, of which about 75 % have wellpoints installed for garden irrigation (SRK, 2014). An average of some 230 m³ per annum of groundwater per erf is abstracted via wellpoints from the primary aquifer, assuming gardens are irrigated each day. This equates to 173 000 m³ per annum of groundwater being abstracted from the area south of the KNPS.

Some 30 000 m³ per annum of groundwater is abstracted from four boreholes along the Aquarius Wellfield. The groundwater from these boreholes is currently used for stock watering and irrigation purposes, as well as to supply the dam at the conservation offices at the KNPS. These boreholes were initially drilled to supply water to the KNPS. However, as the groundwater is relatively saline, the use of these boreholes was temporarily abandoned as desalination by reverse osmosis was not cost-effective (Eskom, 2006a). It was previously estimated that 0.5 Mm³/a of groundwater was abstracted from the Aquarius Wellfield (Parsons, 1999). The four boreholes were re-commissioned at the beginning of 2007.

Seventeen monitoring boreholes are situated around the reactors at the KNPS. These boreholes are solely used for groundwater monitoring purposes, as are three piezometers installed in some of the wetlands on site.

#### 4.1.7.6 Aquifer Classification and Vulnerability

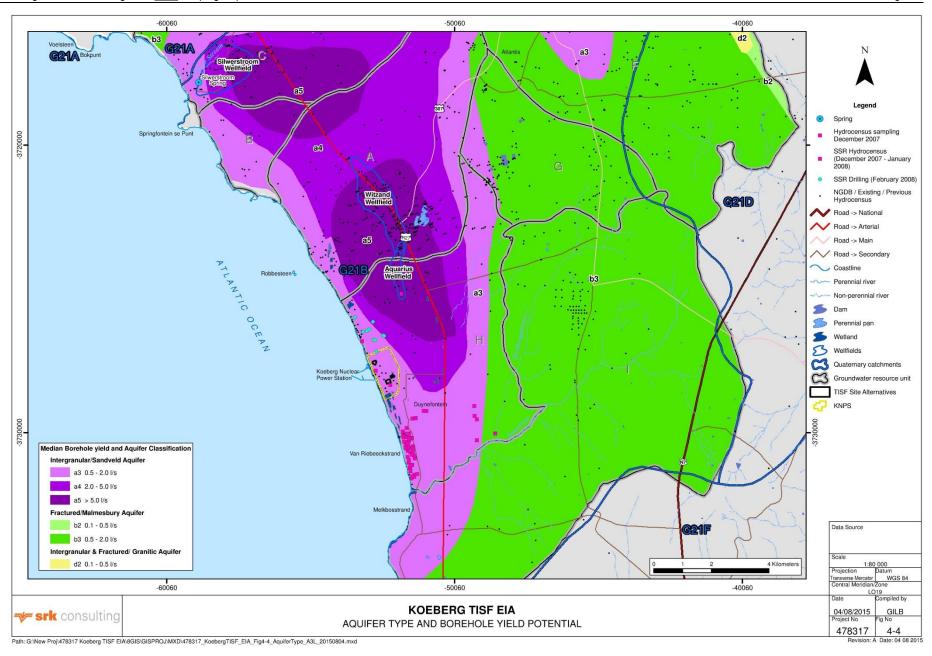
The Atlantis portion of the Sandveld Aquifer is classified as a Sole Source aquifer system (Parsons 1995 and Parsons and Conrad, 1998). Although smallholdings in the vicinity of the site are dependent on groundwater, a reticulated pipeline was installed in 2002. The primary aquifer system towards the east of the site is therefore classified as a Major Aquifer system with high vulnerability to anthropogenic impacts (Parsons and Flanagan, 2006). Its vulnerability is mainly due to its shallow unconfined water table and high permeability. The Sandveld Aquifer beneath the KNPS similarly has a high vulnerability due to its shallow water table and high permeability.

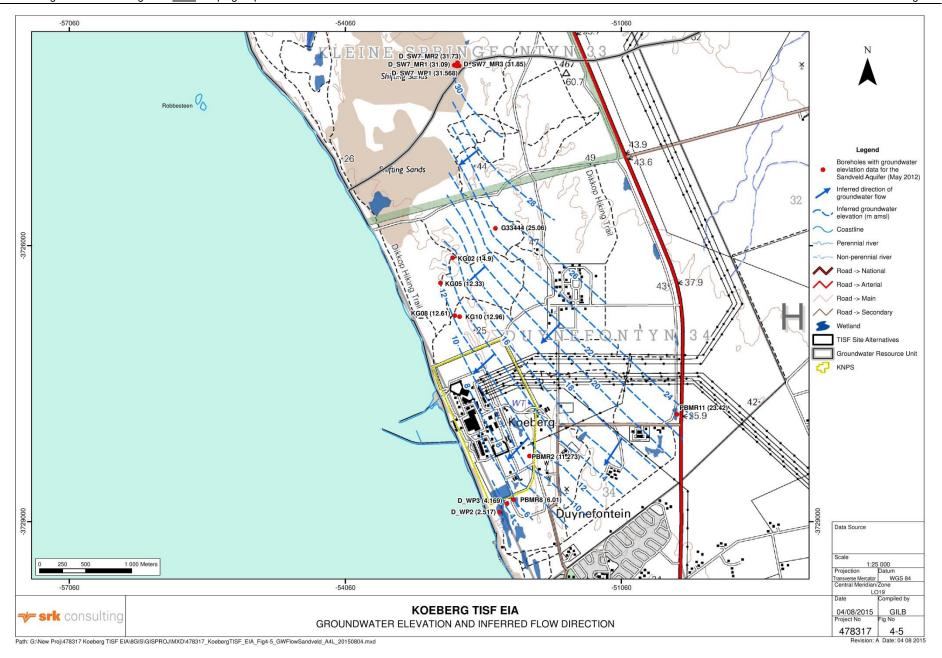
#### 4.1.7.7 Groundwater Quality

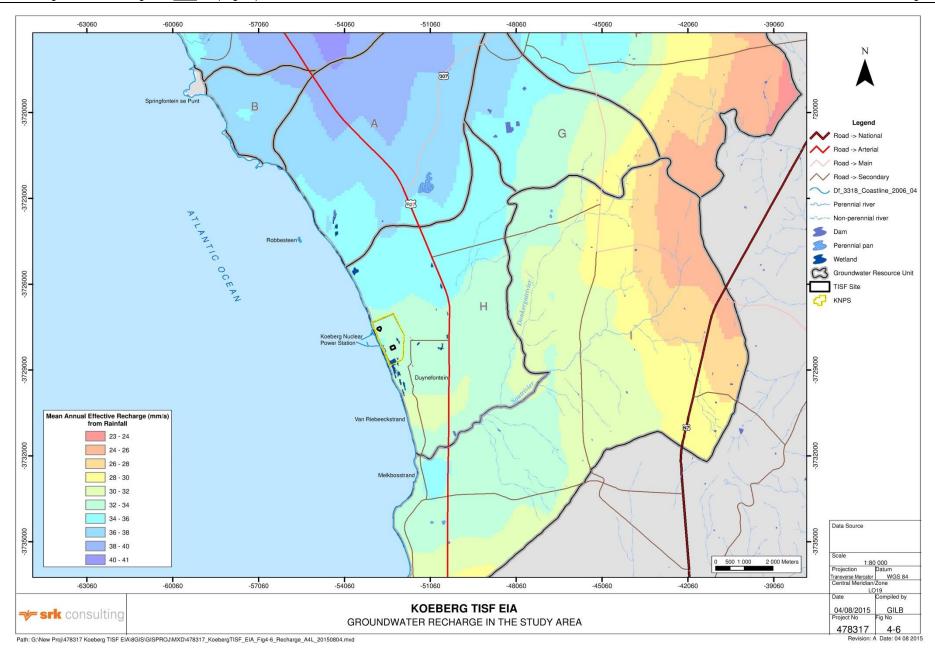
The groundwater of the Sandveld Aquifer was classified as Class A type (Electrical Conductivity [EC] <70 mS/m) (Vandoolaeghe and Bertram, 1982). The groundwater is generally of a sodium (Na) - chloride (Cl) type, but younger groundwater in the vicinity of the site shows a calcium (Ca) - bicarbonate (HCO<sub>3</sub>) character (Parsons, 1999). Interpretation of groundwater quality data collected in the area confirms that groundwater quality in the vicinity of the KNPS has a Na-Cl character, as is typical of groundwater in coastal environments. Based on monitoring data and previous investigations, groundwater in close proximity to the KNPS also shows a magnesium (Mg) - sulfate (SO<sub>4</sub>) and Mg-Cl character.

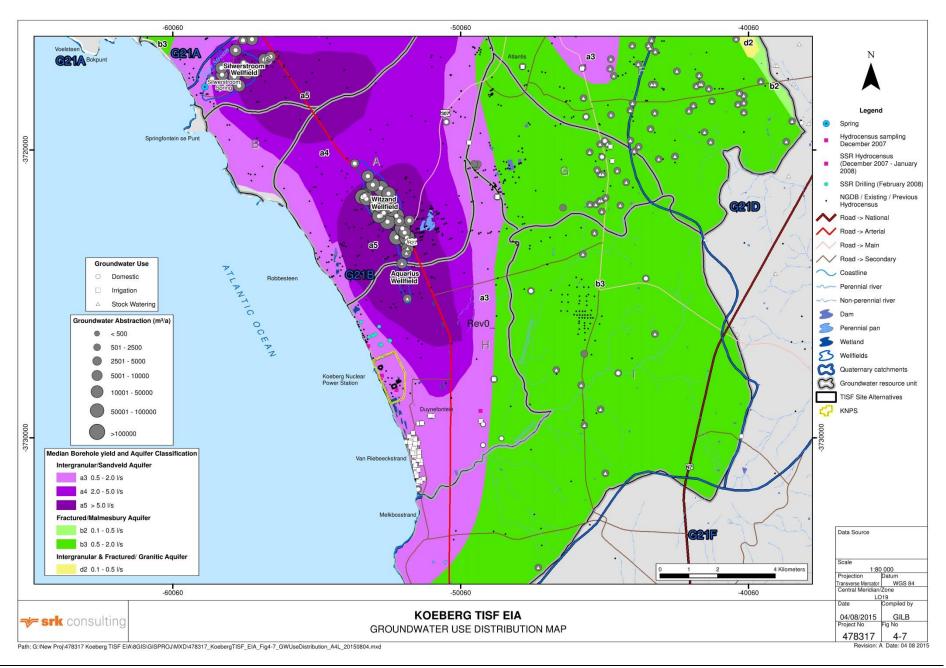
Groundwater salinity (indicated as EC in mS/m) across the study area is indicated in Figure 4-8. Based on field measurements, EC at the KNPS ranges between 85 and 215 mS/m, while at the Aquarius Wellfield, it ranges from 135 to 200 mS/m (Jolly and Hartley, 1996). Groundwater quality monitoring data available for the Witzand Wellfield indicates that EC levels vary between 50 and 250 mS/m in the vicinity of the KNPS (Figure 4-8).

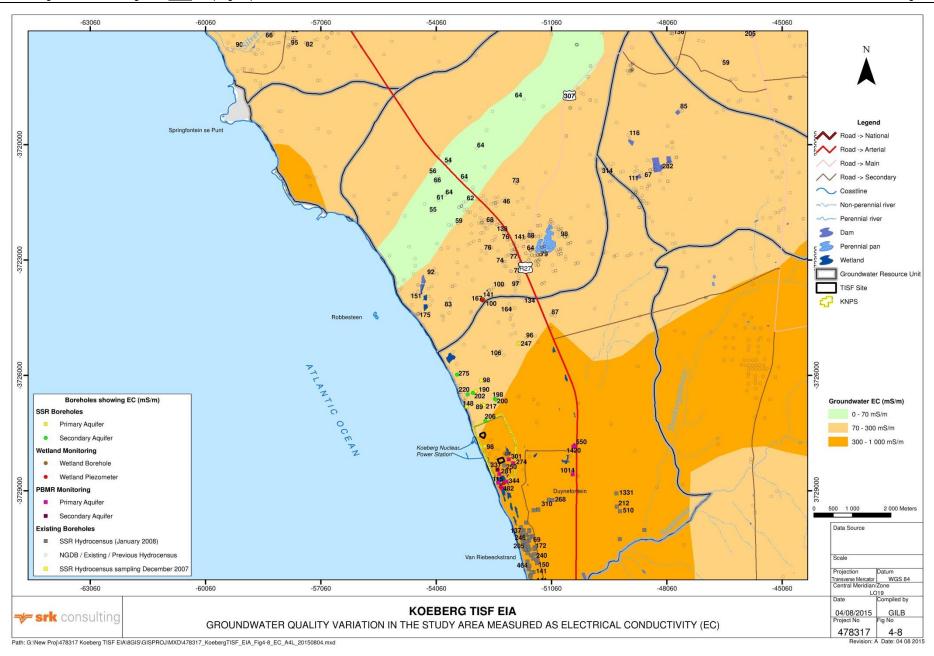
The quality of the groundwater is a direct result of the closeness of these aquifers to the ocean, i.e. at the end of the flow path and influence of frontal rainfall recharge and sea-spray / aerosols.











### 4.1.7.8 Conceptual Geohydrological Model

A conceptual geohydrological model is a descriptive representation of a groundwater system that incorporates an interpretation of the geological and hydrological conditions. It consolidates the current understanding of the key processes of the groundwater system, including the influence of stresses, and assists in the understanding of possible future changes. Figure 4-9 presents a schematic representation of the geohydrological profile at the KNPS. The main concepts of the model, as discussed above, are summarised below:

- There is no downstream use of groundwater;
- Groundwater at the KNPS is near/at the end of its flow path;
- Depth to the groundwater table at the KNPS ranges between 3 and 4 mbgl;
- The receiving environment/downstream receptor of any contamination will be the shore zone/sea;
- There is a two aquifer system present, with an upper intergranular aquifer (Sandveld Aquifer)
  and a lower fractured rock aquifer (Malmesbury Aquifer). For this assessment, only the upper
  Sandveld Aquifer may potentially be impacted by the project;
- Local direct recharge only affects the Sandveld Aquifer the Malmesbury Aquifer is recharged inland, far from the KNPS. There may be upward leakage of groundwater from the Malmesbury Aquifer into the Sandveld Aquifer (and vice versa) depending on relative groundwater heads in each aquifer;
- Groundwater flow is from the interior, across the KNPS, in a south-westerly direction towards the coast, with discharge into the ocean;
- Hydraulic conductivity values of the Sandveld Aquifer at and around the KNPS range from 0.9 to 5.6 m/d.
- Groundwater flows under a relatively low gradient at a calculated flow rate of c.2.6 m/d, which indicates a relatively quick migration across the KNPS, towards the coastline;
- There is an inferred interface between 'fresh' groundwater from inland and saline groundwater in
  the shore-zone. This interface may be shifted by groundwater control measures and sea level
  rise. However, down-hole salinity probing did not detect this zone and so it is unlikely to be a
  significant boundary at the KNPS; and
- Natural groundwater quality is marginally saline and of a mixed NaCl and CaHCO<sub>3</sub> character.

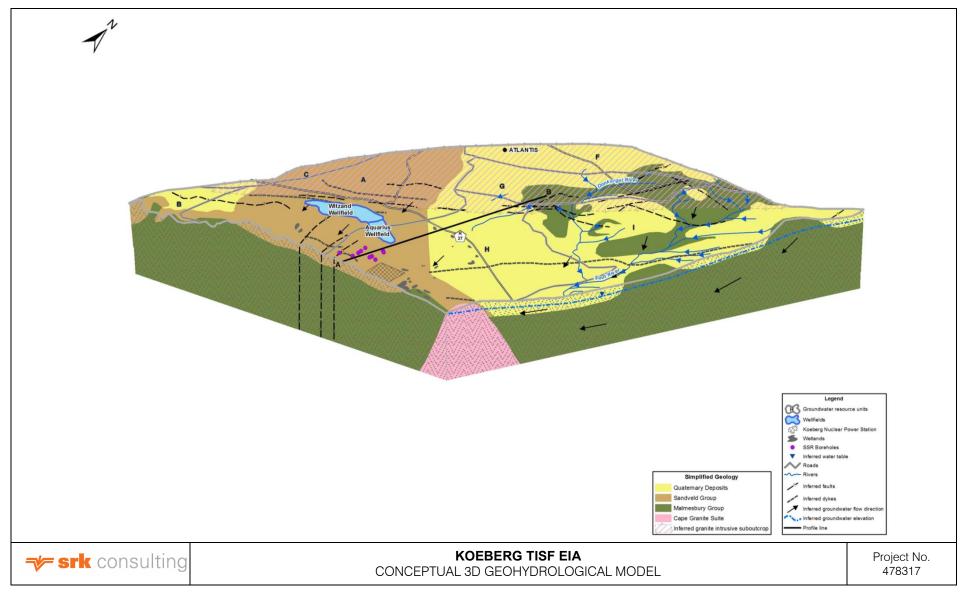


Figure 4-9: Conceptual 3D geohydrological model

Source: SRK, 2015a

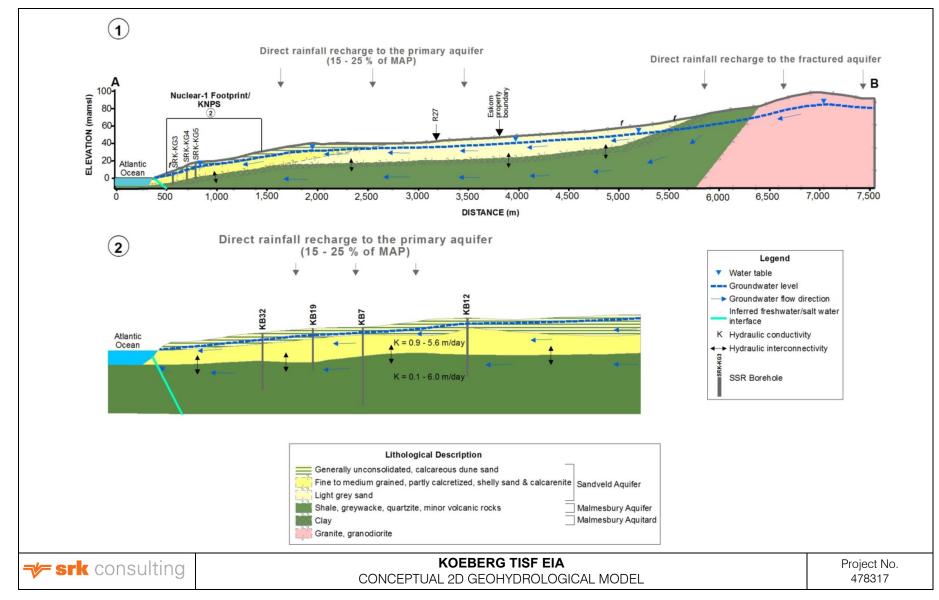


Figure 4-10: Conceptual 2D geohydrological model

Source: SRK, 2015a

# 4.1.8 Terrestrial Vegetation and Habitats

This section is based on the Terrestrial Ecology Baseline Assessment by Scientific Aquatic Services, 2015.

The KNPS is located within the Fynbos biome and the Western Strandveld bioregion. The vegetation type indicated by Mucina and Rutherford (2009) is Cape Flats Dune Strandveld (Figure 4-11) which is considered to be *Endangered* within the region (National list of threatened ecosystems for South Africa, 2011). The Cape Flats Dune Strandveld vegetation type can be subdivided into two forms, the False Bay form and the West Coast form. The False Bay form occurs on the False Bay shoreline from Muizenberg to Gordons Bay (south and east of the city bowl), and the West Coast form occurs on the western shoreline from Cape Town to Bokbaai (north of the City bowl) (City of Cape Town Biodiversity Fact Sheet 5: Cape Flats Dune Strandveld, 2011). Cape Flats Dune Strandveld occurs as four discontinuous regions. The largest patch spans the south coast of False Bay and penetrates deep into the Cape Flats as a broad wedge as far north as Bellville (False Bay form). The other patch spans Silverstroomstrand and Table Bay and includes the Atlantis dune plume. The third region is a series of small patches covering coastal dune pockets on the Cape Peninsula, while the last patch is situated on Robben Island (Mucina and Rutherford, 2006).

Cape Flats Dune Strandveld is characterised by high levels of transformation as a result of urban sprawl, road building, sand mining and cultivation. Approximately 56% of the vegetation type as a whole has been transformed and only 7% is statutorily conserved. Approximately 7% of the False Bay and 7% of the West Coast forms are in proclaimed reserves, with the West Coast form also having 16% in the private Koeberg Nature Reserve (City of Cape Town Biodiversity Fact Sheet 5: Cape Flats Dune Strandveld, 2011). The conservation target for the Cape Flats Dune Strandveld (24%) has not yet been reached and any unnecessary loss of this vegetation type should be avoided, where possible.

Alternative 1 is located within the Cape Flats Dune Strandveld vegetation type. This vegetation type is characterised by a flat to slightly undulating (dunefields) landscape, covered by tall, evergreen, hard leaved shrubland with abundant grasses and annual herbs in gaps (Mucina and Rutherford, 2006). The vegetation associated with Alternative 1 (Figure 4-12) has been disturbed by historical construction related activities associated with the development of the KNPS and by gravel road development through the area, which has resulted in the loss of naturally occurring Cape Flats Dune Strandveld vegetation from the site. However, vegetation has subsequently begun to re-establish within the area. The vegetation currently present on site is characterised by the presence of clumps of shrubby vegetation with an open, shorter shrub and grassy layer. Annuals and bulbous species are also likely to appear in these gaps during spring after sufficient rainfall. The vegetation is dominated by the pioneer shrub Chrysanthemoides incana which is indicative of past disturbance on the site. However, additional indigenous floral species including Otholobium bracteolatum, Helichrysum niveum, Searsia glauca, Morella cordifolia, Thesium cf spicatum, Trachyandra divaricata, Solanum africanum, Thesidium fragile, Cladoraphis cyperoides, Metalasia muricata, Cynodon dactylon, Ficinia lateralis, Atriplex nummularia, Limonium peregrinum, Searsia laevigata, Carpobrotus acinaciformis, Chironia baccifera, Pelargonium capitatum and Lessertia sp. were also encountered scattered within the area.





Figure 4-12: Vegetation associated with Alternative 1

Alternative 2 is also located within the Cape Flats Dune Strandveld vegetation type. Vegetation associated with Alternative 2 was historically disturbed by activities associated with construction of the KNPS and by the development of a laydown area. However, over the years, dune movement has resulted in the movement of sand over the disturbed area and Cape Flats Dune Strandveld vegetation has re-established in the area. Vegetation associated with Alternative 2 (Figure 4-13) is characterised by the presence of dense stands of shrubby, hard leaved vegetation up to approximately 1.5 m tall. Species diversity within the area proposed for Alternative 2 is considered to be higher than that associated with Alternative 1 with a higher floral species richness and evenness encountered. However, species diversity is not likely to be as high as in surrounding, undisturbed Cape Flats Dune Strandveld. Indigenous floral species encountered which are considered to be representative of the natural vegetation type included Otholobium bracteolatum, Helichrysum niveum, Asparagus asparagoides, Seriphium plumosum, Searsia glauca, Searsia lucida, Thesidium fragile, Solanum africanum, Galium tomentosum, Helichrysum crispum, Morella cordifolia, Thesium cf spicatum, Helichrysum sp., Trachyandra divaricata, Cladoraphis cyperoides, Metalasia muricata, Cynodon dactylon, Ficinia lateralis, Phylica ericoides, Searsia laevigata, Carpobrotus acinaciformis, Chironia baccifera, Pelargonium capitatum, Lessertia sp, Psoralea sp. Senecio sp. and Drosanthemum sp.



Figure 4-13: Vegetation associated with Alternative 2

During the field assessment, special emphasis was placed on the identification of floral Species of Conservation Concern (SCC) as listed by previous ecological assessments undertaken within and in the vicinity of the KNPS (Low, 2008, Todd, 2013 and Koeberg Nature Reserve Management Plan, 2015). A single possible SCC<sup>7</sup>, *Lampranthus* of *explanatus* (*Near Threatened*) was encountered within the construction footprint of Alternative 1. Individuals of this species were mostly encountered within the western portion of the site, to the west of the existing gravel road. Individuals of this species have also been recorded as occurring within the Koeberg Nature Reserve (Low, 2008) and are not restricted to the construction footprint of Alternative 1.

No SCC were encountered within Alternative 2 at the time of the assessment; however, the presence of individuals of the SCC *Lessertia canescens* was confirmed during a previous assessment of the site in 2013 (Pers. comm. – Nick Helme). *Lessertia canescens* has yet to be formally Red Listed as *Threatened*, due to recent taxonomic changes, but is likely to be listed as *Vulnerable*, and is restricted to coastal areas from Cape Town to Mossel Bay (Pers. comm. Nick Helme). *Lessertia canescence* is also likely to occur in other areas within the Koeberg Nature Reserve.

In a previous study, Low (2008) listed 22 SCC for Koeberg (based on a composite species list generated in SaSFlora 1998-2007). Additional floral SCC, as listed by Low (2008), which have a possibility of occurring within the site alternatives include annuals and bulbs such as *Cotula duckittiae* (*Vulnerable*), *Capnophyllum africanum* (*Near Threatened*), *Steirodiscus* cf *tagetes* (*Vulnerable*) and *Satyrium* cf *carneum* (*Near Threatened*). Although the site alternatives have been historically disturbed, there is still a small possibility that these species may occur.

Three floral species which are protected under the Western Cape Nature Conservation Laws Amendment Act 3 of 2000 (WCNCLAA) were also noted within the site alternatives at the time of the assessment. These include *Carpobrotus acinaciformis* (occurring on both sites),

<sup>&</sup>lt;sup>7</sup> Was not in flower at the time of the assessment which created a limitation to the identification of the species.

*Drosanthemum* sp. (encountered within Alternative 2) and *Lampranthus* of *explanatus* (occurring at Alternative 1) (all members of the Mesembryanthemaceae family).

Alien vegetation was very limited within both site alternatives. A few *Acacia longifolia* saplings were encountered interspersed with the vegetation of both sites. Additional alien and invasive species were largely limited to the outer boundary of the areas where disturbance has occurred as a result of previous road development.

#### 4.1.9 Fauna

This section is based on the Terrestrial Ecology Baseline Assessment by Scientific Aquatic Services, 2015

#### 4.1.9.1 Mammals

The location of the site alternatives within the KNPS largely precludes the existence of medium to large mammal species because of the proximity of the sites to existing infrastructure and human activity. Also, both the site alternatives are located within the high security area, and as such are surrounded by a high security fence, which inhibits the movement of mammal species between the site alternatives and the surrounding natural habitat. However, smaller mammal species will be able to move through the fence structure and may inhabit the site alternatives either temporarily or permanently. Such mammals will likely comprise of the smaller Rodentia species, as noted through the observation of *Rhabdomys pumilio* (Four striped grass mouse) on site.

It is highly unlikely that the site alternatives will provide usable and viable habitat to medium and large mammal species. It is likely that a significantly higher number of mammal species will be located outside of the KNPS, within the Koeberg Nature Reserve. Koeberg Nature Reserve has significantly lower levels of transformation in comparison to the site alternatives and is home to a number of introduced antelope species and indigenous small mammal species.

# 4.1.9.2 Avifauna

Data obtained from the South African Bird Atlas Project (SABAP2), habitat observations on site and previous studies of the area surrounding both the site alternatives, indicates that the sites are likely to be inhabited and utilised by a number of common bird species of the region. Close proximity to human and noise disturbances within the complex combined with a lower habitat suitability of the site alternatives will most likely preclude avifaunal SCC from occurring on site. Any avifaunal species that may currently occuron either Alternative 1 or 2, are likely to utilise the surrounding area, and will not be solely restricted to either of the site alternatives. Furthermore, the absence of any wetlands or permanent water sources within both site alternatives will further result in decreased overall bird diversity. No priority avifaunal species as per the Western Cape State of Biodiversity Report (2012) are expected to occur within either of the site alternatives.

### 4.1.9.3 Invertebrates

Habitat observations on site and data obtained from previous studies along with invertebrate distribution data was assessed to determine the probability of invertebrate species occurrence within the site alternatives. Historically the surrounding habitat of both Alternative 1 and Alternative 2 hosted the butterfly SCC *Chrysoritis dicksoni* (Dickson's Strandveld Copper), which is listed as *Critically Endangered*. However, all known populations from the area are now considered to be "extinct", with the remaining populations only known to occur near Witsand (East of De Hoop Nature Reserve) (Henning et al, 2009).

# 4.1.9.4 Amphibians

No wetlands or preferred amphibian habitat units occur within either of the site alternatives. The surrounding areas contain seasonal wetland habitats, and as such it is likely that amphibians within

the area will congregate within these areas and largely avoid the site alternatives. The only amphibian SCC listed for the area is *Cacosternum capense* (Cape Caco), however the specific habitat requirements for this species are likely to exclude it from either Alternative 1 or 2. It is possible that this species will occur within the surrounding areas.

# 4.1.9.5 Reptiles

The location of both Alternative 1 and 2 within the high security fence line, as well as associated anthropogenic activities and disturbances, will likely preclude any reptile SCC from inhabiting the sites on a permanent basis. Although no reptile SCC are expected within the site alternatives, it is likely that other common reptile species will occur within both Alternative 1 and 2. It is unlikely that these reptiles rely solely on the sites for survival and will relocate to surrounding natural habitat should construction commence. *Scelotes montispectus* (Bloubergstrand Dwarf Burrowing Skink) has been confirmed to occur within the area surrounding the sites. As yet this species has not been identified as a SCC; however, due to its perceived limited distribution range and the lack of data for this species, the precautionary principle may well be applicable here. As such consideration needs to be given to the possibility that *S. montispectus* may occasionally traverse through either of the site alternatives.

#### 4.1.9.6 Arachnids

Spider and scorpion species distribution has not been well documented and verified historically in the Western Cape. However the data available from previous studies in the area indicates that no arachnid SCC are known to occur within either Alternative 1 or 2. No arachnid species are listed as protected according to the Western Cape Province State of Biodiversity Report 2012 or in the WCNCLAA. *Harpactira atra* (Common Baboon Spider) has been observed within the Koeberg Nature Reserve. As such it is possible that there may be *H. atra* individuals occurring within both Alternative 1 and 2, although this species is not protected and is common throughout the Western Cape.

### 4.1.10 Conservation Areas

The Koeberg Nature Reserve was proclaimed as a private nature reserve in 1991 and was established by Eskom to conserve the natural habitat as far as possible whilst providing a buffer area surrounding the KNPS and maintaining land for future development (Eskom, 2014).

The Koeberg Nature Reserve covers an area of approximately 3 000 ha of Eskom property around the KNPS (Figure 3-1) and incorporates a number of environments - small wetlands, coastal dunefields, strandveld dune vegetation and sand plain fynbos. The reserve is home to a number of animal species. Grysbok, Steenbok and Duiker occur naturally in the area and Bontebok and Springbok have been introduced to the Reserve. The reserve's largest predator is the Caracal (Rooikat) and the African wild cat, Grey mongoose and Genet can also be seen. The most common reptiles are the Cape cobra, Mole snake, Boomslang, Skaapsteker and the Angulated tortoise. The reserve has an abundant birdlife with 153 species recorded to date - including the Ostrich, African fish eagle and Cape penduline tit.

Koeberg Nature Reserve is a private reserve but access is provided to the public with a number of hiking and mountain bike trail options.

# 4.2 Socio-economic Environment

# 4.2.1 National Socio-economic Environment

South Africa is a middle-income developing country with an abundance of natural resources. It is the most industrialised country in Africa, leading the continent in industrial output and mineral

production, with well-developed financial, legal, communication, energy and transport sectors. South Africa also has a smaller, but well developed, informal economy which interacts with the formal economy.

Not only is South Africa itself an important emerging economy, it also provides trade linkages to other African markets. The country plays a significant role in supplying relief aid, transport, communications and investment on the continent (SAinfo, 2009). South Africa's well-developed road and rail links provide the platform and infrastructure for land-based trade throughout Southern Africa.

Two of the biggest challenges facing the South African economy are poverty and unemployment. Current estimates place unemployment figures in South Africa at ~25%.

### 4.2.1.1 Performance and Structure of the Economy

Between 1999 and 2008 South Africa experienced sustained economic growth with Gross Domestic Product (GDP) growing at an average of 5.4%. The global financial crisis reduced local and international demand for domestic goods and services. South African GDP growth slowed to 3.2% in 2008 and contracted by 1.5% in 2009 (SARB, 2014), broadly mirroring developments in global economic activity.

During the recession and subsequent recovery, economic activity in developing markets was more robust than developed markets, with China and India specifically maintaining strong economic momentum (SARB, 2010). This provided strong support for commodity and resource exporting nations such as South Africa; and consequently GDP growth recovered in the third quarter of 2009. Growth was then strong in the first quarter of 2010 before cooling off to a certain degree thereafter (SARB, 2010).

In 2012 and 2013 global economic growth remained sluggish on the back of low economic output, and downward pressure on developing countries has intensified (PERO, 2014). In South Africa economic growth contracted during this period from both supply-side and demand side constraints, such as labour unrest (particularly in the mining and manufacturing sectors), a persistent current account deficit, interruptions in electricity supply, reduction in domestic demand, decrease in global commodity prices and reduced investor confidence (SARB, 2014 and PERO, 2015).

The tertiary sector in South Africa contributes the largest portion to GDP (62% in 2013); while the primary and secondary sectors contribute approximately 10% and 18% to GDP respectively. The relative decline in the contribution of the primary and secondary sectors to South Africa's economy since 2009 is evidence of the impact of labour disputes, constrained electricity supply and a reduction in both domestic and international demand. Constrained growth is expected to continue in the short term as a result of the persistence of these factors.

### 4.2.1.2 Employment

After rising to above 25% following the 2009 recession (Trading Economics, 2015), the South African unemployment rate<sup>8</sup> remained relatively stable until the first quarter of 2015, when it jumped to 26.4%, the highest unemployment rate in South Africa for 12 years (Fin24, 2015).

The failure of the South African labour market to stimulate employment growth post-2009 can be attributed to a number of factors, including a decline in labour relations, fall in commodity prices post-2012, slowdown in South African output growth, decline in investor confidence, electricity supply constraints and a renewed sluggishness in the global economic recovery, particularly in Europe, which is one of South Africa's major trading partners (SARB, 2014 and UNDP, 2015). The most

<sup>&</sup>lt;sup>8</sup> The number of people actively looking for a job as a percentage of the labour force.

recent spike in the unemployment rate is likely to be partially a consequence of electricity rationing, as energy supply is increasingly constrained in the face of rising energy demand (SARB, 2015). Electricity rationing is set to continue in South Africa until at least 2017 (BusinessDay, 2015).

The percentage of total jobs in each sector broadly mirrors the sectors' percentage contribution to GDP (StatsSA, 2015 and StatsSA, 2014). The majority of employment in South Africa is in the social services and commercial industries, followed by manufacturing and finance. While the utilities sector (including electricity) contributes ~3% to annual GDP it only employs ~1% of the employed workforce in South Africa. Employment levels in the electricity-generation sector contracted marginally in 2009 and 2010. However, the sector's workforce expanded by 4% and 3.7% in 2011 and 2012 respectively, when Eskom expanded with a view to increase capacity (SARB, 2014).

# 4.2.1.3 Electricity Demand and Supply

Almost 90% of South Africa's electricity is generated in coal-fired power stations. The KNPS provides about 5% of national electricity capacity. A further 5% is provided by hydroelectric and pumped storage schemes (DOE, No date).

Eskom, the national wholly state-owned utility that also owns and operates the national electricity grid, supplies about 95% of South Africa's electricity. While Eskom does not have exclusive generation rights, it has a practical monopoly on bulk electricity. It also operates the integrated national high-voltage transmission system and supplies electricity directly to large consumers such as mines, mineral beneficiators and other large industries, municipalities, commercial farmers and residential consumers (DOE, No date).

In January 2008, Eskom curtailed power exports and introduced load shedding in South Africa to ration electricity, as demand outstripped supply capacity (WNA, 2015). The demand: supply ratio improved by 2009, partly due to the economic slowdown and hence lower electricity demand (WNA, 2015).

National electricity production has been declining since peaking in 2011, when 262 538 GWh were generated. In 2014, less electricity was produced in South Africa than in 2013 (StatsSA, 2014a), intensifying the country's continued challenge with a decreasing supply margin. In the face of declining production, Eskom again introduced load shedding in late 2014. It has been estimated that load shedding will continue until 2017, when additional generating facilities are scheduled to come online. Load shedding will therefore place an ongoing strain on growth in South Africa for the short term.

# 4.2.2 Provincial and Metropolitan Socio-economic Environment

The physical characteristics of the Western Cape support a diverse provincial economy. The shoreline provides an important fishing industry. Varying geographic and climatic zones, ranging from winter rainfall areas suitable for intensive farming (such as for citrus and viticulture) to the arid condition of the Karoo and Namaqualand only suitable for extensive livestock farming (PERO, 2010), allow for agricultural diversity. These characteristics also contribute to a sizable and developed tourism sector that attracts national and international visitors.

Although the Western Cape is not recognised as an industrial hub, a number of industries make significant contributions to the economy. These include a developed processing industry which supports the agricultural sector, heavy industries such as metal and chemical and, to a lesser and declining extent, the clothing and textiles industries. The economy of the Western Cape has seen significant growth in the large service sector.

Cape Town is one of Africa's most dynamic and developed metropolitan areas. It benefits from its strategic and spectacular location on the tip of Africa and at the foot of Table Mountain, recently

voted as one of the world's new seven wonders of nature. One of the Province's two deep sea ports as well the international airport are located in the Cape Town, facilitating both domestic and international trade and travel to and through the City.

### 4.2.2.1 Performance and Structure of the Economy

The economy of the Western Cape has outperformed the national economy since 2010 (StatsSA, 2014) and contributed more than 13% to national GDP since 2004, exceeding its share of national population and land mass (both ~11%). The historically better performance by the Western Cape economy stems from both the structure and source of its economic activity (PERO, 2014): the tertiary sector makes up a greater proportion of the Western Cape economy and has outperformed primary and secondary sector industries.

Regional GDP (GDPR) for the Western Cape economy grew at an annual average of 5.3% over the period 2006 – 2008 (compared to a national average of 4.7%). The Western Cape GDPR contracted in 2009, mirroring a similar development in the national GDP (StatsSA, 2014). After accelerating to an annual rate of 3.9% in 2011, economic growth in the Western Cape slowed to 2.9% in 2012 and has largely mirrored national growth since then (PERO, 2014).

The performance of the CoCT metropolitan area largely mirrors that of the Province, as it generates more than 70% of the Western Cape's GDPR (CoCT, 2013) with 64% of the Province's population. It is the second-largest metropolitan economy in South Africa, after the City of Johannesburg. On average, in the last 15 years, the variation of the City's GDP growth rate from the provincial rate was ~ 0.5 percentage points (CoCT, 2013).

The Western Cape economy has developed from its agricultural beginnings and now has a strong complement of food and beverage producers, higher value-added manufacturing activity and a range of services activities (including tourism). The regional economy is, however, still characterised by a strong agro-processing sector. The tertiary sector (67% of GDPR in 2013) plays a slightly more dominant role in the Western Cape economy than in the national economy (StatsSA, 2014), while the relative contribution of the primary sector is less than half that of the contribution to the national economy (4% of GDPR in 2013). The secondary sector contributed 18% of GDPR in 2013.

The most important industries to the Western Cape Economy in terms of contribution to GDPR are finance, real estate and business services (~30% of total value added); wholesale, retail and trade, catering and accommodation (~16% of total value added); and manufacturing (~16% of total value added) (StatsSA, 2014). Although it contributes a relatively small portion of GDPR, a wide diversity of products makes the agriculture, forestry and fishing industries important to the Western Cape economy.

The CoCT contributes 80% of the Western Cape's finance and business services, more than 70% of wholesale and retail trade and about 70% of manufacturing (CoCT, 2013).

Income, household consumption and growth in real consumer spending is expected to remain under pressure nationally in the short to medium term as rising inflation, higher interest rates, subdued employment and credit growth weigh on household income (PERO, 2014). This poses a particular challenge to the tertiary sector dominating the Western Cape economy, as a slowdown in consumer spending will reduce demand for services (PERO, 2014). However, the Western Cape is less exposed to the mining sector than the national economy, and the challenges related to an anticipated prolonged drop in commodity prices.

# 4.2.2.2 Population

The Western Cape has a population of ~6.1 million people, which is ~11% of the national population (StatsSA, 2014c). Almost 3.9 million people live in the Cape Town Metropolitan area, i.e. 63% of the

provincial population (CoCT, 2014). The population structure of both the Western Cape and the CoCT broadly mirrors the national population structure:  $\sim$ 25% are younger than 15 years,  $\sim$ 70% of the population is of working age (15 – 64 years old) and  $\sim$ 6% are over the age of 64 years (StatsSA, 2014b and CoCT, 2014b). The CoCT and the Western Cape Province have a slightly higher proportion of working-age population than South Africa as a whole.

The provincial and metropolitan populations grew on average by 2.3% per annum between 2001 and 2014 (CoCT, 2014), compared to a 1.6% average annual growth rate in the national population (Census, 2001 and Census, 2011). The faster population growth in the Western Cape and the CoCT can (at least partly) be ascribed to inter-provincial migration, where people are drawn to the Western Cape with the hope of finding employment and better opportunities (CoCT, 2014 and PERO, 2014). The Western Cape had a net in-migration of just over 150 000 people between 2006 and 2011 (StatsSA, 2014c). This trend is projected to continue.

### 4.2.2.3 Employment

Of the  $\sim$ 6.1 million people in the Western Cape,  $\sim$ 4.2 million people are of working age (15 – 64 years) (PERO, 2014). Of these, 64% (or  $\sim$ 2.9 million people) are in the labour force (employed or actively seeking employment), while  $\sim$ 8% (340 000 people) are discouraged work seekers<sup>9</sup>. Approximately 23% (675 000 people) of the provincial labour force was unemployed in 2014 (PERO, 2014).

Of the ~3.7 million people living in the City in 2011, ~2.6 million people were of working age. Of these, 65% (or ~1.7 million people) were in the labour force, while 3% were discouraged work seekers. Approximately 24% of Cape Town's labour force was unemployed in 2011 (Census 2011), closely mirroring provincial labour statistics.

Following the recession and global financial crisis, the unemployment rate increased in South Africa. The provincial unemployment rate grew by an average of 5.6% annually between 2009 and 2014 (higher than the national average of 3.5% - partly as a result of in-migration of unemployed people seeking work in the Western Cape). However, in the Western Cape, the number of employed people has increased at a faster rate than the national average (PERO, 2015) indicating that although unemployment is rising, additional jobs are being created in the Province.

The sector with the highest share of employment in the Western Cape in 2014 was wholesale and retail trade (21.5%), followed by general government services (21.4%), finance, real estate and business services (16.7%) and manufacturing (13.2%) (StatsSA, 2014b and StatsSA, 2010).

Employment structure in the CoCT is expected to largely mirror provincial employment statistics, with slightly lower numbers of the metropolitan population employed in the primary sector than in rural areas.

### 4.2.2.4 Income

Table 4-3 shows the distribution of annual household income in South Africa, the Western Cape and the CoCT. Both the Western Cape and the City have a smaller proportion of households earning very low income and a larger proportion of households earning higher incomes than at national level. Nevertheless, more than half of the households the Western Cape (65%) and the City (61%) have a monthly income of less than ~R6 366 (or R76 400 per annum).

<sup>&</sup>lt;sup>9</sup> The Western Cape differs substantially from most other provinces in that the non-searching unemployed (also referred to as discouraged work seekers) account for ~8% of the working-age population, compared to nearly 32% nationally (PERO, 2014). A number of factors explain this difference, including the Province's relatively high level of urbanisation, the City of Cape Town's dominance within the provincial labour market and different patterns of educational attainment (PERO, 2014).

Table 4-3: Annual household income in 2011

Annual income	% of the households in:				
Annual income	South Africa	Western Cape	CoCT		
No income	15%	13%	14%		
R1 – R38 200	48%	36%	33%		
R38 201 – R76 400	13%	16%	14%		
R76 401 – R307 600	16%	24%	25%		
R307 601 – R614 400	5%	7%	9%		
R614 401+	3%	4%	5%		

Source: Census 2011

The GDPR per capita in the Western Cape was estimated at R43 557 in 2011 (2005 prices) compared to R49 647 for Cape Town (CoCT, 2014). This placed the CoCT in third place, after Tshwane and Johannesburg, in terms of per capita GDPR amongst the country's six metros. The poverty rate<sup>10</sup> has decreased in the Western Cape Province and the CoCT by 4.6% and 4.2% respectively between 2001 and 2010 (CoCT, 2014) to ~160 000 people.

### 4.2.3 Local Socio-Economic Environment

The CoCT is divided into eight planning districts and 24 subcouncils. Subcouncils are divided into a total of 111 smaller administrative wards, which may contain several suburbs.

The KNPS is situated in the Blaauwberg Planning District (Planning District B) and Subcouncil 1 of the CoCT. The geographical boundaries of Subcouncil 1 and the Blaauwberg Planning District are almost identical. Subcouncil 1 is divided into Wards 4, 23, 29, 32, 104 and 107<sup>11</sup> (see Figure 4-14). The KNPS is located in Ward 32.

Subcouncil 1 is located on the western coastline of the City and stretches 30 km from Milnerton in the south to Atlantis in the north. The subcouncil includes a great diversity of areas, ranging from some of the poorest and most underprivileged suburbs in Cape Town such as Atlantis, Dunoon, Joe Slovo Park and Doornbach, to some of the more affluent, including Table View, Flamingo Vlei, Sunningdale, Big Bay, Blouberg and Melkbos.

A 5 km Precautionary Action Planning Zone (PAZ) and 16 km Urgent Protective Action Planning Zone (UPZ) have been delineated around the KNPS, where development is restricted. The population density around the KNPS is thus low. The study area has thus been taken as those areas within a 20 km radius of the KNPS, where socio-economic impacts may occur (for example, from construction activities) (see Figure 4-15).

Key residential areas (suburbs) that fall within the study area include (see Figure 4-15)<sup>12</sup>:

- Within 5 km of the KNPS: Melkbosstrand, Kleine Zout River Small Holdings and portions of the Atlantis and Milnerton non-urban areas;
- Within 5 10 km of the KNPS: Portions of the Atlantis and Milnerton non-urban areas;

<sup>&</sup>lt;sup>10</sup> The poverty income is defined as the minimum monthly income needed to sustain a household and varies according to household size; the larger the household the larger the income required to keep its members out of poverty. The monthly income needed to keep a one person household out of poverty was estimated in 2010 to be R1 315, while for a two person household it was R1 626; a four person household required an estimated income of R2 544 to stay out of poverty while a household with eight or more person required an estimated R4 729.

<sup>&</sup>lt;sup>11</sup> Prior to the 2011 Census Subcouncil 1 was divided into Wards 4, 23, 55, 56 and 104.

<sup>&</sup>lt;sup>12</sup> Note that the "suburb" of Killarney Gardens is a wholly industrial area with no residential population and therefore is not included in the analysis.

- Within 10 15 km of the KNPS: Morning Star Small Holdings, Sunningdale, Atlantis and Philadelphia; and
- Within 15 20 km of the KNPS: Parklands, Vissershok, Bloubergstrand, Table View, Doornbach, Du Noon, Mamre and Milnerton.

A number of socio-economic indicators are discussed below, mainly derived from Census 2011 data. Where Census 2011 data is not available, Census 2001 data is used.

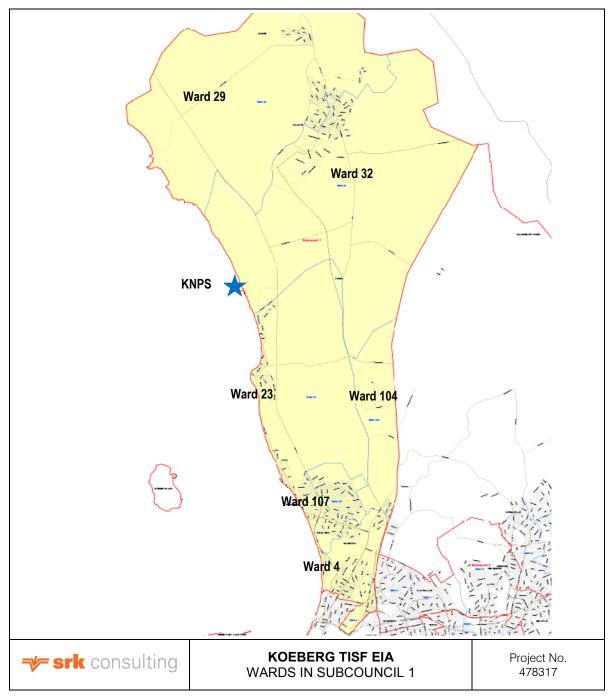


Figure 4-14: Wards in subcouncil 1

Source: CoCT, 2012

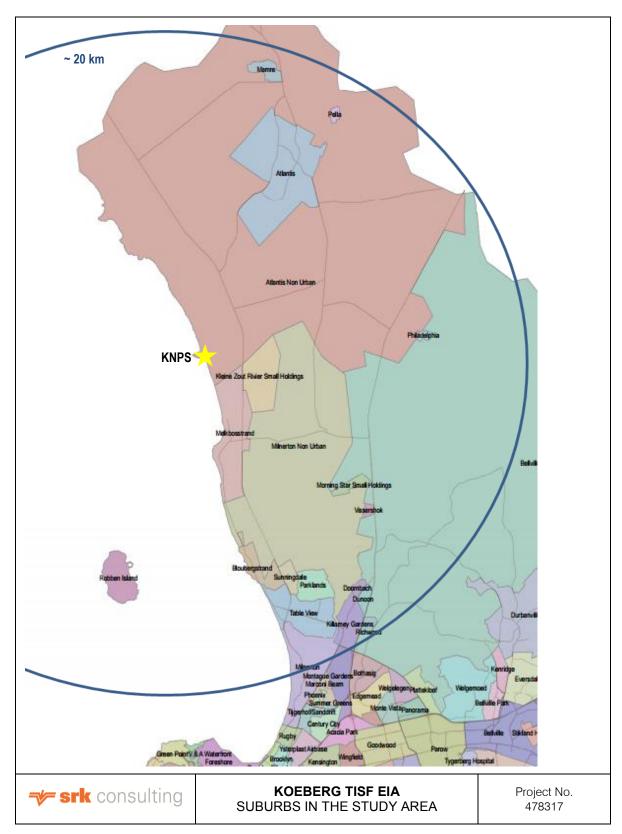


Figure 4-15: Suburbs in study area (within 20 km arc)

Source: CoCT, 2013a

#### 4.2.3.1 Population

The geography of Cape Town makes the study area an attractive region for urban expansion. This is evidenced by the rapid residential expansion into new suburbs such as Sunningdale and Parklands. The population of the study area increased at an average of 7.3% per annum between 2001 and 2011 (see Table 4-4, Census 2011). This exceeds the average growth rate of the City (2.3%) by a considerable margin.

In 2001 the population of the study area was estimated to be 122 762. Census 2011 estimated the population of the study area to be 212 813, almost doubling in the 10 year period. Extrapolating the past population growth rate of the study area into the future, the population of this area could grow to more than 430 000 people by 2021. If the population of the study area grows at the current City-wide average growth rate, the population would be approximately 270 000 in 2021. In reality, population growth rates in the study area are likely to exceed the City average, but be below historic growth rates.

The most populous suburbs in the study area include Atlantis, Du Noon, Table View and Parklands: are all located more than 14 km from the KNPS. The largest suburb near the KNPS is Melkbosstrand with a population of more than 11 000 people, located > 2 km south of the KNPS.

The highest population growth in urban suburbs took place in areas furthest away from the KNPS, including Du Noon, Milnerton and Bloubergstrand. Apart from Du Noon, suburbs in the south west of the study area at or adjacent to more affluent communities have seen the most rapid urban growth between 2001 and 2011 (see Table 4-4). The population growth in the Milnerton non-urban area also indicates expansion of Sunningdale and Parklands beyond their registered suburban boundaries. The population of Du Noon had tripled between 2001 and 2011. Opportunities for employment at the industrial area of Killarney Gardens serve as a significant pull factor for people entering this area. Nevertheless, Melkbosstrand is also an attractive area and has shown considerable growth.

The gender profile of the study area is relatively evenly distributed with females having a slightly higher count (52%) against males (48%) (Eskom, 2015). This gender distribution is the same as the South African average.

Population density is highest in the urban areas to the south and north east of the KNPS (see Figure 4-16). Based on 2001 Census data, Eskom (Eskom, 2015) estimated that the average population density of the area within 16 km of the KNPS was 155 people per km². Based on the estimated population increase between 2001 and 2011, population density in the study area may have increased to at least 270 people per km² on average in 2011. However, population density is highly variable within the study area, with large areas nearly unpopulated.

Table 4-4: Population data for the study area

Suburb	2001 Population	2011 Population	Average Annual Population Growth Rate	Projected Population in 2021 at CoCT Growth Rate (2.3%)	Projected Population in 2021 at Study Area Historic Growth Rate
Melkbosstrand	6 462	11 302	7.5%	14 188	22 864
Kleine Zout River Small Holdings	No data	283	N/A	355	573
Atlantis non-urban	4032	2 479	-3.9%	3 112	5 015
Milnerton non-urban	205	3 293	150.6%	4 134	6 662
Morning Star Small Holdings	No data	485	N/A	609	981
Sunningdale	No data	5 299	N/A	6 652	10 720
Atlantis	54 904	67 490	2.3%	84 722	136 533
Philadelphia	No data	570	N/A	716	1 153
Parklands	No data	24 614	N/A	30 899	49 794
Vissershok	332	323	-0.3%	405	653
Bloubergstrand	5 844	11 179	9.1%	14 033	22 615
Table View	23 445	25 977	1.1%	32 610	52 552
Doornbach	4 082	5 033	2.3%	6 318	10 182
Du Noon	9 036	31 133	24.5%	39 082	62 982
Mamre	7 267	9 047	2.5%	11 357	18 302
Milnerton	7 153	14 306	10.0%	17 959	28 941
Total / Average	122 762	212 813	7.3%	267 149	430 522

Source: Census, 2011

### Note:

- Dark grey shading indicates suburbs located within 5 km (PAZ) of the KNPS;

- Lighter shading indicates suburbs located within 10-15 km (UPZ) of the KNPS; and

- No shading indicates suburbs located within 15-20 km of the KNPS.

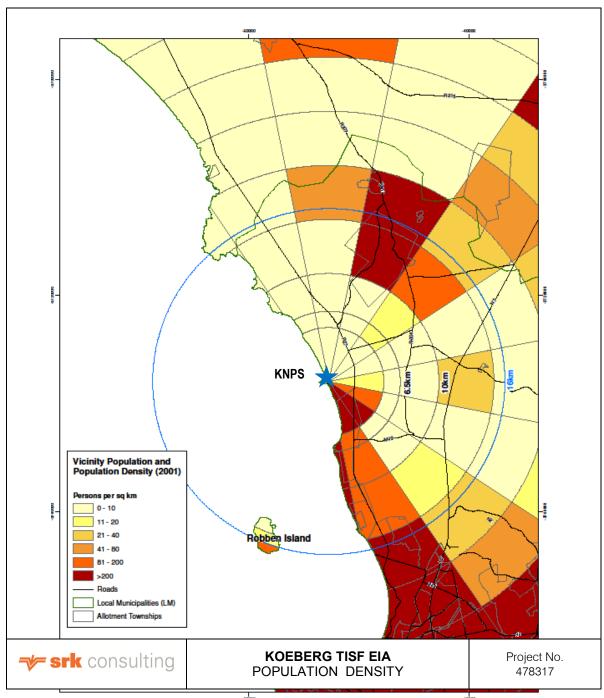


Figure 4-16: Population density

Source: Eskom, 2015

### 4.2.3.2 Socio-economic Status Index

The Socio-economic Status Index (SES) is an indicator of relative socio-economic status of communities, calculated by the CoCT based on Census 2001 data (CoCT, 2007). The SES considers four indicators:

- % of households earning less than R19 200 per annum;
- % of adults (20+) with highest educational level less than matric;
- % of the economically active population that was unemployed; and
- % of the labour force employed in elementary/unskilled occupations.

A higher SES score indicates relatively better socio-economic conditions. The SES of the Blaauwberg Planning District (Planning District B) is 30.22, below the City average of 37.97.

The socio-economic status of communities and wards within Planning District B varies significantly. Generally, areas north of the KNPS are more deprived than areas to the south (see Figure 4-17), although both include some communities that are considered "worst off" by the CoCT, including Vissershok, Du Noon and areas of Atlantis.

Ward 104 was the worst off ward in the District in 2001 from a socio-economic perspective, indicating that people in this area are more likely to be unskilled and / or unemployed and have a lower income. This ward included the communities of Doornbach, Du Noon, Killarney, Killarney Gardens, Milnerton, Parklands, Sunridge, Table View and West Riding. Ward 23 was the best off ward in the district in 2011, indicating that people living in this ward are more likely to be skilled and / or employed and have a higher income. This ward included the communities of Atlantic Beach Estate, Blouberg, Bloubergrant, Bloubergstrand, Duynefontein, Melkbosstrand, Morningstar, Philadelphia, Sunningdale, Table View, Van Riebeeckstrand, Vissershok and West Beach.

The socio-economic status of communities in these wards also varies significantly. For example West Beach and Vissershok are classified as "best off" and "worst off" respectively in terms of their socio-economic status, and are both located within the same ward (see Figure 4-17).

Using Census 2011 data and, like the CoCT, considering income, education and employment, and including the status of dwellings in these suburbs (i.e. % of households that are informal) (see Table 4-6); SES Indices were calculated by SRK for this assessment to compare the current socio-economic status of suburbs in study area (see Table 4-5). Suburbs with a less favourable socio-economic status are located inland to the north, east and south east of the KNPS, while more affluent suburbs are located on the coastline to the south and south west. A brief description of the socio-economic characteristics of each of these suburbs is presented in Section 4.2.3.3.

۵

<sup>&</sup>lt;sup>13</sup> The City of Cape Town classifies suburbs with a SES score of 54.92 – 79.07 as being in the bottom 20<sup>th</sup> percentile of all suburbs in the City, while those suburbs with a SES score of less than 13.06 are classified as being in the top 20<sup>th</sup> percentile of all suburbs in the City.

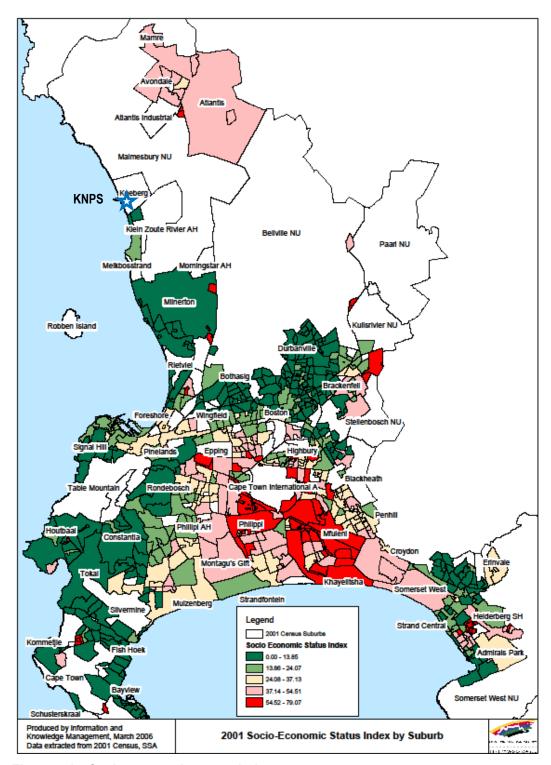


Figure 4-17: Socio-economic status index

Source: CoCT, 2007b

Table 4-5: SES indices for suburbs in study area (Census 2011)

Suburbs	Distance to the KNPS	SES Score
Melkbosstrand		34,71
Kleine Zout River Small Holdings	un to Elem	52,13
Atlantis non-urban	up to 5 km	54,35
Milnerton non-urban		36,77
Morning Star Small Holdings		36,37
Sunningdale	10 – 15 km	33,35
Atlantis		57,27
Philadelphia		50,14
Parklands		33,61
Vissershok		64,17
Bloubergstrand		33,53
Table View	15 – 20 km	34,31
Doornbach	15 – 20 KIII	59,43
Du Noon		56,21
Mamre		60,13
Milnerton		32,61
Average		45,57

Source: Census, 2011

Note: Grey shaded communities indicate above study area average SES Index scores

### 4.2.3.3 Socio-economic Analysis

The following section briefly describes the socio-economic status of the study area and of the suburbs in the study area. Table 4-6 presents selected socio-economic indicators for the suburbs in the study area.

Based on the SES indices derived for this assessment, the socio-economic status of the population of the study area is marginally better than the City average (see Table 4-6). On average, the population of the study area is slightly more educated and more likely to be employed than other people living in Cape Town. Households in the study area are less likely to have a very low monthly income (i.e. less than R3 200 / month). It is noteworthy that, on average, nearly one in four dwellings in each suburb is informal, about 2% higher than the City wide average.

The socio-economic status of people living in each of the suburbs in the study area varies significantly (see Table 4-6). A brief description of the socio-economic status of each suburb, or where appropriate, cluster of suburbs, follows.

Table 4-6: Socio-economic indicators for the study area

Suburb	% Working Age	% Adults with Grade 12 or Higher	Unemployment Rate	% hh Monthly Income < R3200	% Informal Dwelling	SES*
Melkbosstrand	68.6	82.0	5.7	17.1	2.0	34.71
Kleine Zout River Small Holdings	71.3	34.4	20.0	76.9	54.0	52.13
Atlantis non-urban	73.0	38.7	18.3	49.8	12.0	54.35
Milnerton non-urban	69.9	73.3	5.6	21.9	7.1	36.77
Morning Star Small Holdings	75.4	66.1	9.4	12.7	10.5	36.37
Sunningdale	65.1	83.2	3.1	14.5	1.0	33.35
Atlantis	68.4	32.4	26.6	50.4	15.5	57.27
Philadelphia	65.6	35.6	12.5	32.7	9.0	50.14
Parklands	72.6	84.7	6.6	13.2	0.6	33.61
Vissershok	70.5	2.8	63.2	93.2	96.9	64.17
Bloubergstrand	75.2	87.3	5.5	16.4	0.5	33.53
Table View	73.8	83.1	6.0	14.8	0.5	34.31
Doornbach	73.7	13.1	56.3	93.6	99.1	59.43
Du Noon	71.9	29.6	36.7	76.8	59.1	56.21
Mamre	67.9	32.0	27.2	48.7	3.4	60.13
Milnerton	72.9	85.7	4.6	12.4	0.9	32.61
City of Cape Town	69.7	46.9	23.9	47.0	21.6	50.60
Total / Average	71.0	54.0	19.2	40.3	23.3	45.57

Source: Census, 2011

Note: Grey shaded communities indicate above study area average SES Index scores

<sup>\* -</sup> SES Indices have been derived by SRK for this study, considering income, education, employment status of dwellings in these suburbs (i.e. % of households that are informal) to compare the socioeconomic status of suburbs in study area.

#### Milnerton

The suburb of Milnerton is located in the south of the study area and includes the communities of Milnerton, Sunset Beach and Milnerton Ridge. The suburb is the best off suburb in the study area in terms of its socioeconomic status, with relatively low levels of unemployment and excellent service delivery. Dwellings are almost all formal (more than 99%), and residents of this suburb generally enjoy a more affluent lifestyle than the majority of the population of the study area.

The population of the suburb doubled between 2001 and 2011 to more than 14 000 people.

The suburb hosts a number of facilities such as the Milnerton Medi-Clinic, Paddocks Shopping Centre, Milnerton Golf Course, Killarney Race Track and Theo Marais Sports Park (Eskom, 2015). Sunset Beach and Woodbridge Island are both popular beaches located in the suburb. The Rietvlei Nature Area is also situated in this suburb.

The R27 and M5 roads provide access to the Cape Town Central Business District (CBD) to the south and to other areas in the City. These transportation routes are congested during high use periods (i.e. rush hour). The City railway network passes to the east of the suburb and also provides good access to the City. The recently (2013) launched MyCiti Bus Service also provides access to and from this area.

### Sunningdale, Parklands, Bloubergstrand and Table View

These four contiguous suburbs are located to the north of Milnerton (Figure 4-15) and include the communities of Table View, Flamingo Vlei, Sunridge, Rosendal, West Riding, Bloubergrant, Blouberg Rise, Sunningdale, Parklands, Bloubergstrand, Blouberg Sands, West Beach and Big Bay. These suburbs also display a better than average socioeconomic status with relatively low levels of unemployment and better than average levels of service delivery. Dwellings are almost all formal (~99%), and residents of these suburbs generally enjoy a more affluent lifestyle relative to the population of the study area.

These four suburbs, particularly the communities of Big Bay, Sunningdale, Parklands and Blouberg Sands, have expanded significantly. A large amount of residential densification has also taken place, in particular along the coastal strip (Eskom, 2015). Sunningdale and Parklands are two of the fastest growing urban areas in Cape Town and further expansion is proposed (Eskom, 2015). The population of these four suburbs increased by nearly 130% to more than 67 000 people between 2001 and 2011 placing strain on services in the area (Eskom, 2015).

While this area is predominantly residential, the West Coast Village (Shopping Centre) and Big Bay are both important retail nodes, and the Blaauwberg Netcare (hospital) is located in Sunningdale. Many local residents and people from outside of the study area surf and kite surf at Bloubergstrand and Big Bay (Eskom, 2015).

The R27 and M5 roads provide access to the Cape Town CBD to the south and to other areas in the City. These transportation routes are congested during high use periods (i.e. rush hour). The MyCiti Bus Service also provides access to and from this area.

Parklands Main Road is proposed to develop as a mixed use activity street northward along the railway line.

#### Milnerton Non-urban

The Milnerton non-urban area is a largely unpopulated area located north of Sunningdale and Parklands stretching north towards the KNPS. The suburbs of Parklands and Sunningdale have expanded into this area and therefore the socioeconomic status largely reflects the socioeconomic status of these neighbouring suburbs (see Table 4-6). This also accounts for the rapid population expansion between 2001 and 2011 (see Table 4-4).

The Blaauwberg Conservation Area is located in this non-urban area, a unique nature area of approximately 2 000 ha comprising natural, cultural and historical elements which is regarded as a global biodiversity hotspot. The R304 and the M19 (Melkbosstrand Road) are important regional access routes and traverse the area.

#### Melkbosstrand

Melkbosstrand is the closest populated area to the KNPS and is located to the south of the facility on the coastline. The suburb includes the communities of Duynefontein, Van Riebeeckstad and Melkbosstrand. This suburb also displays a better than average socioeconomic status with relatively low levels of unemployment and better than average levels of service delivery. Dwellings are almost all formal (~ 99%), and residents of these suburbs generally enjoy a more affluent lifestyle relative to the population of the study area. Due to its location along the coastline and the adjacent Blaauwberg Conservation Area the suburb is a sought after residential area.

The most significant development in the suburb in the last 15 years is the Atlantic Beach golf estate to the south. The development of the Melkbosstrand CBD has also proceeded with the construction of a supermarket and residential component. The demarcation of the urban edge will limit the extent of outward expansion of the town over the development projection period. However, due to its proximity to the City and being a desirable residential area, a certain amount of infill and redevelopment may be expected (Eskom, 2015).

The beach is popular with surfers and is one of the landing points for the South Africa-Far East and South Atlantic/West Africa submarine cable systems.

The R27, which runs to the west of the suburb, provides access to and from other areas in Cape Town. The MyCiti Bus Service also provides access to and from this area.

#### **Philadelphia**

The rural village of Philadelphia is a small isolated community situated in the east of the study area with a population of only 570 people in 2011. The village has a slightly worse than average socioeconomic status, and the population has generally low levels of education (see Table 4-6). More than 90% of dwellings in the suburb are formal, and more than 65% of households earn more than R3200 / month.

The community was established as a religious community and is dominated by a large church. The historic town is a fairly popular destination for local tourists and hosts a primary school and a police station.

The R304, which runs through the suburb, provides access to and from other areas in Cape Town.

#### **Morning Star Small Holdings**

Morning Star Small Holdings is a small rural community of only about 500 people located about 12 km to the south east of the KNPS. This community is relatively affluent, with fairly low levels of unemployment. Dwellings are mostly formal (89.5%), and residents of this suburb generally enjoy a more affluent lifestyle than the majority of the population of the study area.

The N7, an important regional access route, passes to the east of Morning Star, and a railway line passes to the west providing access to and from Cape Town for this community.

### Kleine Zout River Small Holdings

Kleine Zout River Small Holdings is a largely unpopulated rural area located to the west of Melkbosstrand (see Figure 4-15). More than half of the dwellings in the area are informal, and most of the population of 283 people have a low monthly income.

The area hosts an airstrip and an off-road vehicle track. The R27 forms the western boundary of the area.

#### **Du Noon and Doornbach**

The suburbs of Du Noon and Doornbach are two contiguous communities located to the west of Parklands (see Figure 4-15). Doornbach and large parts of Du Noon are informal settlements, and housing is typically of poor quality with little space, and residents are exposed to high levels of environmental risk. Correspondingly, service delivery is poor. These communities are characterised by low levels of education, high levels of unemployment and low income and are known for high levels of crime.

These suburbs reflect high levels of social and environmental vulnerability associated with living in low income settlements in urban areas in South Africa. The majority of people living in such areas can be considered socially, economically and environmentally vulnerable (Oelofse, 1999, in Lewis et al, 2007).

The population of Du Noon tripled between 2001 and 2011. Opportunities for employment at the adjacent industrial area of Killarney Gardens serve as a significant pull factor for people entering this area. A growth corridor is proposed between Big Bay and Doornbach (Eskom, 2015) which will further expand the population of this area.

The N7 runs to the west of this area, and the railway network provides access to the west. The MyCiti Bus Service also provides access to and from this area.

#### **Atlantis and Mamre**

Atlantis and Mamre are two large urban communities located in the north east of the study area. Atlantis was established in the 1970s by the apartheid era government as an industrial and residential community. The suburbs include the communities of Wesfleur, Saxonsea, Sherwood, Beaconhill, Robinvale, Avondale, Protea Park, Witsand and Mamre. While most households are formal, there are some informal settlements in Atlantis. The population has a below average level of education, and has a slightly higher unemployment rate than the City average. In addition to unemployment, crime is also a major challenge to these communities (IOL, 2013).

A large and important industrial sector is present in Atlantis. The establishment of a Hisense (electronics) factory in 2013 has created much needed employment opportunities and skills development in the area (BusinessDay, 2013).

While population growth rates have been low compared to the average rates in the study area and Atlantis has experienced a period of relative stagnation, further residential and industrial development is proposed in the Atlantis Growth Corridor. The town has also been identified at ministerial level for upgrading in order to facilitate the economic upliftment of the community (Eskom, 2015). Since heavy industrial uses are permitted in Atlantis, it could be expected that further heavy industrial uses may develop here (SSR, 2012).

The 41 bed Wesfleur Hospital is located in the suburb of Atlantis and is the closest hospital to the KNPS.

The railway network, the R27, the R304 and the MyCiti Bus service provide access to and from these suburbs.

# **Atlantis Non-Urban**

The Atlantis non-urban area is a largely unpopulated rural area in the north of the district which surrounds Atlantis and Mamre. The population of this area experiences a similar socioeconomic status to Atlantis and Mamre.

This area includes the KNPS and surrounding nature reserve, the Atlantis dune field and aquifer and the Silwerstroomstrand recreational area on the coast. Silwerstroomstrand was expected to develop as a resort because of the beauty of the coastline, the growing popularity of the West Coast as a recreational area, and its proximity to the City. However, this has not yet materialised.

The R27 and the N7 are important regional access routes connecting Cape Town to areas to the north.

#### Vissershok

The community of Vissershok is a small informal community of about 300 people located near the Vissershok hazardous waste disposal site. This community is characterised by extremely low education and income levels. It is assumed that the majority of employed persons in this community work at the waste disposal site. The N7 runs to the west of Vissershok.

#### 4.2.4 Cultural and Historical Environment

This section is based on the Heritage Baseline Assessment by ACO Associates cc, 2015.

The KNPS was built between 1976 and 1981 on what was at the time an undeveloped and alien infested farm. The site alternatives for the TISF were both extensively disturbed by extensive massive earthworks and lay down areas for the construction of the KNPS. While the broader site is rich, particularly in Pleistocene fossil deposits and possibly even earlier Miocene and Pliocene deposits at deeper depths, the site alternatives are sterile and significantly transformed by previous activities.

# 4.2.4.1 Palaeontological Context

In 1973, Richard Klein discovered the palaeontological site known as Duinefontein 2, which comprised of fragments of fossil animal bone that were un-earthed during trial excavations for the KNPS. The site was extensively excavated between 1998 and 2003. There are at least three buried horizons (ancient land surfaces) at Duinefontein 2 (Klein 1999), each of which represents different ages in the Pleistocene and Holocene history of the region. Klein and his team found the fossilized remains of ancient Pleistocene fauna (about 300 000 years old) along with traces of human activity. The animals included many species not seen in the Cape today, as well as several extinct species such as the giant buffalo, giant pigs, extinct species of elephant, hippopotamus and the cape horse. The main fossil horizon lay roughly 1 m below the surface of the present day windblown sands. Nodular calcretes had developed over the fossil horizon making excavation very difficult at times. Deep soundings by Klein and his team revealed the presence of an even older deeper horizon; however groundwater at a depth of 2 m prevented its detailed excavation. Klein (pers. comm.) is of the opinion that archaeological and palaeontological deposits such as those found at Duinefontein 2 have the potential to exist anywhere within the Eskom held property and beyond; however more detailed surveys conducted since, show that the main fossil beds lie in the portion of the nature reserve to the north of the KNPS.

When the excavation for the KNPS took place in the 1970's, a deep sequence of fossil bearing sediments was exposed. The most recent sands and calcretes contained Pleistocene mammalian fossils as well as evidence of Early Stone Age occupation in the form of stone artefacts (Klein pers. comm.). Deeper down in the sequence, the sediments contained marine fossils of the Miocene period deposited during periods of marine transgression. Palaeontologist John Pether (2007) has indicated that these early deposits are deeply buried at 10-14 m below surface level, underneath a vertical section of 24-28 m of sediment.

### 4.2.4.2 Archaeological Context

The coastal regions of the southwestern Cape were occupied in pre-colonial times by peoples who exploited marine resources for their livelihood. Human occupation of the coast is archaeologically reflected in the thousands of shell midden sites and rock shelter deposits. Herder sites, such as at Kasteelberg, show occupation between 1800 and 1600 years ago. European explorers had contact with many of the Khoekhoen groups along the coast. These peoples included the CochoqQua, whose territory stretched from Saldanha Bay to Vredenburg, and the ChariGuriQua or GuriQua who occupied the lower Berg River area, St Helena Bay and points around Piketberg. Shell middens have been observed locally at Blouberg Beach, Atlantic Beach but very few within the Koeberg Nature Reserve despite exhaustive surveys.

Archival documentation makes reference to Hermanus Dempers an 'inhabitant and owner of the 'Opstal' on the loan place named 'Duinefontein' (CA CO 3985 ref, 117, CO 3887 ref 79). When the property was surveyed in 1834, there was no indication of houses or any built structures. There is, however, a 'Kraal Ordannantie' which features on the diagram as well as the later 1890 SW Cape survey map. The kraal location appears to be outside of the KNPS boundary. The site of Demper's house is not known, but it is possible that ephemeral evidence of its presence may lie under the dune sands somewhere on the Eskom property.

The colonial period history of Duinefontein is interesting; however, it does not reveal any particular significance in terms of associations with events, or important historical personalities.

### 4.2.5 Visual and Aesthetic Environment

The inherent value of the visual landscape to viewers is informed by geology/topography, vegetation and land-use and is expressed as *Visual Character* (overall impression of the landscape), *Visual Quality* (how the landscape is experienced) and *Sense of Place* (uniqueness and identity).

#### 4.2.5.1 Visual Character

Visual character is descriptive and non-evaluative, which implies that it is based on defined attributes that are neither positive nor negative. A change in visual character cannot be described as having positive or negative attributes until the viewer's response to that change has been taken into consideration. The probable change caused by the project is assessed against the existing degree of change caused by previous development.

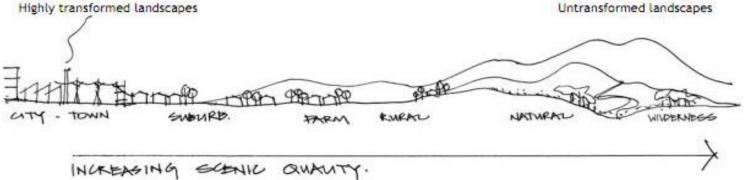
Typical character attributes, used to describe the visual character of the affected area and to give an indication of potential value to the viewer, are provided in Table 4-7.

The basis for the visual character of the study area is provided by the geology/topography, vegetation and land use of the area, giving rise to a confined industrial enclave in an open area of stable and active dunes under predominantly natural cover with influence from the ocean. The study area can be described as a *transition landscape* associated with the interface between urban development to the south and natural areas to the north.

The TISF will be located in the KNPS SPA, a substantially modified landscape (*highly transformed landscape*) with high levels of visual impact caused by the reactor units and associated infrastructure (buildings, roads, powerlines, etc.).

Table 4-7: Typical visual character attributes

High levels of visual impact associated with the interface between, rural, agricultural area and more related infrastructure (e.g. powerlines).  with the interface between, rural, agricultural area and more developed suburban or urban zones.	sypical character is rural andscape, defined by field atterns, forestry plantations and gricultural areas and ssociated small-scale roads and buildings.	No / minimal impact associated with the actions of man. National parks, coastlines, pristine forest areas.



Source: CNDV, 2006







#### 4.2.5.2 Visual Quality

Aesthetic value is an emotional response derived from our experience and perceptions. As such, it is subjective and difficult to quantify in absolute terms. Studies in perceptual psychology have shown that humans prefer landscapes with higher complexity (Crawford, 1994). Landscape quality can be said to increase when:

- Topographic ruggedness and relative relief increases;
- Water forms are present;
- Diverse patterns of grasslands, shrubs and trees occur;
- Natural landscape increases and man-made landscape decreases; and
- Where land-use compatibility increases.

The visual quality of the overall area can be ascribed to the open, modified natural character of the landscape with the KNPS as a prominent landmark on the coastline.

The visual quality is also enhanced by the view of Table Mountain in the background (looking south).

The low-growing vegetation does not add any visual interest although the predominantly natural state of the landscape inland of the KNPS (within the Koeberg Nature Reserve) and the vegetated primary dune and active dunefield to the north adds to the visual quality of the study area.

The visual quality of the area can be experienced through a number of views. These views include:

- Open views along the coast towards the KNPS (Figure 4-18);
- Rolling views across Koeberg Nature Reserve towards the KNPS (Figure 4-18 and Figure 4-19); and
- Extended, open views from the ridgeline across the coastal plain (Figure 4-19).

There are elements that detract from visual quality in the study area, notably the powerlines from the KNPS across the study area, and telecommunications masts. Nevertheless the visual quality of the study area is considered to be moderate.

### 4.2.5.3 Sense of Place

Our sense of a place depends not only on spatial form and quality but also on culture, temperament, status, experience and the current purpose of the observer (Lynch, 1992). Central to the idea of 'sense of place' or Genius Loci is identity. An area will have a stronger sense of place if it can easily be identified, that is to say if it is unique and distinct from other places. Lynch defines 'sense of place' as "the extent to which a person can recognise or recall a place as being distinct from other places – as having a vivid or unique, or at least a particular, character of its own" (Lynch, 1992:131).

It is often the case that sense of place is linked directly to visual quality and that areas/spaces with high visual quality have a strong sense of place. However, this is not an inviolate relationship and it is plausible that areas of low visual quality may have a strong sense of place or – more commonly – that areas of high visual quality have a weak sense of place. The defining feature of sense of place is uniqueness, generally real or biophysical (e.g. trees in an otherwise treeless expanse), but sometimes perceived (e.g. visible but unspectacular sacred sites and places which evoke defined responses in receptors). Tourism can sometimes serve as an indicator of sense of place insofar as it is often the uniqueness (and accessibility) of a space/place which attracts tourists.

The sense of place of the study area is determined by the KNPS facility and associated infrastructure located in a predominantly natural setting and influenced by the proximity to the coast and the Koeberg Nature Reserve. The study area has an immediately recognisable sense of place as the KNPS reactor units have been distinguishable, though not overly intrusive landmarks on the landscape for many years.





KOEBERG TISF EIA VISUAL QUALITY Project No. 478317

Figure 4-18: View of the KNPS from Duynefontein beach (above) and view of the KNPS from Koeberg Nature Reserve with Table Mountain in the background (below)



Figure 4-19: View across Koeberg Nature Reserve from the R27 (above) and view across the coastal plain towards the R27 from the primary dune (below)

### 4.2.5.4 Visual Receptors

Receptors are important insofar as they inform visual sensitivity. The sensitivity of viewers is determined by the number of viewers and by how likely they are to be impacted upon. Potential viewers include the following:

- Motorists: The KNPS is visible to users travelling on the R27 along the eastern boundary of the study area. Viewers along the R27 are transient (and moving at speed) and so are exposed to visual impacts for a relatively short period. The dunefield in the north of the study area provides partial screening, and although the KNPS is visible to motorists along the R27, the TISF will not be visible as the alternative sites are wholly screened by the primary dune.
- Residents of Duynefontein: Visibility from individual households is likely to be low, since the urban fabric obtrudes views of the site beyond the very immediate foreground. The primary dune provides visual screening to receptors in Duynefontein. The Alternative 2 site on the southern side of the KNPS may be partially visible from the beach, although this is unlikely as receptors can only approach to within approximately 1.6 km of the KNPS and the dunes provide partial screening. The Alternative 1 site will not be visible to residents of Duynefontein as this site is located on the northern side of the KNPS and will therefore be screened by existing infrastructure.
- Visitors to the Koeberg Nature Reserve: The primary dune provides visual screening to many
  of the trails and viewpoints within the nature reserve. Regular visitors to the area will have
  become accustomed to the KNPS infrastructure, while new visitors to the study area could be
  expected to notice industrial elements.

The ridgeline ensures that most of the KNPS <u>SPA</u>, and therefore the site alternatives, are screened from receptors. The TISF is unlikely to be easily distinguishable from the rest of the KNPS infrastructure. The sensitivity of viewers or visual receptors potentially affected by the visual impact of the Project is considered to be very low.

### 4.2.5.5 Viewing Distance and Visibility

The distance of a viewer from an object (in this case the TISF) is an important determinant of the magnitude of the visual impact. This is because the visual impact of an object diminishes/attenuates as the distance between the viewer and the object increases. Thus the visual impact at 1 000 m would, nominally, be 25% of the impact as viewed from 500 m. At 2 000 m it would be 10% of the impact at 500 m (Hull and Bishop, 1988 in Young, 2000).

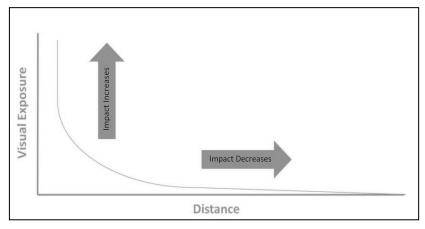


Figure 4-20: Visual exposure vs distance

Source: Adapted from Hull and Bishop (1998)

Three basic distance categories can be defined for a Project of this scale (as discussed and represented in Table 4-8):

- Foreground;
- · Middleground; and
- · Background.

Table 4-8: Distance categories

FOREGROUND (0 – 1 km)	The zone where the proposed Project will dominate the frame of view. The TISF will be <i>highly visible</i> unless obscured.	
MIDDLEGROUND (1 – 3 km)	The zone where colour and line are still readily discernible. The TISF will be moderately visible but will still be easily recognisable.	
BACKGROUND (> 3 km)	This zone stretches from 3 km to the point from where the TISF can no longer be seen. Objects in this zone can be classified as <i>marginally visible</i> to <i>not visible</i> .	

A range of (reasonably) accessible viewpoints were selected from the surrounding areas, in order to provide an indication of the likely visibility of the TISF. The viewpoints were not randomly selected but were chosen because they are likely to afford optimal views of the project, i.e. the TISF is likely to be less visible from other accessible viewpoints.

The selected viewpoints are shown in Figure 4-21, and views from these viewpoints are shown in the accompanying photographs (Figure 4-22 to Figure 4-25). The criteria used to determine the visibility of the TISF are set out in Table 4-9 and the visibility from each viewpoint is summarised in Table 4-10.

Table 4-9: Visibility criteria

NOT VISIBLE	Project cannot be seen	
MARGINALLY VISIBLE	Project is only just visible / partially visible (usually in background zone)	
VISIBLE	Project is visible although parts may be partially obscured (usually in middleground zone)	
HIGHLY VISIBLE	Project is clearly visible (usually in foreground or middleground zone)	

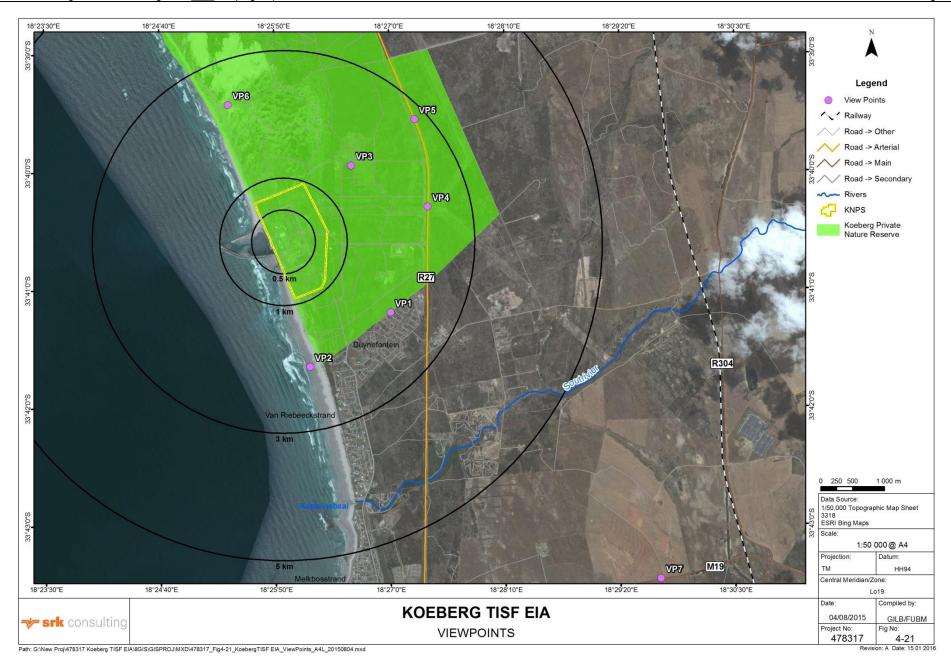


Table 4-10: Visibility from viewpoints

View Point #	Location	Co-ordinates	Direction of view towards/from the site	Time of Photograph	Potential Receptors	Visibility
VP1	Duynefontein (Napoleon Avenue)	33°41'11.63"S;	North-west	10:37am	Residents of	Alternative 1 Site - Not visible
		18°27'0.35"E			Duynefontein	Alternative 2 Site – Not visible
VP2	Duynefontein beach	33°41'39.15"S; 18°26'11.29"E	North	10:53am	Visitors to Duynefontein beach	Alternative 1 Site – Not visible
					,	Alternative 2 Site – Marginally visible
VP3	Koeberg Nature Reserve	33°39'56.73"S;	South-west	11:23am	Visitors to the	Alternative 1 Site - Not visible
	administration buildings	18°26'36.79"E			Koeberg Nature Reserve	Alternative 2 Site – Not visible
VP4	R27	33°40'17.89"S;	West	11:30am	Users of the R27	Alternative 1 Site - Not visible
		18°27'23.29"E				Alternative 2 Site – Not visible
VP5	R27	33°39'33.36"S;	South-west	11:33am	Users of the R27	Alternative 1 Site - Not visible
		18°27'15.42"E				Alternative 2 Site – Not visible
VP6	Dune Road in Koeberg Nature	33°39'24.25"S;	South	12:25pm	Visitors to Koeberg	Alternative 1 Site – Marginally visible
	Reserve north of site	18°25'32.97"E			Nature Reserve	Alternative 2 Site – Not visible
VP7	Melkbosstrand Road	33°43'27.51"S;	North-west	10:25am	Users of Melkbosstrand Road	Alternative 1 Site – Not visible
		18°29'44.40"E				Alternative 2 Site – Marginally visible but 7.5km from site

Note: Shading indicates visibility according to Table 4-9.

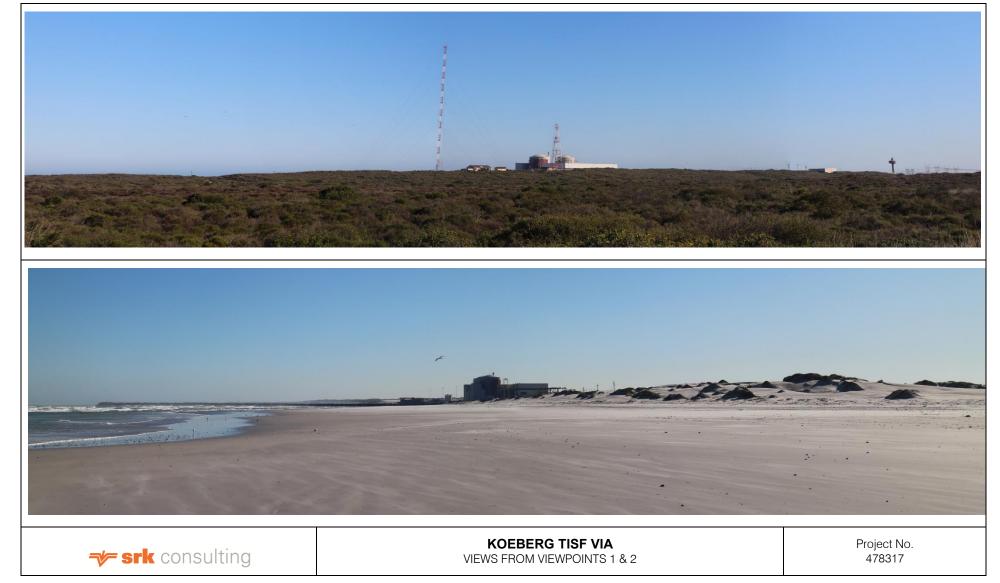


Figure 4-22: Views from Viewpoint 1 (above) and Viewpoint 2 (below)



Figure 4-23: Views from Viewpoint 3 (above) and 4 Viewpoint (below)



Figure 4-24: Views from Viewpoint 5 (above) and Viewpoint 6 (below)



Figure 4-25: Views from Viewpoint 7

## 5 Stakeholder Engagement

Stakeholder engagement forms a key component of the S&EIR process. The objectives of stakeholder engagement are outlined in this section, followed by a summary of the approach to be followed, in compliance with Chapter 6 of the EIA Regulations, 2014.

## 5.1 Objectives and Approach to Stakeholder Engagement

The overall aim of stakeholder engagement is to ensure that all IAPs have adequate opportunity to provide input into the process and raise their comments and concerns. More specifically, the objectives of stakeholder engagement are to:

- Identify IAPs and inform them about the proposed development and S&EIR process;
- Provide stakeholders with the opportunity to participate effectively in the process and identify relevant issues and concerns; and
- Provide stakeholders with the opportunity to review documentation and assist in identifying mitigation and management options to address potential environmental issues.

## 5.2 Stakeholder Engagement Activities

The activities undertaken during the Pre-Application and Scoping Phases of the assessment are outlined in Table 5-1 and Table 5-2 below.

Table 5-1: Stakeholder engagement activities <u>undertaken</u> during the Pre-Application Phase

Task	Objectives	Dates
Advertise release of Background Information Document (BID) for I&AP registration	To provide stakeholders with the opportunity to review the BID and register on the I&AP database.	08 October 2015
Initial public comment and registration period	To provide stakeholders with the opportunity to review the BID and provide initial comment and register as stakeholders for the EIA process.	09 October to 09 November 2015
Public Open Day	To present the proposed project to stakeholders and provide an opportunity for questions and discussion.	27 October 2015
Focus Group Meetings	To present the proposed project to relevant authorities and focus groups identified through stakeholder interest, and provide an opportunity for questions and discussion.	November 2015 to January 2016
Release Draft Scoping Report for public comment	To provide stakeholders with the opportunity to review the Scoping Report and provide initial comment.	March to April 2016
Compile Comments and Responses Summary	To record all issues and concerns raised and collate these comments in the Scoping Report.	May 2016

Table 5-2: Stakeholder engagement activities <u>undertaken</u> during the Scoping Phase

Task	Objectives	Dates
Advertise commencement of EIA process and release of Scoping Report for public comment period	To notify IAPs of the commencement of the EIA process and to provide a description of the proposed project and the affected environment, as well as a description of potential environmental issues, and the proposed approach to the Impact Assessment Phase.	<u>4 – 8</u> July 2016
Public comment period	To provide stakeholders with the opportunity to review and comment on the results of the Scoping Phase.	<u>8</u> July to <u>8</u> August 2016

Task	Objectives	Dates
Public Open Day	To present the findings of the Scoping Report to stakeholders and provide an opportunity for questions and discussion.	<u>21</u> July 2016
Focus Group Meeting	To present the findings of the Scoping Report to relevant authorities and focus groups identified through stakeholder interest, and provide an opportunity for questions and discussion.	<u>27</u> July 2016
Compile Comments and Responses Summary and finalise Scoping Report	To record all issues and concerns raised and collate these comments in the final report which provides DEA with information to decide whether to accept the Scoping Report.	August 2016

The key activities undertaken in the stakeholder engagement process during the Pre-Application and Scoping Phases are described further below.

#### 5.2.1 Identification of Key Stakeholders

As required by the EIA Regulations, 2014, relevant local, provincial and national authorities, conservation bodies, local forums and representatives and surrounding land owners and occupants have been notified of the EIA and the release of the Scoping Report for comment.

Relevant authorities (Organs of State) have been automatically registered as IAPs. In accordance with the EIA Regulations, 2014, all other persons must request in writing to be placed on the register, submit written comments or attend meetings in order to be registered as stakeholders and included in future communication regarding the project. As specified in GN R 982, all persons who submit written comments, attend meetings or request in writing to be placed on the register will be registered as IAPs, and advertisements advise that IAPs register as such.

A list of stakeholders that were notified of the process is provided in <u>Appendix  $E^{14}$ </u>. The stakeholder database will be updated throughout the process.

#### 5.2.2 Pre-Application Phase

#### 5.2.2.1 Release of BID for Public Comment

Key stakeholders were identified and notified of the availability of the BID for public review. Newspaper advertisements (*Appendix F*) announcing the availability of the BID and inviting IAPs to register on the project database were placed in:

- One regional newspaper:
  - The Cape Times (in English).
- Five local newspapers:
  - WeskusNuus (in Afrikaans);
  - Table Talk (in English);
  - Tygerburger Table View (in English and Afrikaans);
  - Isolabantu (in isiXhosa); and
  - Impact 24/7 (in Afrikaans).

<sup>&</sup>lt;sup>14</sup> Stakeholders who submitted written comments or attended the Public Open Day and/or Focus Group Meetings during the Pre-Application Phase, were registered on the stakeholder database.

A notice was also placed in the Shutdown Times (in English), an Eskom internal newsletter.

Copies of the BID and I&AP registration forms (included in <u>Appendix G</u>) were made available for viewing at the following venues:

- Koeberg Public Library, Duynefontein;
- Wesfleur Public Library, Atlantis;
- · Cape Town Public Library;
- The KNPS Visitors Centre; and
- SRK's office in Rondebosch.

A4 or A3 size notices, in English and/or Afrikaans, were placed on the noticeboards at each of the relevant locations. A2 site notices were placed at the entrances to the KNPS (see *Appendix H*).

#### 5.2.2.2 Public Open Day and Focus Group Meetings

A Public Open Day was held on Tuesday 27 October 2015 at the KNPS Visitors Centre from 15h00 to 18h30. The Public Open Day included a poster presentation (copies of posters and the attendance register are included as <u>Appendix I</u>). The purpose of the Public Open Day was to provide stakeholders with information regarding the proposed project and allow for the identification of key issues and concerns to inform the Scoping process.

Focus Group Meetings were held with key stakeholders listed in Table 5-3 to facilitate focused discussion and the dissemination of information regarding the project. Notes from these meetings are included in *Appendix J*.

Table 5-3: Focus Group Meetings during the Pre-Application Phase

Meeting 1: Pre-Application Meeting	Date: 20 November 2015	Venue: DEA Offices, Pretoria	
Stakeholder	Organisation		
Henriette van Graan	NNR		
Peter Mkhabela	NNR		
Lerato Mokoena	DEA		
Wayne Hector	DEA		
Millicent Solomons	DEA		
Meeting 2: Authorities Meeting	Date: 26 January 2016	Venue: DEA&DP Offices, Cape Town	
Stakeholder	Organisation		
Alvan Gabriel	DEA&DP: Development Manage	ment	
Adri la Meyer	DEA&DP: Development Management		
Lance McBain-Charles	DEA&DP: Waste Management Licencing		
Russell Mehl	DEA&DP: Pollution Management		
Melanese Schippers	DEA&DP: Development Manage	ment	
Anthony van Wyk	DEA&DP: Environmental Officer		
Zayed Brown	DEA&DP: Pollution and Chemica	lls Management	
Peter Harmse	DEA&DP: Air Quality Manageme	nt	
Bhawoodien Parker	DEA&DP: Air Quality Manageme	nt Monitoring	
Eugene Pienaar	DEA&DP: Waste Management		
Pat Titmuss	CoCT: Environmental Resources Management		
Morné Theron	CoCT: Environmental Resources Management		
lan Gildenhuys	CoCT: City Health		

#### 5.2.2.3 Release of Draft Scoping Report for Public Comment

The Draft Scoping Report was released for public and authorities comment from 18 March until 25 April 2016. Copies of the document were made available to all key commenting authorities, and all registered I&APs were notified in writing of the availability of the report for comment (*Appendix K*), and provided with an executive summary of the Draft Scoping Report.

Hard copies of the full report were made available for viewing at the following venues:

- Koeberg Public Library, Duynefontein;
- · Wesfleur Public Library, Atlantis;
- · Cape Town Public Library;
- · The KNPS Visitors Centre; and
- SRK's office in Rondebosch.

An electronic version of the report was also available on SRK's website **www.srk.co.za** (via the 'Library' and 'Public Documents' links).

A notice was also placed in the internal Eskom KNPS communication newspaper, namely the "Shutdown Times" (in English). Eskom also communicated the proposed TISF project at the quarterly Public Safety Information Forum meetings on 30 September 2015 and 31 March 2016 respectively.

#### 5.2.3 Scoping Phase

#### 5.2.3.1 Notification of the EIA Process and Availability of Scoping Report for Public Comment

The Scoping Report was released for public and authorities comment from 8 July until 8 August 2016. Copies of the document were made available to all key commenting authorities, and all registered I&APs were notified in writing of the availability of the report for comment (Appendix L), and provided with an executive summary of the Scoping Report.

Newspaper advertisements (<u>Appendix M</u>) announcing the commencement of the S&EIR process, the availability of the Scoping Report for stakeholder review and once again inviting additional I&APs to register on the project database were placed in:

- · One regional newspaper:
  - o The Cape Times (in English).
- Five local newspapers:
  - WeskusNuus (in Afrikaans);
  - Table Talk (in English);
  - Tygerburger Table View (in English and Afrikaans);
  - Isolabantu (in isiXhosa); and
  - Impact 24/7 (in Afrikaans).

Hard copies of the full report were made available at the venues listed in Section 5.2.2.4, and an electronic version of the report <u>was available</u> on SRK's website **www.srk.co.za** (via the 'Library' and 'Public Documents' links).

A2 site notices were placed at the entrances to the KNPS (*Appendix N*).

Stakeholders were provided with a 30 day comment period.

#### 5.2.3.2 Public Open Day and Focus Group Meetings

A Public Open Day <u>was held on 21 July 2016 at the KNPS Visitors' Centre</u>. At this Open Day, a series of posters <u>was</u> presented and members of the EIA team and Eskom's technical team <u>were</u> available to discuss any aspects of the proposed project with stakeholders (**Appendix S**).

<u>A Focus Group Meeting was held with authorities listed in Table 5-4 on 27 July 2016</u> to present the findings of the Scoping Report and to provide an additional opportunity for questions and discussion. <u>Notes from this meeting are included in **Appendix O**.</u>

Table 5-4: Authorities Focus Group Meeting held during the Scoping Phase 15

<u>Stakeholder</u>	<u>Organisation</u>
<u>Sifiso Nhleko</u>	<u>NNR</u>
Adri la Meyer	DEA&DP: Development Management
Thorsten Aab	DEA&DP: Waste Management Licencing
Melanese Schippers	DEA&DP: Development Management
Morné Theron	CoCT: Environmental Resources Management
lan Gildenhuys	CoCT: City Health
<u>David Chapman</u>	CoCT: City Health

#### 5.2.4 Key Concerns Raised by Stakeholder during Scoping

Key concerns raised by stakeholders during the Pre-Application and Scoping Phases are as follows:

- Used nuclear fuel should not be stored at the KNPS but rather at the CISF;
- Intended lifespan of the TISF;
- Design details of the TISF;
- Used nuclear fuel from other sources will be stored at the TISF;
- Transport of the dry storage casks to and from the TISF;
- Access road design requirements;
- Proximity of the increasing population to the TISF and the health and safety risks;
- Consideration of other alternatives;
- Motivation for the preferred site alternative;
- Impacts on coastal processes;
- Delineation of the HWM;
- Impacts on terrestrial ecology;
- Potential visual impacts of the TISF;
- Potential groundwater impacts;
- Potential impacts on the health and safety of employees;
- Potential radiation <u>risks and</u> impacts;
- Lifespan and maintenance requirements of the casks;

<sup>&</sup>lt;sup>15</sup> All those authorities who attended the Authorities Focus Group Meeting during the Pre-Application Phase were invited to the Authorities Focus Group Meeting during the Scoping Phase.

- · Security at the TISF and responses to emergencies;
- Cumulative impacts of other proposed projects;
- · Disposal of construction waste and general waste;
- Confusion between the KNPS SPA and NEM:PAA Protected Area;
- Impact of heat generated by storage casks; and
- Timeline of implementation of TISF conflicting with other planned developments at KNPS.

These issues have informed the Plan of Study for EIA. All written comments received from stakeholders during the Pre-Application Phase are included in <u>Appendix P</u> and all written comments received from stakeholders during the Scoping Phase are included in <u>Appendix Q</u>. A Comments and Responses Summary has been included in <u>Appendix R</u>.

## 6 Potential Environmental and Social Impacts

## 6.1 Key Environmental Issues

The impacts of a project are mostly linked to the sensitivity of the receiving environment and proximity of receptors, the extent or footprint and nature of the development, potential risks in an emergency situation and stakeholders' perceptions.

Based on the above considerations as well as the professional experience of the EAP, the following *key* environmental issues – potential negative impacts and potential benefits of the project in its proposed setting – have been identified. Other less significant impacts are discussed in Section 7.7.9.

- Geohydrology The construction of the TISF may potentially impact on groundwater levels and
  quality although this is unlikely as groundwater at the project site is deeper than the proposed
  TISF excavation depth. Dewatering of excavations will probably not be required during
  construction.
- Terrestrial ecology Due to the ecological sensitivity of both TISF site alternatives and the
  presence of sensitive vegetation types, the project may negatively impact threatened and/or
  protected floral species. The project does not pose a threat to threatened or protected faunal
  species.
- Socio-economic Potential negative impacts on the surrounding communities would be
  associated with an increase in nuisance factors (e.g. poor noise and air quality conditions during
  construction). Potential economic benefits are expected due to increased employment
  opportunities during the construction phase. The TISF will also ensure the continued operation
  of the KNPS, a significant electricity producer in the Western Cape.
- Radiation and Human Health The potential exposure of Eskom employees as well as
  individuals in surrounding communities to radiation due to the handling and storage of used fuel
  at the TISF and the potential negative impacts on human health of is expected to be a key
  concern to stakeholders.
- Heritage Although the West Coast is known for its wealth of fossil and shell middens, both TISF site alternatives are considered significantly disturbed by previous construction activities and in terms of the heritage landscape, the possibility of finding sites of archaeological or palaeontological importance is highly unlikely.
- Visual The sense of place of the study area is determined by the KNPS infrastructure located
  in a predominantly natural setting and influenced by the proximity to the coast. The TISF will be
  located in the KNPS <u>SPA</u>, a substantially modified landscape and is therefore unlikely to have
  significant negative visual impacts for receptors.

The potential direct, indirect and cumulative impacts (negative and positive) of the project and the No Go option, based on the key issues listed above, will be addressed in the Impact Assessment Phase of the EIA. Specialist studies and inputs will be commissioned during the Impact Assessment Phase to address these issues (see Section 7.3).

Certain impacts, while important, are considered likely to be less significant than those discussed above, or unlikely to require specialist input given the information already available. It is proposed that these potential impacts be assessed by the EAP. These include **land use**, **air quality, noise, traffic, surface water and stormwater impacts** – see Section 7.7.9.

#### 6.2 Radiation Risks

Eskom has a comprehensive ERP for the KNPS as discussed in Section 3.7.5. In the case of the TISF, there is very unlikely to be a scenario of severe damage to the KNPS and the used fuel casks that would generate a radiation plume exceeding the plume from the (simultaneously damaged) reactor units or from the SFP. A detailed analysis of possible scenarios that may lead to radiological releases will be assessed in the Probabilistic Safety Assessment (PSA) which has been commissioned by Eskom. The PSA will also inform the update of the KNPS ERP.

Risks associated with the TISF, and appropriate emergency response will be evaluated by the NNR, who will need to be assured that these matters are correctly addressed prior to authorising the TISF. As such, radiation risks will not be evaluated in detail in the Impact Assessment Phase, although impacts of any routine exposure to radiation to human health will be reported - see Sections 7.7.5 and 7.7.6.

## 7 Plan of Study for the EIA

The proposed Plan of Study for the Impact Assessment Phase of the EIA is presented below.

### 7.1 Description of the Proposed EIA Process

The Impact Assessment Phase can be divided into key steps, namely:

- Consultation with relevant authorities;
- Specialist studies;
- Compilation of an EIA Report and an Environmental Management Programme (EMPr);
- · Stakeholder engagement; and
- Submission of the Final EIA Report and EMPr to the competent authority, in this case DEA.

These are outlined in more detail below.

#### 7.2 Consultation with the Relevant Authorities

Consultation will be conducted with DEA and other relevant authorities to clarify their requirements for the Impact Assessment Phase of the proposed development, other permit and licence applications for the project and to ensure that comments from the key authorities can be received in time to allow for them to be addressed in the EIA. The authorities (and other organs of state) that will be consulted include:

- DEA;
- NNR;
- DEA&DP;
- HWC;
- DWS;
- DoE;
- CoCT;
- CapeNature; and
- DEA:0&C.

## 7.3 Specialist Studies

Specialist assessments will be undertaken as part of the Impact Assessment Phase to investigate the key potential environmental issues and impacts identified during Scoping. These key issues and impacts have been identified based on:

- The legal requirements (Chapter 2);
- The nature of the proposed activity (Chapter 3)
- The nature of the receiving environment (Chapter 4); and
- The professional experience of the EIA team.

The following specialist studies are proposed for the Impact Assessment Phase:

- Geohydrology Specialist Study;
- Terrestrial Ecology (including terrestrial fauna) Specialist Study;
- Socio-economic Specialist Study;
- Review of Radiological Assessment;
- Human Health Specialist Study;
- Heritage Specialist Study; and
- Visual Specialist Study.

Draft ToR for these studies are presented in Section 7.7 below.

## 7.4 Compilation of the Environmental Impact Assessment Report

The compilation of the EIA Report and EMPr will include the following tasks:

- · Assimilation of the specialist studies / input into the EIA Report and EMPr;
- Identification and assessment of environmental impacts based on the results of the specialist studies / input and professional judgment of the EIA team. This will entail an assessment of the duration, extent, probability and intensity of the impacts to determine their significance (see Section 7.7.1 below);
- Identification of mitigation measures and recommendations for the management of the proposed project to avoid and minimise environmental impacts and maximise benefits; and
- Collation of the above information into an EIA Report and EMPr for the design, construction and operation phases of the project.

The update of the ERP falls outside the scope of the EIA and EMPr and will be undertaken/commissioned at a later stage.

## 7.5 Stakeholder Engagement

The stakeholder engagement process initiated during the Scoping Phase (see Section 5.2) will continue in the Impact Assessment Phase of the EIA. The key activities planned during the Impact Assessment Phase are outlined in Table 7-1.

Table 7-1: Stakeholder engagement activities planned during the Impact Assessment Phase

Task	Objectives	Dates
'		Throughout S&EIR process
Compile and release EIA Report for public comment period	To assess the impacts of the project and formulate mitigation measures and management plans.	Impact Assessment Phase
Public comment period	To provide stakeholders with the opportunity to review and comment on the results of the Impact Assessment Phase.	Impact Assessment Phase
Public open day/focus group meetings with key stakeholder	To discuss potential impacts of the project and findings of the studies. Key stakeholder groups will be identified based on findings of specialist studies and interest from	Before and/or after the release of the EIA Report for public

Task	Objectives	Dates
groups	stakeholders and include groups that might be significantly affected by the project as well as local and regional authorities.	comment
Finalise EIA Report	To present the findings of the EIA process and incorporate stakeholder comment in the final report which provides DEA with information for decision-making.	Impact Assessment Phase

## 7.6 Submission of the Final EIA Report and EMPr to DEA

All comments received will be incorporated into a Comments and Responses Summary which will be appended to the Final EIA Report. The Final EIA Report (including the EMPr) will then be submitted to DEA to inform their decision regarding environmental authorisation of the proposed development.

## 7.7 Specialist Study Terms of Reference

The assessment of impacts will be based on the professional judgment of the specialists, fieldwork and desktop analysis, as required. General ToR applicable to all specialists, as well as specific ToR for each specialist study are set out below. The general ToR may not apply equally to all specialists but are included to provide a comprehensive guideline. Specialists will be instructed to disregard those elements of the general ToR that are not applicable to them.

#### 7.7.1 General Terms of Reference

In June 2005 DEA&DP issued several guidelines for involving specialists in EIA processes. SRK expects that specialists will be aware of and utilise these guidelines to more precisely determine methods and approaches to specialist studies and will reference these guidelines accordingly. Specialist studies must also comply with Appendix 6 of the EIA Regulations, 2014.

The specialist studies shall be based on the procedure outlined below.

#### Approach to the Study

Provide an outline of the approach used in the study. Assumptions, limitations and sources of information must be clearly identified. The knowledge of local people should, where possible, be incorporated in the study. The description of the approach shall include a short discussion of the appropriateness of the methods used in the specialist study. The assessment of the data shall, where possible, be based on accepted scientific techniques, failing which the specialist is to make judgments based on professional expertise and experience.

#### **Description of the Affected Environment or Baseline**

A description of the affected environment must be provided, both at a site-specific level and for the wider region, the latter to provide an appropriate context and cumulative impact analysis. The focus of this description shall be relevant to the specialists' field of expertise.

It is essential that the relative uniqueness or irreplaceability of the area be understood in the context of the surrounding region at a local, regional (and, if necessary, national) scale. This will largely be based on a comparison to existing data sources, where available.

The baseline should provide an indication of the sensitivity of the affected environment. Sensitivity, in this instance, refers to the 'ability' of an affected environment to tolerate disturbance (given existing and expected cumulative impacts).

Lastly, the baseline should provide a sufficiently comprehensive description of the existing environment in the study area to ensure that a detailed assessment of the potential impacts of the

proposed development can be made. The baseline should include data collected through a thorough literature review as well as field surveys (where applicable).

#### **Impact Identification and Assessment**

Clear statements identifying the potential environmental impacts of the proposed project must be presented. This includes potential impacts of the construction and operation of the project. The specialist shall clearly identify the suite of potential **direct, indirect and cumulative environmental impacts**<sup>16</sup> in his/her study. The assessment of these impacts should take into account any other existing proposals in the surrounding area.

Direct impacts require a quantitative assessment which must follow the impact assessment methodology laid out in Section 7.7.2. The significance of impacts must be assessed both without and with assumed effective mitigation. Indirect and cumulative impacts should be described qualitatively.

The specialist shall comparatively assess environmental impacts of the development (and each alternative if applicable), and shall indicate any fatal flaws, i.e. very significant adverse environmental impacts which cannot be mitigated and which will jeopardise the project and/or activities in a particular area. All conclusions will need to be thoroughly backed up by scientific evidence.

#### **Mitigation Measures**

Specialists must recommend practicable **mitigation measures** or management actions that effectively minimise or eliminate negative impacts, enhance beneficial impacts, and assist project design. If appropriate, specialists must differentiate between essential mitigation and optimisation measures (i.e. implicit in the 'assuming mitigation' rating), and best practice measures (which reduce impacts, but do not affect the impact rating).

Specialists are also required to recommend appropriate monitoring and review programmes to track the efficacy of mitigation measures (if appropriate).

Specialists must indicate the environmental acceptability of the proposal (and alternatives if applicable), i.e. whether the impacts are acceptable or not. A comparison between the No Go alternative and the proposed development alternative(s) must also be included.

#### 7.7.2 Geohydrology Specialist Study

The following ToR are proposed for the Geohydrology Specialist Study:

- Review previous geohydrology studies undertaken at the KNPS to determine baseline information available and to determine gaps in information;
- Describe and map the existing groundwater resources potentially affected by the project, including groundwater levels, groundwater quality, hydrological linkages with other surface and groundwater resources and existing users of groundwater resources in the area;
- Simulate a dewatering scenario for the construction phase and determine dewatering flow rates, volumes and impact on the aguifer by using existing numerical models for the KNPS;

<sup>&</sup>lt;sup>16</sup> An **indirect** impact is an effect that is related to but removed from a proposed action by an intermediate step or process. **Cumulative** impacts occur when: Different impacts of one activity or impacts of different activities on the natural and social environment take place so frequently in time or so densely in space that they cannot be assimilated; or impacts of one activity combine with the impacts of the same or other activities in a synergistic manner.

- Identify potential impacts of the project on groundwater resources as well as potential impacts of groundwater on the proposed development;
- Assess the impacts of the project on groundwater resources using the prescribed impact assessment methodology;
- Identify and assess potential cumulative impacts resulting from the proposed development in relation to proposed and existing developments in the surrounding area;
- Recommend practicable mitigation measures to avoid and/or minimise/reduce impacts and enhance benefits. Assess the effectiveness of proposed mitigation measures using the prescribed impact assessment methodology; and
- Recommend and draft a monitoring campaign to ensure the correct implementation and adequacy of recommenced mitigation and management measures, if applicable.

#### 7.7.3 Terrestrial Ecology Specialist Study

The following ToR are proposed for the Terrestrial Ecology Specialist Study:

- Review previous terrestrial ecology studies undertaken at the KNPS to determine baseline information available and to determine gaps in information;
- Undertake a field assessment of the entire area to be affected by construction activities as well
  as the surrounding zone of influence to identify habitat types, conservation importance and
  ecological state;
- List any potentially threatened, endangered and endemic flora and fauna species in the area and indicate the importance of the identified species in a local, regional and national context;
- Map areas of higher and lower sensitivity on the site;
- Define applicable legislative requirements regarding any permit applications required;
- Identify potential impacts of the project on terrestrial ecology;
- Assess the impacts of the project on terrestrial ecology in the area using the prescribed impact assessment methodology;
- Identify and assess potential cumulative ecological impacts resulting from the proposed development in relation to proposed and existing developments in the surrounding area;
- Recommend practicable mitigation measures to avoid and/or minimise/reduce impacts and enhance benefits. Assess the effectiveness of proposed mitigation measures using the prescribed impact assessment methodology; and
- Recommend and draft a monitoring campaign to ensure the correct implementation and adequacy of recommenced mitigation and management measures, if applicable.

The specialist should also refer to and, where appropriate, comply with, the DEA&DP Guidelines for Involving Biodiversity Specialists in EIA Processes (2006).

#### 7.7.4 Socio-economic Specialist Study

The following ToR are proposed for the Socio-economic Specialist Study:

- Describe the socio-economic characteristics of the study area, based on:
  - Existing public data, including:
    - Statistical data from Census 2011 and 2001 and the 2007 community survey;
    - Relevant planning and policy frameworks for the area, such as the District Plans of the CoCT Spatial Development Framework and Environmental Management Framework;
    - Spatial data analysis produced by the City of Cape Town;
    - Maps and aerial photographs of the study area;
    - Previous studies undertaken for the KNPS site;
    - Economic publications, such as the Provincial Economic Review and Outlook for the Western Cape; and
    - Previous studies undertaken for similar projects.
  - Interviews with key stakeholders (e.g. local councillors or organisations).
- Describe current and historical social trends;
- Identify the potential social and economic impacts of the project;
- Assess the socio-economic impacts of the project area using the prescribed impact assessment methodology. Findings of other specialist studies, such as the visual, heritage and human health studies compiled for the project, must be considered where relevant;
- Identify and assess potential cumulative socio-economic impacts resulting from the proposed development in relation to proposed and existing developments in the surrounding area; and
- Recommend practicable mitigation measures to avoid and/or minimise/reduce impacts and enhance benefits. Assess the effectiveness of proposed mitigation measures using the prescribed impact assessment methodology.

The SRK Cape Town environmental team includes a socio-economic specialist who has the expertise and necessary tools to undertake the Socio-economic Specialist Study. This specialist input will be incorporated directly into the EIA Report and a separate specialist report will not be produced.

#### 7.7.5 Review of Radiological Assessment

A Radiological Assessment was commissioned by Eskom prior to commencement of the EIA. In order to meet the independence requirements as stipulated in the EIA Regulations, 2014 an independent review of the Radiological Assessment will be undertaken to inform the EIA process.

The following ToR are proposed for the Independent Review of the Radiological Assessment:

- Review the ToR and the radiation specialist's proposal for the Radiological Assessment;
- Recommend any changes required to the Radiological Assessment ToR to comply with South African legislation, by-laws and international best practice;
- Review relevant aspects of the Radiological Assessment including, as a minimum, the methodology, input data, findings, conclusions and recommendations of the Assessment relating to Public Dose Assessment and Worker Dose Assessment; and

• Identify gaps in reporting and make recommendations to improve reports and processes so that they are aligned with international best practice and national legislation.

The (reviewed) Radiological Assessment will not be reported in detail in the Impact Assessment Phase, but will be a critical input into the Human Health Specialist, to better understand and report any potential impacts associated with exposure to radiation.

#### 7.7.6 Human Health Specialist Study

The following ToR are proposed for the Human Health Specialist Study:

- Compile a baseline assessment based on exposure scenarios prior to development of the TISF;
- Contextualise radiation dose (using data from the Radiological Assessment) in terms of risk for morbidity and mortality using generic numerical factors to convert total radiation dose to cancer risk;
- Identify potential impacts of the project on human health of the communities surrounding the KNPS;
- Assess the impacts of the project on human health in the area using the prescribed impact assessment methodology;
- Identify and assess potential cumulative human health impacts resulting from the proposed development in relation to existing developments at the KNPS;
- Recommend practicable mitigation measures to avoid and/or minimise/reduce impacts and enhance benefits. Assess the effectiveness of proposed mitigation measures using the prescribed impact assessment methodology; and
- Recommend and draft a monitoring campaign to ensure the correct implementation and adequacy of recommenced mitigation and management measures, if applicable.

#### 7.7.7 Heritage Specialist Study

The following ToR are proposed for the Heritage Specialist Study:

- Review previous heritage studies undertaken at Koeberg to determine baseline information available and to determine gaps in information;
- Compile the NID for submission to HWC;
- Identify and describe any heritage resources in the area and their importance in a local, regional and national context;
- Identify potential impacts of the project on heritage resources;
- Assess the impacts of the project on heritage resources in the area using the prescribed impact assessment methodology;
- Identify and assess potential cumulative impacts resulting from the proposed development in relation to proposed and existing developments in the surrounding area;
- Recommend practicable mitigation measures to avoid and/or minimise/reduce impacts and enhance benefits. Assess the effectiveness of proposed mitigation measures using the prescribed impact assessment methodology; and
- Recommend and draft a monitoring campaign to ensure the correct implementation and adequacy of recommenced mitigation and management measures, if applicable.

#### 7.7.8 Visual Specialist Study

The following ToR are proposed for the Visual Specialist Study:

- Determine the character and sensitivity of the visual environment;
- Identify visual resources and key viewing corridors / viewpoints;
- Determine the existing visual character and quality in order to understand the sensitivity of the landscape;
- Identify and determine the magnitude of visual impacts through analysis and synthesis of the following factors:
  - Visual absorption capacity;
  - Visual exposure;
  - Viewing Distance and Visibility;
  - o Landscape Integrity; and
  - Sensitivity of Viewers (visual receptors);
- Assess the impacts of the project on the visual environment and sense of place using the prescribed impact assessment methodology;
- Identify and assess potential cumulative visual impacts resulting from the proposed development in relation to proposed and existing developments in the surrounding area; and
- Recommend practicable mitigation measures to avoid and/or minimise/reduce impacts and enhance benefits. Assess the effectiveness of proposed mitigation measures using the prescribed impact assessment methodology.

The SRK Cape Town environmental team includes a professional landscape architect and visual specialist who has the expertise and necessary tools to undertake the Visual Specialist Study. This specialist input will be incorporated directly into the EIA Report and a separate specialist report will not be produced.

## 7.8 Less Significant Impacts

Certain impacts, while important, are considered likely to be less significant and will be assessed by the EAP, rather than a full specialist study, where required. These include:

- Air Quality Limited emissions (dust) may be generated by construction vehicles and plant during the construction phase of the project. Emissions from the TISF during operation, as well as from vehicles transporting used fuel to the TISF are likely to be limited;
- Noise The number of sensitive receptors in the area is limited; however, construction activities
  will raise noise levels in the area. It is unlikely that noise generated during the operational phase
  will exceed current ambient noise levels;
- Traffic The number of vehicles on the roads around the KNPS will increase marginally during
  the construction phase. However, traffic in the area is modest and it is considered highly unlikely
  that increased traffic volumes will result in increased congestion on the roads; and
- Surface water Although no surface water features occur on the TISF site alternatives, some
  wetlands occur in surrounding areas and may be impacted if run-off from the site is not
  adequately controlled.

## 7.9 Impact Rating Methodology

The **significance** of an impact is defined as a combination of the **consequence** of the impact occurring and the **probability** that the impact will occur.

The criteria used to determine impact consequence are presented in Table 7-2 below.

Table 7-2: Criteria used to determine the consequence of the impact

Rating	Definition of Rating	Score			
A. Extent – the	A. Extent – the area over which the impact will be experienced				
Local	Confined to project or adjacent areas	1			
Regional	Affecting the region (e.g. District Municipality or Province)	2			
(Inter) national	Affecting areas beyond the Province	3			
	he magnitude of the impact in relation to the sensitivity of the receiving environment degree to which the impact may cause irreplaceable loss of resources	t, taking			
Low	Site-specific and wider natural and/or social functions and processes are negligibly altered	1			
Medium	Site-specific and wider natural and/or social functions and processes continue albeit in a modified way	2			
High	Site-specific and wider natural and/or social functions or processes are severely altered	3			
C. Duration – th	ne timeframe over which the impact will be experienced and its reversibility				
Short-term	Up to 2 years	1			
Medium-term	2 to 15 years	2			
Long-term	More than 15 years	3			

The combined score of these three criteria corresponds to a Consequence Rating, as follows:

Table 7-3: Method used to determine the consequence score

Combined Score (A+B+C)	3 – 4	5	6	7	8 – 9
Consequence Rating	Very low	Low	Medium	High	Very high

Once the consequence is derived, the probability of the impact occurring is considered, using the probability classifications presented in Table 7-4 below.

Table 7-4: Probability classification

Probability— the likelihood of the impact occurring			
Improbable	< 40% chance of occurring		
Possible	40% - 70% chance of occurring		
Probable > 70% - 90% chance of occurring			
Definite	> 90% chance of occurring		

The overall **significance** of impacts is determined by considering consequence and probability using the rating system prescribed in Table 7-5 below.

Table 7-5: Impact significance ratings

Probability					
		Improbable	Possible	Probable	Definite
	Very Low	INSIGNIFICANT	INSIGNIFICANT	VERY LOW	VERY LOW
sedneuce	Low	VERY LOW	VERY LOW	LOW	LOW
	Medium	LOW	LOW	MEDIUM	MEDIUM
	High	MEDIUM	MEDIUM	HIGH	HIGH
Cor	Very High	HIGH	HIGH	VERY HIGH	VERY HIGH

Finally the impacts are also considered in terms of their status (positive or negative impact) and the confidence in the ascribed impact significance rating. The prescribed system for considering impacts status and confidence (in assessment) is laid out in Table 7-6 below.

Table 7-6: Impact status and confidence classification

Status of impact		
Indication whether the impact is adverse (negative) or	+ ve (positive – a 'benefit')	
beneficial (positive).	<ul><li>ve (negative – a 'cost')</li></ul>	
Confidence of assessment		
The degree of confidence in predictions based on	Low	
available information, SRK's judgment and/or	Medium	
specialist knowledge.	High	

The impact significance rating should be considered by authorities in their decision-making process based on the implications of ratings ascribed below:

- **Insignificant:** the potential impact is negligible and will not have an influence on the decision regarding the proposed activity.
- **Very Low:** the potential impact is very small and should not have any meaningful influence on the decision regarding the proposed activity.
- Low: the potential impact may not have any meaningful influence on the decision regarding the proposed activity.
- Medium: the potential impact should influence the decision regarding the proposed activity.
- High: the potential impact will affect the decision regarding the proposed activity.
- Very High: The proposed activity should only be approved under special circumstances.

Practicable mitigation and optimisation measures are recommended and impacts are rated in the prescribed way both without and with the assumed effective implementation of mitigation and optimisation measures. Mitigation and optimisation measures are either:

- Essential: measures that must be implemented and are non-negotiable; and
- Best Practice: recommended to comply with best practice, with adoption dependent on the
  proponent's risk profile and commitment to adhere to best practice, and which must be shown to
  have been considered and sound reasons provided by the proponent if not implemented.

## 7.10 Cumulative Impacts

Anthropogenic activities can result in numerous and complex effects on the natural and social environment. While many of these are direct and immediate, the environmental effects of individual activities (or projects) can combine and interact with other activities in time and space to cause incremental or aggregate effects. Effects from disparate activities may accumulate or interact to

cause **additional** effects that may not be apparent when assessing the individual activities one at a time (Canadian Environmental Protection Agency, no date). Cumulative effects can also be defined as the total impact that a series of developments, either present, past or future, will have on the environment within a specific region over a particular period of time (DEAT IEM Guideline 7, Cumulative effects assessment, 2004).

The International Finance Corporation (IFC) states that environmental assessment should include consideration of "... cumulative impacts of existing projects, the proposed project and anticipated future projects." For the purposes of this report, cumulative impacts are defined as 'direct and indirect impacts that act together with current or future potential impacts of other activities or proposed activities in the area/region that affect the same resources and/or receptors'.

To define the level of cumulative impact, it is critical to look beyond the geographical boundaries and environmental impacts of a single development on the environment and consider the area of influence of the specific project as well as other developments currently in or proposed in the area and their understood impacts and area of influence. It may be that impacts experienced as a result of a single development are not considered to be significant, but when considered as part of a cumulative impact assessment, these require mitigation.

Key considerations for the assessment of cumulative impacts as part of the environmental impact assessment are:

- The Cumulative Impact Assessment will need to give consideration to developments that may have contributed to cumulative effects in the past, may be contributing or are anticipated to contribute in the foreseeable future. This needs to be relevant to the timeframe within which impacts are to be experienced as a result of the project itself (i.e. all phases for which the project specific impact assessment is being undertaken). Given that the baseline environment will already be impacted on by the historical and current contributors to the cumulative impact, it is only necessary when undertaking the cumulative impact assessment to place an emphasis on an identified future cumulative baseline environment;
- Cumulative impacts may not be applicable to all aspects, as project related impacts may be
  confined to the project area and not subject to or contributing to impacts in the broader area of
  influence as a whole. For example, if the project area is confined to a water catchment which is
  not anticipated to be impacted on by other developments (past, present or foreseeable future)
  then a cumulative impact assessment need not be considered for this environmental
  aspect/component;
- A cumulative impact assessment will consider a specific area of influence which will be
  determined by the impact itself and the baseline environment in which it is proposed; e.g. where
  one or more projects affect the same ecosystem, the whole area in which the ecosystem is
  found may be considered the area of influence for the cumulative assessment. This will vary
  across project aspects and therefore a single area of influence for the cumulative impact
  assessment cannot be set; and
- The cumulative impact assessment can only be undertaken where information is readily
  available and as such will only be an initial assessment of the likely cumulative impact in terms
  of knowledge available at the time of the assessment. It is critical to understand the information
  sources and limitations that exist.

For the most part, cumulative effects or aspects thereof are too uncertain to be quantifiable, due mainly to a lack of data availability and accuracy. This is particularly true of cumulative effects arising from potential or future projects, the design or details of which may not be finalised or available and the direct and indirect impacts of which have not yet been assessed. Given the limited detail available regarding such future developments, the analysis will be of a more generic nature and

focus on key issues and sensitivities for the project and how these might be influenced by cumulative impacts with other activities.

For cumulative effects analysis to be a useful tool to decision makers and stakeholders, it must be limited to effects that can be meaningfully evaluated, rather than expanded to the point where the resource or receptors are no longer significantly affected or the effects are no longer of interest to stakeholders. To this end, four important aspects require consideration prior to the evaluation of cumulative effects:

- 1. The determination of an appropriate **area of influence**, i.e. spatial and, to a lesser extent, temporal boundaries for evaluation of cumulative effects of the project;
  - The TISF site alternatives are both situated within the existing boundaries of the KNPS <u>SPA</u>, which is located within the Koeberg Nature Reserve and various development exclusion zones. Impacts are likely to be mostly of local extent. The spatial scope of this analysis is generally aligned with the zone of influence of the project and potential projects (if any) in the vicinity that may have impacts overlapping with the proposed project.
- 2. Identification of **Valued Environmental and Social Components** (VECs). VECs are environmental and social attributes that are considered to be important in assessing risks; they may be: physical features, habitats, wildlife populations (e.g. biodiversity), ecosystem services, natural processes (e.g. water and nutrient cycles, microclimate), social conditions (e.g. health, economics) or cultural aspects (e.g. traditional spiritual ceremonies);

The project is located within the KNPS <u>SPA</u>, within portions of the site identified for development. Access to both site alternatives is limited due to strict security requirements. Although previously disturbed, natural vegetation has re-established on both site alternatives including some SCC. As such the VECs considered in the cumulative assessment are as follows:

- Koeberg Nature Reserve.
- 3. External natural and social stressors, e.g. flooding, wildfires, etc.;

Natural stressors are limited and may include fynbos fires. Development exclusions zones surrounding the KNPS limit social stressors and none have been identified for the TISF project.

- 4. The evaluation of relevant projects for consideration in the cumulative effects analysis:
  - Cumulative Impacts of Existing Activities: It is reasonably straightforward to identify significant past and present projects and activities that may interact with the project to produce cumulative impacts, and in many respects, these are taken into account in the descriptions of the biophysical and socio-economic baseline; and
  - Potential Cumulative Impacts of Future Activities: Relevant future projects that will be included in the assessment are defined as those that are 'reasonably foreseeable', i.e. those that have a high probability of implementation in the foreseeable future; speculation is not sufficient reason for inclusion. Such projects may include those for which EAs have already been granted, that are currently subject to EA applications or that have been identified in an IDP of the relevant local municipality.

Projects that fall in the above categories and that may result in cumulative impacts with the proposed development and therefore have been considered in the cumulative impact analysis are listed below:

#### • Past and existing projects / activities:

The development of the KNPS in the 1980s in what was at the time a relatively remote location, and the subsequent establishment of associated facilities and infrastructure, as well as declaration of the Koeberg Nature Reserve.

The establishment of the Duynefontein residential area, south of the KNPS, largely inhabited by employees of the KNPS.

The construction of the new Simulator Building adjacent to the Edusec Building as part of the environmental authorisation and rezoning for the Koeberg Training Centre Complex and Administrative Centre.

#### • Future projects / activities:

Numerous developments are proposed/anticipated within the Koeberg Nature Reserve and surrounds including those identified in Table 7-7 and Figure 7-1.

Table 7-7: Proposed developments within Koeberg Nature Reserve and their status

Project	Status	Reference Number
Koeberg Training Centre Complex and Administrative Centre	EA obtained	DEA Ref no: 12/12/20/997
KBG Ankerlig 132 kV powerline	EA obtained	NEAS Ref no: DEA/EIA.0000723/2011 DEA Ref no: 14/12/16/3/3/1/329
Ankerlig 400kV powerline	EA obtained	DEA Ref no: 14/12/16/3/3/1/1182
Weskusfleur substation	EIA in progress	DEA Ref no: 14/12/16/3/3/2/508
New nuclear facility (Nuclear 1)	EIA in progress	DEA Ref no: 12/12/20/944
Koeberg Diesel Storage project (on-site Koeberg and Bulk Stores Extension)	BA process in 2016	Reference number still to be issued
Potable water storage tanks (on-site Koeberg)	BA process in 2016	Reference number still to be issued
New Koeberg Insulator Pollution Testing Station (KIPTS) and decommissioning of the existing KIPTS	BA process in 2016	Reference number still to be issued
Car park area extension project	BA process in 2016	Reference number still to be issued

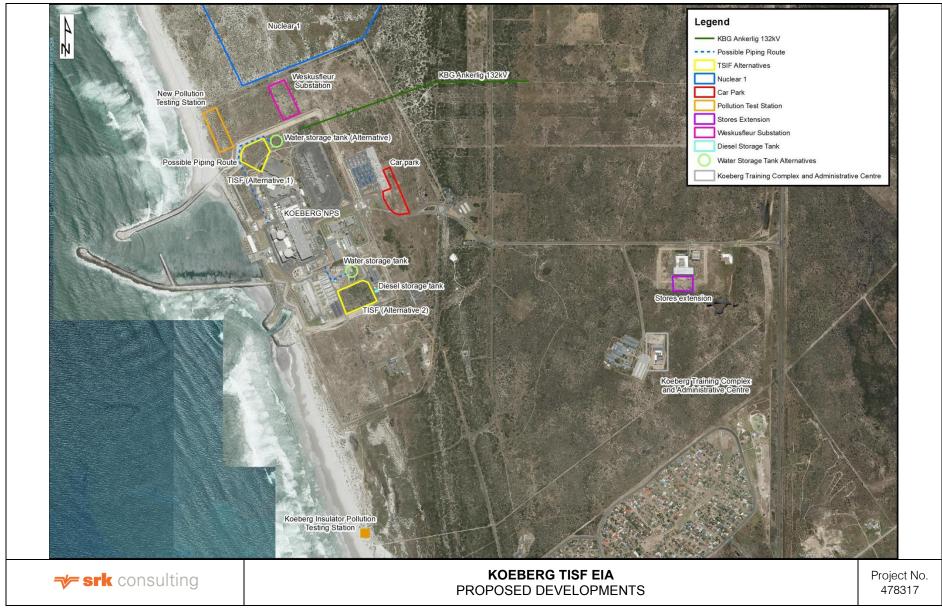


Figure 7-1: Approved and proposed developments within the Koeberg Nature Reserve Source: Eskom. 2016

## 8 Conclusions and Recommendations

#### 8.1 Conclusions

In order to apply for EA for the TISF, a Scoping Study is being undertaken in terms of the EIA Regulations, 2014, promulgated in terms of NEMA. The objectives of the study are to:

- Identify stakeholders and inform them of the proposed activity and the S&EIR process;
- Provide stakeholders with the opportunity to participate effectively in the process and identify any issues and concerns associated with the proposed activity;
- Identify areas of likely impact and environmental issues that will require further investigation during the Impact Assessment Phase; and
- Develop ToR for specialist studies to be undertaken.

The conclusions of the Scoping Study are as follows:

Eskom proposes to construct a TISF for the storage of dry casks at the KNPS to accommodate used nuclear fuel from the reactors for the operational life of the power station, thereby ensuring the continued operation of the KNPS.

Used fuel assemblies from the nuclear reactors are stored in SFPs within the KNPS. The SFPs serving Reactor Unit 1 and Reactor Unit 2 will reach capacity by March 2018 and September 2018, respectively. As the current SFPs are reaching their storage capacity, additional space will be created by transferring used fuel from the SFPs into dry storage casks as part of Eskom's Koeberg Spent Fuel Storage Project to cater for the KNPS' needs until 2025.

The TISF will be constructed on a section of vacant land within the KNPS SPA. The TISF will comprise of concrete pad(s) within a site footprint of approximately 12 800 m². The TISF will be constructed to accommodate 160 dry storage casks, though the dry storage casks will be placed on the pad in a modular manner. This strategy assumes that the CISF will not be commissioned earlier than 2025. The dry storage casks will be either metal or concrete casks or concrete assemblies, and will be approximately 6 m in height. A secure perimeter fence of approximately 2.3 m in height will be erected around the TISF site with controlled pedestrian and service gates. The TISF will meet the requirements of the NNR and will be built and managed according to the IAEA safety standards.

The dry storage casks will accommodate used fuel assemblies removed from the reactor units and cooled in the SFPs. The dry storage system is a passive system which is not reliant on human action or active components to maintain a suitable safety level. Heat generated from used fuel radioactive decay will dissipate through the external surface of the dry casks.

Various site alternatives were considered during the early planning stages of the project and two feasible and reasonable alternatives were identified for assessment in the EIA:

- Alternative 1 (the preferred alternative): located adjacent to the CBS on the northern boundary of the KNPS; and
- Alternative 2: located along the southern boundary of the KNPS next to the Ekhaya Building.

The following key environmental issues associated with the TISF and storage of used fuel have been identified through the Scoping process:

 Geohydrology – potential impact on groundwater and possible need, although unlikely, for dewatering during construction;

- **Terrestrial ecology** potential loss of indigenous vegetation and sensitive or protected species and habitats:
- Socio-economic potential benefit of limited investment and temporary employment during the
  construction phase of the project, and improved trade balance and stability of energy supply
  during operations;
- Radiation Human health potential impact of radiation from the dry storage casks on the health of Eskom employees and surrounding residents;
- **Heritage** potential impacts on archaeological and paleontological resources during the construction phase; and
- Visual aspects potential deterioration of sense of place and aesthetic value.

Potential risks associated with emergency situations during the operation of the TISF will be evaluated through a PSA commissioned by Eskom, to inform their application to the NNR.

#### 8.2 Recommendations

Based on the findings of the Scoping Study, the following specialist studies are proposed for the Impact Assessment Phase:

- Geohydrology Specialist Study;
- Terrestrial Ecology Specialist Study;
- Socio-Economic Specialist Study;
- Review of Radiation Assessment;
- Human Health Specialist Study;
- Heritage Specialist Study; and
- · Visual Specialist Study.

#### Prepared by

SRK Consulting - Certified Electronic Signature



#### **Sharon Jones**

Principal Environmental Consultant

#### Reviewed by



#### Chris Dalgliesh

#### Partner

All data used as source material plus the text, tables, figures, and attachments of this document have been reviewed and prepared in accordance with generally accepted professional environmental practices.

## 9 References

ACO Associates cc, 2015. Heritage Impact Assessment – A Proposed Transient Interim Storage Facility at Cape Farm 1552 (Koeberg), Western Cape Province.

Author unknown, 2009. Shan Ding Lu. Available online: http://www.shandinglu.org, accessed in August 2012.

Boschkloof, 2012. Cederberg Farm Experience. Available online: http://www.boschkloof.com/cederberg-guest-farm-citrusdal.htm, accessed in October 2012.

BusinessDay, 2013. Article: Hisense factory in Atlantis 'to create 1,200 jobs' – June 7 2013. Available online: http://www.bdlive.co.za/business/trade/2013/06/07/hisense-factory-in-atlantis-to-create-1200-jobs, accessed in July 2015

BusinessDay, 2015. Article: Tariff refusal will bring economic pain, says Eskom – June 18 2015. Available online: http://www.bdlive.co.za/business/energy/2015/06/18/tariff-refusal-will-bring-economic-pain-says-eskom, accessed in July 2015.

CNDV, 2006. Strategic Initiative to Introduce Commercial Land Based Wind Energy Development to the Western Cape: Towards a Regional Methodology for Wind Energy Site Selection. Reports 1 - 6.

CoCT, 2007. City of Cape Town Planning District Profiles. Available online: https://www.capetown.gov.za/en/stats/CityReports/Documents/PD%20Report.pdf, accessed in July 2015.

CoCT, 2007a. City of Cape Town Planning District Profiles: District B. Available online: https://www.capetown.gov.za/en/stats/CityReports/Documents/Other%20City%20Reports/Planning\_ District Profiles App B 932007132253 359.pdf, accessed in July 2015.

CoCT, 2009. Cape Town's Economic Environment. Available online: http://www.capetown.gov.za/en/ehd/Documents/EHDEcon.pdf, accessed in May 2011.

CoCT, 2011. City of Cape Town Council Overview. Available online: http://www.capetown.gov.za/en/stats/CityReports/Documents/CoCT\_Councillor\_handbook\_v3.pdf, accessed in July 2015.

CoCT, 2012. Subcouncil 01 Subcouncil Description. Available online: https://www.capetown.gov.za/en/subcouncils/yoursubcouncil/pages/SubCouncilDescription.aspx?Ite mID=1&WebName=SC1, accessed in July 2015.

CoCT, 2013. Cape Town Quarterly Economic Report Q2 2013 Final. Available online: https://www.capetown.gov.za/en/ehd/Documents/Cape%20Town%20Quarterly%20Report%20Q2% 202013%20Final.pdf, accessed in July 2015.

CoCT, 2013a. Cape Town: 2011 Census Suburbs. Available online: https://www.capetown.gov.za/en/stats/2011CensusSuburbs/2011\_Census\_Suburbs\_Map.pdf, accessed in July 2015.

CoCT, 2015. Western Cape Government Provincial Treasury Socio-economic Profile City of Cape Town.

Available online:

https://www.westerncape.gov.za/assets/departments/treasury/Documents/Socio-economic-profiles/2014/dc00 city of cape town seplg 2014 f.pdf, accessed in July 2015.

CoCT, 2015. Five-year Integrated Development Plan 2012-2017. 2015/2016 Review and Amendments.

Crawford, D., 1994. Using remotely sensed data in landscape visual quality assessment, Landscape and Urban Planning. 30: 17-81.

DEA, 2010. Companion to the EIA Regulations 2010, Integrated Environmental Management Guideline Series 5, Department of Environmental Affairs. Department of Environmental Affairs and Tourism (DEAT), Pretoria.

DEA&DP. 2013. EIA Guideline and Information Document Series. Western Cape Department of Environmental Affairs and Development Planning (DEA&DP) Available online: http://www.capegateway.gov.za/eadp, accessed June 2013.

DEAT, 2004. Overview of Integrated Environmental Management, Integrated Environmental Management, Information Series. Department of Environmental Affairs and Tourism (DEAT), Pretoria.

DOE, No date. Basic Electricity Overview. Available online: http://www.energy.gov.za/files/electricity\_frame.html, accessed in July 2015.

Eskom, date unknown. Generating Electricity at a Nuclear Power Station. Fact Sheet.

Eskom, date unknown. Nuclear Energy: Koeberg Power Station. COP 17 Fact Sheet.

Eskom, date unknown. Nuclear Waste Fact Sheet.

Eskom, 2015a. Pre-feasibility Study on TISF Locations.

Eskom, 2015b. Site Safety Report for Duynefontein, Section 5.4, Demography: Koeberg

Eskom Nuclear Engineering, 2015. Pre-Feasibility Study on TISF Locations. Unique Identifier: 331-547.

Eskom Nuclear Project Management. 2015. Work Instruction: Proposed Transient Interim Storage Facility for Used Nuclear Fuel at Koeberg Power Station. Unique Identifier: 239-QWR-014.

Fin24, 2015. Article: SA's unemployment rate hits 12-year high - May 26 2015. Available online: http://www.fin24.com/Economy/SAs-unemployment-rate-hits-12-year-high-20150526, accessed in July 2015.

IAEA, 2015. International Atomic Energy Agency. Available Online: <a href="https://www.iaea.org/About/index.html">https://www.iaea.org/About/index.html</a>, accessed on 19 August 2015.

IAEA, 1996 (as amended in 2003). Regulations for the Safe Transport of Radioactive Material. 2009 Edition.

Investec (2012). Macro-economic forecasts: South Africa continues to become wealthier. 2nd Quarter 2012. Available online: <a href="http://www.investec.co.za/content/dam/investec/investec-international/documents/EconomicReportsPDFs/2012/Macro%20Economic%20Forecasts%20Q2%2">http://www.investec.co.za/content/dam/investec/investec-international/documents/EconomicReportsPDFs/2012/Macro%20Economic%20Forecasts%20Q2%2</a> 02012.pdf, accessed in May 2013.

IOL, 2013. Article: Atlantis en route to resurrection – March 15 2015. Available online: http://www.iol.co.za/news/south-africa/western-cape/atlantis-en-route-to-resurrection-1.1486811#.Vboa6fmqqkq, accessed in July 2015.

Koeberg Nature Reserve Management Authority, 2015. Koeberg Nature Reserve Management Plan. Revision 0, April 2015.

Lewis F., Mitchell D. and Oelofse C. 2007. Community Impact Assessment for the Proposed Dube Transport.

Lynch, K., 1992. Good City Form, The MIT Press, London.

National Nuclear Regulator (NNR). Emergency preparedness and response requirements for Nuclear installations (RD-014).

Night Jar Travel (Pty) Ltd, 2012) Night Jar Travel South Africa. Available online: http://www.nightjartravel.com, accessed in August 2012.

Oberholzer, B., 2005. Guideline for involving visual & aesthetic specialists in EIA processes: Edition 1. CSIR Report No ENV-S-C 2005 053 F. Republic of South Africa, Provincial Government of the Western Cape, Department of Environmental Affairs & Development Planning, Cape Town.

PERO, 2014. Western Cape Government Provincial Treasury Provincial Economic Review and Outlook.

Available online:

https://www.westerncape.gov.za/assets/departments/treasury/Documents/2014\_pero\_printers\_2\_oct ober\_2014\_version\_4\_final\_with\_amendm.pdf, accessed in July 2015.

SAInfo, 2009. Article: South Africa: open for business. Available online: http://www.southafrica.info/business/trade/import/open.htm, accessed in July 2015.

SANBI, 2010. BGIS Mapping Tool. South African National Biodiversity Insitute (SANBI). Available online: http://www.bgis.sanbi.org, accessed in July 2015.

SARB, 2010. Annual Economic Report, 2010. Available online: http://www.reservebank.co.za/aer, accessed in December 2010.

SARB, 2012. Annual Economic Report, 2012. Available online: http://www.reservebank.co.za /aer, accessed in May 2013.

SARB, 2014. South African Reserve Bank Annual Economic Report 2013. Available online: https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/5831/AER2013.pdf, accessed in July 2015.

SARB, 2014. South African Reserve Statement of the Monetary Policy Committee. Available online:

https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/6729/MPC%20stateme nt%20May%202015.pdf, accessed in July 2015.

Scientific Aquatic Services, 2015. Terrestrial Ecological Assessment as part of the Environmental Assessment and Authorisation process for the Proposed Construction of the Transient Interim Storage Facility at Koeberg Nuclear Power Station, Western Cape Province.

SRK Consulting, 2012. Geohydrology, Meteorology, Oceanography and Wetland Ecology Monitoring at the Duynefontein Site: Annual Report for February 2011 to March 2012.

SRK Consulting, 2013. Geohydrology, Meteorology, Oceanography and Wetland Ecology Monitoring at the Duynefontein Site: Annual Report for February 2012 to March 2013.

SRK Consulting, 2015. Specialist Geohydrology Baseline Assessment for the Proposed Transient Interim Storage Facility at Koeberg.

StatsSa, 2010. Statistical Release: Quarterly Labour Force Survey Quarter 3, 2010. Available online: http://www.statssa.gov.za/publications/P0211/P02113rdQuarter2010.pdf, accessed in July 2015.

StatsSA, 2014. Statistical Release; Gross Domestic Product. Available online: http://beta2.statssa.gov.za/publications/P0441/P04413rdQuarter2014.pdf, accessed in July 2015.

StatsSA, 2014a. Statistical Release; Electricity generated and available for distribution (Preliminary)

December 2014. Available online:

http://www.statssa.gov.za/publications/P4141/P4141December2014.pdf, accessed in July 2015.

StatsSA, 2014b. Statistical Release; Quarterly Labour Force Survey Quarter 1, 2015. Available online: http://www.statssa.gov.za/publications/P0211/P02111stQuarter2015.pdf, accessed in July 2015.

StatsSA, 2014c. Statistical Release; Mid-year population estimates 2014. Available online: http://www.statssa.gov.za/publications/P0302/P03022014.pdf, accessed in July 2015.

Trading Economics, 2015. South Africa Unemployment Rate 2000-2015. Available online: http://www.tradingeconomics.com/south-africa/unemployment-rate, accessed in July 2015

UNDP, 2015. African Economic Outlook: South Africa 2015. Available online: http://www.africaneconomicoutlook.org/fileadmin/uploads/aeo/2015/CN\_data/CN\_Long\_EN/South\_A frica\_GB\_2015.pdf, accessed in July 2015

WESGRO, 2011. Labour Skills in the Western Cape – the Western Cape Investment and Trade Promotion Agency, South Africa. Available online at: http://www.wesgro.co.za /publications/files/useruploads/ user\_anon/files/2011%20Labour% 20Skills.pdf, accessed in: July 2011.

WNA, 2015. Nuclear Power in South Africa. Available online: http://www.world-nuclear.org/info/Country-Profiles/Countries-O-S/South-Africa/, accessed in July 2015.

Young, G., 2000. First Draft Gamsberg Zinc Project: Specialist Study Report: Visual Environment. Newtown Landscape Architects, 10 March 2000.

## **Appendices**

# Appendix A: EAP Curriculum Vitae



### **Chris Dalgliesh Principal Consultant**



**Profession Environmental Practitioner** 

**Education** MPhil (EnvSci) with Distinction, Cape Town, 1994

BBusSc (Hons), Cape Town, 1985

Registrations/ Cert Envir Assessment Practitioner (South Africa) **Affiliations** 

(10/2002)

Member International Association of Impact

Assessment

#### **Specialisation**

Environmental management consulting.

#### **Expertise**

Chris Dalgliesh has been involved in environmental projects for the past 23 years. His expertise includes:

- ESIA, EMPR, environmental planning and management and environmental management system projects;
- socio-economic impact assessments;
- environmental management systems (ISO 14001);
- waste management;
- environmental permitting;
- environmental and social due diligence;
- stakeholder engagement;
- strategic environment assessments and management plans;
- environmental review and reporting;
- training;
- state of environment reporting;
- environmental management frameworks;
- site safety reports for the nuclear industry;
- natural resource management.

_	
⊢mn	lovment

2000 – Present 1999 – 2000 1996 – 1998 1994 – 1996 1991 – 1993	SRK Consulting (Pty) Ltd, Partner and Principal Environmental Consultant Arcus Gibb (Pty) Ltd, Associate, Cape Town, South Africa African Environmental Solutions (Pty) Ltd, Senior Environmental Consultant Environmental Evaluation Unit, Environmental Consultant, UCT Novello Music Publishers, Marketing Manager, London, UK
1988 – 1990 1986 – 1988	JR Phillips, Product Manager, Wokingham, UK Unilever, Trade and Assistant Brand Manager, Durban, South Africa
Publications	I have been interviewed and quoted in numerous environmental and sustainability articles published in the press and sector specific journals, including <i>Engineering News, Mining News, Business Report and Cape Times,</i> and am a frequent guest lecturer.
Languages	English – read, write, speak Afrikaans – read, write, speak

## Chris Dalgliesh Principal Consultant

## Environmental (and Social) Impact Assessment (ESIA) and Environmental Management Programmes (EMP)

- Tronox Namakwa Sands, EIA for new slimes dam, Brand se Baai, Western Cape Province, South Africa, 2015 ongoing, R900,000
- The River Club, EIA for redevelopment of the property, Cape Town, Western Cape Province, South Africa, 2015 ongoing, R500,000
- SIMO Petroleum Ltd, ESIA for fuel supply project, Guinea, 2015, US\$200,000
- SIMO Petroleum Ltd, EIA for fuel supply project, Liberia, 2015, US\$200,000
- Eskom, ElA for Transient Interim Storage Facility, Western Cape, South Africa, 2015 ongoing, R900,000
- Falcon Oil & Gas, Environment Management Programme Report (EMPr) update and engagement,
   Western, Northern and Eastern Cape, South Africa, 2014 2015, US\$90,000
- Department of Environmental Affairs (DEA), Waste Management Licence applications and Basic Assessment for 20 waste facilities, Western Cape, South Africa, 2014 2015, R2,600,000
- Sable Mining / West Africa Explorations (WAE), Cumulative Impact Assessment (CIA) for WAE's Nimba iron ore mine, Guinea, May 2014 – on hold, US\$90,000
- De Beers Buffalo Camp, Basic Assessment and EMPr Amendment, Kimberley, Northern Cape, 2014, R260,000
- EFG Engineers, EIA for Hermanus bypass road, Western Cape Province, South Africa, 2014 ongoing, R800,000
- SRK Turkey, CIA of Copler gold mine, Turkey, 2014, US\$30,000
- Sable Mining Africa Ltd, ESIA for railway line and port expansion, Liberia, 2014, US\$480,000
- Tronox Namakwa Sands, EIA for abalone farm, Brand se Baai, Western Cape Province, South Africa, 2014 – ongoing, R1,050,000
- Matzikamma Municipality, EIAs for three abalone farms, Doringbaai, Western Cape Province, South Africa, 2014 – ongoing, R1,100,000
- De Beers, EMPr amendment for fine residue pond, Kimberley, South Africa, 2013, R120,000
- AES, ESIA of landfill, Soyo, Angola, 2013, US\$70,000
- PetroSA, EIA of offshore gasfield, Southern Cape, South Africa, 2013 ongoing, R500,000
- EnergieBedrijven Suriname, ESIA for new power plant, Suriname, 2013, US\$135,000
- AES, ESIA of Thermal Desorption Unit, Soyo, Angola, 2013, US\$65,000
- Staatsolie Maatschappij Suriname, Rapid EIA of power plant expansion, Suriname, September 2012 2014, US\$100,000
- BP, ESIA of Blocks 18 & 31 Drilling and Seismic Survey, Angola, 2012, US\$40,000
- Frontier, EIA for desalination plant and water pipeline, Abraham Villiers Bay, Northern Cape, South Africa, August 2012 ongoing, R1,250,000
- Tronox Namakwa Sands, EIA /EMPr for two mining application areas, Namakwaland, Western Cape Province, South Africa, 2012 ongoing, R1,250,000
- Airports Company South Africa, EIA of realignment of runway, Cape Town International Airport, Western Cape, South Africa, R2,675,000

## Chris Dalgliesh Principal Consultant

- Grindrod Mauritius, EIA of Matola Coal Terminal Phase 4 Expansion, Maputo, Mozambique, 2012 2013, US\$425,000
- Maersk, ESIA of Block 16 Seismic Survey, Angola, 2010 2011, US\$25,000
- Staatsolie Maatschappij Suriname, EIA for diesel, gasoline and LGP pipelines, Suriname, October 2011 2013, US\$120,000
- Premier Fishing, EIA for re-establishment of fishmeal plant, Saldanha Bay, South Africa, May 2011 2015, R1,200,000
- Eni Angola BV, ESIA of development of Block 15/06 West Hub oil fields, Angola, 2011 2013, US\$110.000
- Falcon Oil & Gas, EMPr, Western, Northern and Eastern Cape, South Africa, 2010 2011, US\$100,000
- Great Western Minerals Group, EIA and EMPr of rare earth mine, Vanrhynsdorp, Western Cape, South Africa, 2010 2012, R1,760,000
- Vale, ESIA of phosphate mine, Nampula Province, Mozambique, 2010 2013, US\$630,000
- Sonangol Lda, EIA (x6) of onshore hydrocarbon facilities, Luanda, Malange and Lubango, Angola, March
   November 2010, US\$280,000
- Empresa Moçambicana de hidrocarbonetos and Buzi Hydrocarbons Pty Ltd, ESIA for seismic surveys and exploration drilling in Buzi Block, Sofala Province, Mozambique, 2009 2010, US\$200,000
- Staatsolie, ESIA of refinery expansion, Paramaribo, South America, 2009 2010, US\$400,000
- Sasol Technology, EIA for proposed new gas pipeline from Ressano Garcia to Moamba, Mozambique, Moamba, Mozambique, 2009 2010, R1,000,000
- Anglo American, State of Environment Report, Strategic Environment Assessment, and ESIA of Gamsberg zinc mine, Aggeneys, South Africa, 2008 – 2010, R13,000,000
- CIC Energy, Environmental screening and fatal flaw assessment of Trans Kalahari Railroad and port, Botswana and Namibia, 2008 present, R1,300,000
- BHP Billiton, ESIA of Corantijn River dredging, Suriname, 2007 2008, US\$750,000
- BHP Billiton, ESIA of Bakhuis transport project, Suriname, 2006 2008, US\$1,600,000
- Altona Developments, EIA of mixed development, Worcester, Western Cape Province, South Africa, 2006

   2010, R750,000
- BHP Billiton, ESIA of Bakhuis bauxite mine, Suriname, 2005 2008, US\$3,200,000
- Levendal Developments (Pty) Ltd, EIA of mixed development, Suider-Paarl, Western Cape Province, South Africa, 2005 2008, R450,000
- Bevcan, Angola, EIA of canning facility, Viana, Angola, 2005 -2010, US\$75,000
- Chevron Texaco, EIA of landifll, Cabinda, Angola, 2004 2005, US\$90,000
- Attpower Developments (Pty) Ltd, EIA of mixed coastal development, Mossel Bay, Western Cape Province, South Africa, 2004, R600,000
- Intels Services Luanda, EIA of landifll, Cacuaco, Angola, 2004, US\$65,000
- Kwezi V3, EIA of waste water treatment works, Gansbaai, Western Cape Province, South Africa, 2003 2005, R350,000
- City of Cape Town, EIA of Fisantekraal waste water treatment works, Cape Town, Western Cape Province, South Africa, 2003 – 2004, R450,000

## Chris Dalgliesh Principal Consultant

- St Francis Bay Municipality, EIA of beach remediation, St. Francis Bay, Eastern Cape Province, South Africa, 2002 2003, R300,000
- City Of Cape Town, Environmental Impact Control Report of Vissershok North landfill, Western Cape Province, South Africa, 2001 2004, R175,000
- NDC, EMPr for NDC diamond mine, Vredendal district, Western Cape Province, South Africa, 2001 2003, R800,000
- Coega Development Corporation, EIA for rezoning, Eastern Cape Province, South Africa, 1999, R85,000
- BHP Billiton, EIA (Scoping) of Alusaf Hillside smelter, Richards Bay, KwaZulu-Natal Province, South Africa, 1999, R150,000
- Gencor, EIA of zinc refinery and phosphoric acid plant, Port Elizabeth, Eastern Cape Province, South Africa, 1995 – 1998, R800,000
- Duferco, EIA of steel rolling mini-mill, Saldanha, Western Cape Province, South Africa, 1997, R90,000
- Hoechst, EIA of polymer extension, Durban, KwaZulu-Natal Province, South Africa, 1993 1994, R280,000

#### **Environmental Planning and Natural Resource Management**

- Tronox Namakwa Sands, Development of Closure Commitments and Rehabilitation Monitoring Plan Namakwaland, Western Cape Province, South Africa, 2015 – ongoing, R600,000
- West Coast District Municipality, Integrated Coastal Management Plan, West Coast, South Africa, 2012 2013, R700,000
- City of Cape Town, Environmental Management Framework and control zones, Cape Town, Western Cape Province, South Africa, 2008 – 2009, R600,000
- Eskom, Ecological Reports, Koeberg, Bantamsklip and Thyspunt, South Africa, 2008 present, R900,000
- City of Cape Town, Environmental Management Framework and control zones, Cape Town, Western Cape Province, South Africa, 2008, R500,000
- Knysna Municipality, State of Environmental Report, Western Cape Province, South Africa, 2004 2005, R130,000
- Western Cape State of Environmental Report, Environmental report, 2004 2005, R1,400,000

#### **Environmental and Social Review and Due Diligence**

- BNP Paribas, Environmental and Social Due Diligence of Elandsfontein mine, Langebaan, South Africa, 2015, R60,000
- Tronox Namakwa Sands, Water Use Licence Audit(s), Namakwaland, Western Cape Province, South Africa, 2015 and 2014, R175,000 (x2)
- Tronox Namakwa Sands, EMPr Performance Assessment, Namakwaland, Western Cape Province, South Africa, 2014, R175,000
- Deutsche Bank, Environmental and Social Due Diligence and Annual Review of Lauca Hydropower Dam, Angola, 2014 – 2018, €300 000
- West Africa Exploration Ltd, Environment and social gap analysis of Nimba iron ore mine, Guinea, 2014, U\$\$80,000
- HSBC, Environmental and Social Due Diligence and Annual Review, Cambambe Hydropower Dam, Angola, 2013 – 2017, €255,000

## Chris Dalgliesh Principal Consultant

• Tronox Namakwa Sands, EMPr Performance Assessment, Namakwaland, Western Cape Province, South Africa, 2012 – 2013, R150,000

- Biovac, Environmental due diligence audit of pharmaceutical plant, Cape Town, Western Cape Province, South Africa, 2012, R100,000
- SRK UK, Environmental Due Diligence of phosphate mine, Brazil, 2010, US\$15,000
- SRK Russia, Environmental Due Diligence of Rossing South uranium mine, Namibia, 2009, US\$12,000
- SonaGas, EIA external review of LNG plant EIA, Soyo, Angola, 2006, US\$50,000
- Confidential, Environmental due diligence audit, Cape Town, Western Cape Province, South Africa, 2004, R80,000
- Netherlands Commission for EIA, External EIA review of Mavoco hazardous landfill EIA, Maputo, Mozambique, 2002, R30,000

#### **Management Plans**

- West Africa Exploration Ltd, Stakeholder Engagement Plan, Guinea, 2014, US\$15,000
- West Africa Exploration Ltd, Biodiversity Action Plan, Guinea, 2014, US\$20,000
- Tronox Namakwa Sands, Integrated Water and Waste Management Plan for Namakwa Sands mine, Namakwaland, Western Cape Province, South Africa, 2013 – 2014, R125,000
- Tronox Namakwa Sands, Integrated Water and Waste Management Plan for Namakwa Sands Smelter, Saldanha Bay, Western Cape Province, South Africa, 2013, R110,000
- BHP Billiton, Conceptual Closure and Rehabilitation Plan, Suriname, 2007 2013, US\$210,000
- Namakwa Sands, Closure plan, Namakwaland, Northern Cape Province, South Africa, 2003, R170,000



# **Sharon Jones Principal Consultant**



**Profession** Environmental Scientist

**Education** MPhil (Environmental Management), with distinction,

University of Stellenbosch, 2007

BSc (Hons), (Environmental and Geographical Science),

University of Cape Town, 1997

BSc, University of Cape Town, 1996

Registrations/ Pr Sci Nat (South Africa) (400122/05)
Affiliations Cortified Environmental Accomment

Certified Environmental Assessment Practitioner (CEAPSA) by EAPSA Interim Certification Board

Member, IAIA

#### **Specialisation**

Environmental management consulting.

#### **Expertise**

Sharon Jones has been involved in environmental management projects for the past 18 years. Her expertise includes:

- a number EIA's undertaken for a variety of activities including mining, airport and port development;
- compilation of Environmental Management Frameworks;
- environmental and social due diligence and gap analysis studies
- compliance audits against lender requirements (IFC, World bank);
- compilation of construction and operational phase EMPs for a range of projects;
- auditing compliance with EMPs on a number of sites.

#### **Employment**

2005 - present 2001 - 2005 1998 - 2001 SRK Consulting SA (Pty) Ltd, Principal Environmental Consultant, Ecosense cc, Environmental Scientist, Stellenbosch Planning Partners, Environmental Consultant, Cape Town

#### **Publications**

I have been interviewed and quoted in numerous environmental and sustainability articles published in the press and sector specific journals including:

- Localised environmental management. Urban Green File. August 2012, 26-31
- Environmental Management Framework for Winelands. *Environmental Management*. Jan/Feb 2012, 6-7
- Port Expansions: No Short Cuts. Export & Import SA. September 2013, p. 26
- No quick fix for port projects. Civil Engineering Contractor. November 2013, p.8.
- Happy Marriage between Civil and Environmental Engineering. Civil Engineering. August 2014, 58-59.

#### Languages

English – read, write, speak Afrikaans– read, write, speak

## Sharon Jones Principal Consultant

January 2016

## Environmental and Social Impact Assessment (EIA or ESIA) and Environmental Management Programmes (EMP)

- Transnet Port Terminals, Basic Assessment for amendments to the Atmospheric Emissions Licence for the iron ore terminal, Port of Saldanha, South Africa, 2016, R 205 000
- Eskom, Basic Assessment for the construction of a powerline between the existing Bon Chretien substation in Ceres and the new Merino substation, South Africa, 2016, R 400 000
- Eskom, EIA for proposed Transient Interim Used Fuel Storage Facility, Koeberg Nuclear Power Station, South Africa, 2015 ongoing, R 1, 000 000
- Matzikama Municipality, EIA for proposed aquaculture farms at Doringbaai, South Africa, 2015, R2,000,000
- Nadeson Consulting Service, Basic Assessment for stormwater infrastructure upgrades, Middelpos Saldanha Bay, 2015, R290,000
- Tronox Mineral Sands (Pty) Ltd, Basic Assessment for amendments to the East OFS Project, Brand-se-Baai, 2014 - ongoing, R1,000,000
- Airports Company of South Africa, EIA and EMP, Cape Town International Airport, Cape Town, 2012 2015, R2,750,000
- Frontier Rare Earths SA (Pty) Ltd, Site Screening and Fatal Flaw Assessment, EIA, EMP and Coastal Water Discharge Permit, Abraham Villiers Bay, Northern Cape, 2012 2015, R1,400,000
- Prestedge Retief Dresner Wijnberg on behalf of Transnet, Basic Assessment and EMP, General Maintenance Quay, Port of Saldanha, 2012 – 2015, R290,000
- Hatch on behalf of Grindrod Terminals, Environmental Scoping Study, ESIA and EMP, Matola Port, Maputo, Mozambique, 2012, US\$420,000
- Vale, Environmental Scoping Study, EIA and EMP, Nampula Province, Mozambique, 2010 2012, US\$800,000
- Overstrand Municipality, Basic Environmental Assessment and Water Use Licence Application, Hermanus, Western Cape, 2009 2011, R350,000
- Staatsolie (State Oil Company), Suriname, Rapid Environmental Assessment, Suriname, South America, 2009, US \$45,000
- Transnet Capital Projects, Basic Environmental Assessment, Saldanha Bay, 2007 2008, R800,000
- Worcester Land Trust, EIA and EMP for Worcester Hills commercial development, Worcester, 2006 2009, R450,000
- Worcester Land Trust, EIA and EMP for Worcester Island mixed use development, Worcester, 2006 2008, R150,000
- Transnet Capital Projects, EIA for upgrade to Ben Schoeman Dock , Port of Cape Town, 2006 2007, R1,500,000
- Transnet Capital Projects, ElAs for various upgrades to the bulk terminal and the desalination plant, Port of Saldanha, 2005 – 2010, R22,000,000
- NV BHP Billiton Maatschappij Suriname, ESIA, Suriname, South America, 2005 2009, US\$160,000
- Breede River Winelands Municipality, EIA for regional landfill, Breede River Winelands, 2001 2007, R750,000

# Sharon Jones Principal Consultant

#### **Strategic Environmental Planning**

• Cape Winelands District Municipality, Environmental Management Framework, Cape Winelands District, Western Cape, 2010 – 2012, R1,300,000

#### **Environmental Due Diligence**

- Deutsche Bank, Environmental and Social Due Diligence and Annual Reviews, Lauca Dam, Angola, 2014
   2018, € 300,000
- HSBC Bank, Environmental and Social Due Diligence and Annual Reviews, Cambambe Dam, Angola, 2013 – 2017, € 254,000
- Comide SPRL, Gap Analysis of EMP for Comide Copper Mine, Kolwezi, Democratic Republic of the Congo, 2012, R450,000
- SRK, Cardiff, Environmental Input into Due Diligence Review, Brazil, 2010, US \$2,000
- Confidential, Environmental Due Diligence Study, Namib-Naukluft National Park, Namibia, 2009, US \$30,000

# Appendix B: Comment from DWS



#### PROVINCIAL OPERATION: WESTERN CAPE

Private Bag X16, Sanlamhof, 7532 52 Voortrekker Road, Bellville, 7530

021 941 6130

Ms. T. Mmachaka 2<sup>--</sup>7: 16/2/7/G200/A/8

021 941 6077

mmachakat@dwa.gov.za

SRK Consulting (Pty) Ltd Private Bag X18 RONDEBOSCH 7701

Attention: Jessica du Toit

#### DRAFT SCOPING REPORT FOR THE PROPOSED USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER STATION

This letter has reference to your Report dated 17 March 2015 submitted to this office for comments on the above activity (ies).

The Department has perused the application report and agrees that your Environmental Authorization application to proceed.

Kindly note that the proposed activities does not constitute a water use in terms of Section 21 of the National Water Act, 1998 (Act No 36 of 1998) and does not require a Water Use Authorization in terms of Section 22 of the National Water Act, 1998 (Act No 36 of 1998).

This office reserves the right to revise its initial comments and request additional information that may arise from correspondence and/or upon inspection.

Please do not hesitate to contact the above official should there be any queries.

Yours faithfully

CHIEF DIRECTOR: WESTERN CAPE

Letter signed by: Mrs M. Lintnaar-Strauss

Designation: Control Environmental Officer: Berg-Olifants Proto CMA

Date: 10 Mary 2016

# Appendix C: Record of Decision from HWC

Our Ref: HM\CAPE TOWN METROPOLITAN\KOEBERG\FARM 1552 DUYNEFONTY

Case No.: 16022313AS0224E
Enquiries: Andrew September

**E-mail**: andrew.september@westerncape.gov.za

**Tel** 021 483 9543 **Date**: 16 March 2016

Sharon Jones Postnet Suite #206 Private Bag X18 Rondebosch 7701 ILifa leMveli leNtshona Kolon Erfenis Wes-Kaap Heritage Western Cape

#### RESPONSE TO NOTIFICATION OF INTENT TO DEVELOP: FINAL

In terms of Section 38(8) of the National Heritage Resources Act (Act 25 of 1999) and the Western Cape Provincial Gazette 6061, Notice 298 of 2003

NOTIFICATION OF INTENT TO DEVELOP: PROPOSED TRANSIENT INTERIM STORAGE FACILITY, KOEBERG NUCLEAR POWER STATION SUBMITTED IN TERMS OF SECTION 38(8) OF THE NATIONAL HERITAGE RESOURCES ACT (ACT 25 OF 1999)

CASE NUMBER: 16022313AS0224E

The matter above has reference.

Heritage Western Cape is in receipt of your application for the above matter received on 29 February 2016. This matter was discussed at the Heritage Officers meeting held on 11 March 2016.

You are hereby notified that, since there is no reason to believe that the proposed interim storage material will impact on heritage resources, no further action under Section 38 of the National Heritage Resources Act (Act 25 of 1999) is required.

However, should any heritage resources, including evidence of graves and human burials, archaeological material and paleontological material be discovered during the execution of the activities above, all works must be stopped immediately and Heritage Western Cape must be notified without delay.

This letter does not exonerate the applicant from obtaining any necessary approval from any other applicable statutory authority.

HWC reserves the right to request additional information as required.

Should you have any further queries, please contact the official above and quote the case number.

Yours faithfully

Dr. Errol Myburg

(Interim CEO: Heritage Western Cape)

www.westerncape.gov.za/cas

CDV	Consultina:	170217	Kaahara	TICE	Einal	Cooping	Donort
SKN	Consulting.	4/031/.	Noebera	ПОГ	rırıaı	SCODING	Report

Appendix D:
Permission from Department of Energy for the establishment of the TISF



#### **ENERGY** REPUBLIC OF SOUTH AFRICA

Private Bag X19, Arcadia, 0007, Trevenna Campus, 4<sup>th</sup> floor 2A, Cnr Meintjies and Schoeman Street, Sunnyside, Pretoria, Tel: +27(12) 444 4103, Fax: +27(12) 444 4505 Private Bag X9111, Cape Town, 8000, Parliamentary Building, 7<sup>th</sup> floor, 120 Plein Street, Cape Town, Tel: +27(21) 469 6425, Fax: +27(21) 465 5980

E2/5/9/3

Enq: Mr Katse Maphoto Tel: (012) 444 4122 Fax: (012) 444 4285

Mr Mpho P. Makwana Chairman **ESKOM HOLDINGS LIMITED** P.O Box 1091 Johannesburg 2000

Dear Mr. PM Makwana,

RE: KOEBERG NUCLEAR POWER STATION (KNPS): TRANSIENT INTERIM USED FUEL DRY STORAGE FACILITY (TISF)

Your letter dated 28th February 2011 requesting approval in terms of the Nuclear Energy Act (47 of 1999) for the construction of TISF, the on-site storage of used nuclear fuel and its transport between the used fuel pools and TISF on the KNPS site.

In light of the above, I therefore authorise ESKOM's initiative of capacity maximization of used fuel storage and transportation at Koeberg Nuclear Power Station in terms of the Nuclear Energy Act (46 of 1999), sections 34(s)(t) and the regulations of NNR Act (47 of 1999).

Thank you for your continued co-operation.

Yours faithfully

elest

MS DIPUO PETERS MINISTER OF ENERGY

## Appendix E: List of Registered Stakeholders

Name	Capacity	Organization
A - Potentially affected pr	operty owners	
Norman, Jan	Homeowner and adjacent property owner: Erf 3108 Duynefontein	
Greef, Greg	Landowner and adjacent property owner: Dynefontein 34	
B - Organs of state	Editional and adjacent property owner. Bytierontein 54	
Smart, Rhett	Scientific Services: Land Use Advice	CapeNature
Hector, Wayne	Assistant Director	Department of Environmental Affairs
Mokoena, Lerato	76555tdiff Director	Department of Environmental Affairs
Soobramany, Senisha	Environmental Officer (Grade A: Integrated Environmental Authorisations)	Department of Environmental Affairs
Gildenhuys, Ian	City of Cape Town: Head Specialised Environmental Health	City of Cape Town
Titmuss, Pat	Environmental and Heritage Management Branch Regional Manager: Northern Districts B & C (Milnerton to Atlantis, Durbanville/Kraaifontein)	City of Cape Town
Theron, Morne		City of Cape Town
Matthys. Lynelle	CoCT Air Quality Management	City of Cape Town
Buthelezi, Thoko		Department of Agriculture, Forestry and Fisheries
Marubini, Mashuduma		Department of Agriculture, Forestry and Fisheries
Stolz, Annette		Department of Agriculture, Forestry and Fisheries
Kgomo, Ditebogo		Department of Energy
Makgopa, Bessie		Department of Energy
Maphoto, Katse		Department of Energy
Phahlamohlaka, Brenda		Department of Energy
Tshepe, Tshekane		Department of Energy
Makhathini, Simphiwe		Department of Public Enterprises
Tsebe, Andretta		Department of Public Enterprises
Malala, Michael		Department of Rural Development and Land Reform
Makhura, Mmule		Department of Transport
Situma, Lanfranc		Department of Transport
Daniels, Derril		Department of Water and Sanitation
Jerardino, Antonieta		Heritage Western Cape
Mkhabela, Dr. Peter	Programme Manager Designate: NPP	National Nuclear Regulator
Hill, Tim		National Nuclear Regulator
Makgae, Reuben		National Nuclear Regulator
Majola, Vanessa	Koeberg Site Office	National Nuclear Regulator
Moonsamy, Gino		National Nuclear Regulator
Mogorosi, Bhepiso		National Nuclear Regulator

Niblamba Cift		National Nuclear Deputator
Nhlapho, Gift		National Nuclear Regulator
Seitsei, Victoria		National Nuclear Regulator
Ramerafe, Mothusi		National Nuclear Regulator
Tselane, Thabo		National Nuclear Regulator
Thiele, Emile	Nuclear SIP Coordinator	
Runkel, Colleen	Western Region	SANRAL
Galimberti, Maria		South African Heritage Resources Agency (SAHRA)
Patientia, Emerentia		Western Cape Department of Agriculture
Kriel, Wouter		Western Cape Department of Agriculture
Ansaas, Mohamed		Western Cape Department of Community Safety
Fourie, Solly		Western Cape Department of Economic Development and Tourism
Scholtz, Abigail		Western Cape Department of Economic Development and Tourism
Dolby, James		Western Cape Department of Economic Development and Tourism
Windvogel, Raybin		Western Cape Department of Economic Development and Tourism
van Wyk, Anthony	Specialised Environmental Officer: Production	Western Cape Department of Environmental Affairs and Development Planning
	Pollution Prevention and Regulatory Services	
Hanekom, Eddie	Waste Management	Western Cape Department of Environmental Affairs and Development Planning
Mcbain-Charles, Lance	Waste Management	Western Cape Department of Environmental Affairs and Development Planning
Pienaar, Eugeune		Western Cape Department of Environmental Affairs and Development Planning
Arendse, Shaun		Western Cape Department of Environmental Affairs and Development Planning
Leaner, Dr Joy	Air quality management	Western Cape Department of Environmental Affairs and Development Planning
Harmse, Peter	Air quality management	Western Cape Department of Environmental Affairs and Development Planning
Parker, Bhawoodien	Air quality management	Western Cape Department of Environmental Affairs and Development Planning
Arendse, Gottlieb		Western Cape Department of Environmental Affairs and Development Planning
Kloppers, Wilna	Pollution and chemicals management	Western Cape Department of Environmental Affairs and Development Planning
Mehl, Russell	Pollution and chemicals management	Western Cape Department of Environmental Affairs and Development Planning
Brown, Zayed	Pollution and chemicals management	Western Cape Department of Environmental Affairs and Development Planning
Dreyer, Taryn		Western Cape Department of Environmental Affairs and Development Planning
Schippers. Melanese		Western Cape Department of Environmental Affairs and Development Planning
Baderoon, Muneeb	Waste Management	Western Cape Department of Environmental Affairs and Development Planning
Gabriel, Alvan		Western Cape Department of Environmental Affairs and Development Planning
La Meyer, Adri		Western Cape Department of Environmental Affairs and Development Planning
Fast, Hildegarde		Western Cape Department of Local Government
Willet, Amanda		Western Cape Department of Local Government
Paulse, Graham		Western Cape Department of Local Government
Deiner, Colin		Western Cape Department of Local Government
Robinson, Maurice		Western Cape Department of Social Development
Jacobs, Agatha		Western Cape Department of Social Development
Bredenkamp, Cailey		Western Cape Department of Transport and Public Works

Du Plessis, Jan		Western Cape Department of Transport and Public Works
Kleynhans, Chrizette		Western Cape Nature Coservation Board
Fanner, Steve		Western Cape Roads Authority
Strydom, Sandy		Western Cape Roads Authority
Swanepoel, Grace		Western Cape Roads Authority
Leedo, Bettie	Environmental Health: Western District	City of Cape Town
Ditiniti, Funanani		DEA: Oceans and Coasts
Cope, Alvin	Road Network Management	Western Cape Government
Van Rensburg, Neville	EMS Services	Western Cape Government
C - Councillors		
Grose, Nora	Ward Councillor: Ward 23	City of Cape Town
Clayton, Cynthia	Ward Councillor: Ward 29	City of Cape Town
Fredericks, Marthinus	Ward 29: Interim Treasurer, Tourism & Environmental Sector	Atlantis Council of Stakeholders
Kastoor, Llewellyn	Ward 29: Social Development Sector	Atlantis Council of Stakeholders
Kok, Cornelius	Ward 29: Agriculture Sector	Atlantis Council of Stakeholders
Kubisa, Geraldine	Ward 29: Frail Care Sector	Atlantis Council of Stakeholders
Lightburn, Allister	Ward 29: Youth Sector	Atlantis Council of Stakeholders
Muzeli, Enid	Ward 29: Interim Secretary: Frail Care Sector	Atlantis Council of Stakeholders
Petersen, Linley	Ward 29: Administrator	Atlantis Council of Stakeholders
Van Rooyen, Manfred	Ward 29: Ward Councillor, Comprehensive Rural Development Programme; Chairperson, Management Committee; Interim Chairperson, Business Development Sector	Atlantis Council of Stakeholders
Mack, Cyril	Atlantis Ward Councillor	
Rass, Barbara	Ward Councillor: Ward 32	City of Cape Town
Makeleni, Lubabalo	Ward Councillor: Ward 104	City of Cape Town
Basson, Justin	Ward Councillor: Ward 105	City of Cape Town
Brenner, Heather	Ward Councillor: Ward 107	City of Cape Town
Titus, CR	Development and Housing Sector	Mamre Council of Stakeholders
Jansen van Vuuren, Marissa	Ward Councillor: Melkbosstrand	
Abrahams, Abobarka	Chairperson	Pella Council of Stakeholders
D - Other institutional stak	eholders	
Mlonyeni, Thembi	Chief Development Officer	Cape Agency for Sustainable Integrated Development in Rural Areas
Borrill, Les		Eskom
de Villiers, Carin		Eskom
Engel, Kevin		Eskom
Featherstone, Keith		Eskom
Featherstone, Keith Francis, Adrian		Eskom Eskom

Goosen, M		Eskom
Henderson, N		Eskom
Henkeman, Pauline	Generation Communication and Stakeholder Management	Eskom
Herbert, Michelle		Eskom
Ismail, E		Eskom
Jenkins, Marina	Koeberg Visitor Centre	Eskom
Greef, Gert	Regional Manager (acting)	Eskom Real Estate Management
	Portfolio Gx Nuclear Land Management	
Mthombeni, Princess		NECSA
Rennie-Kroon, Amelia		NECSA
Tengimfene, Nikelwa		NECSA
Nonqane, Phenyo	Corporate Communiciation	NECSA
Joshua, Debbie		Eskom
Kerr, Evan		Eskom
Kline, Kim		Eskom
Krause, M		Eskom
Le Roux, Jurina		Eskom
Makgae, Lerato	Stakeholder engagement	Eskom
Matsabatsa, G		Eskom
Matshidza, D		Eskom
Mokgwatlheng, L		Eskom
Moffat, Robert	BSc. Chemical Engineer at Koeberg	Eskom
Naidoo, Cassandra		Eskom
Nel, A		Eskom
Peters, Owen		Eskom
Phalanndwa, S		Eskom
Pienaar, Shaun		Eskom
Pru, Nhin		Eskom
Radebe, Phindile		Eskom
Reissenzahn, George		Eskom
Saaymans, Martin		Eskom
Moodley, Trevor	Quality Control	Eskom
Xulibana, V	Koeberg	Eskom
Stwayi, Mandisi	Koeberg	Eskom
Dyabaza, Jongi	Koeberg	Eskom
Ovis, Renee	Koeberg	Eskom
Bakardien, Riedewaan	Koeberg: Power Station Manager	Eskom
Matthee, Felix	Koeberg: Chemist	Eskom
Jones, John	Koeberg: Engineer	Eskom

Terblanche, C	Nuclear Project Manager	Eskom
Perryman, Lindley		Eskom
Kruger, Ludie	Disaster Management Melkbos	Eskom
Jonker, Nikki		Eskom
Foster, N	NE	Eskom
Staffen, Kelvin		Eskom
Tertius Karsten		Eskom
Trollope, Ian		Eskom
van der Westhuizen, K		Eskom
Vawda, Tasneem		Eskom
Xaso, Simphiwe		Eskom
Cosgrove, Tracey	Treasury Manager, Risk and Compliance	PetroSA
Beukes, Willem		South African Nuclear Energy Coorporation (NECSA)
Kordom, Debra		South African Nuclear Energy Coorporation (NECSA)
Jooste, Nico	Detective warrant officer	Melkbosstrand SAPS
Captain van de Toorn	Station Commander	Melkbosstrand SAPS
Labuschagne, Fritz	Chairperson	Melkbosstrand Police Forum
Atkinson, Helena		WESSA
Gubb, Andy		WESSA
Ratsbon, S		WESSA
E - Community organisation	ns	
White, Harry		Atlantic Beach Home Owners Association
Nagan, Roy		Atlantis Civic Association
Smith, Glodene	Sub-Forum Chairperson	Atlantis Community Police Forum (CPF)
Carolus, Warren	Secretariat	Atlantis Police Forum
Daniels, Veronica	Vice Chairperson	Atlantis SAPS
Tajoodien, Abdul G	Chairperson	Atlantis Community Police Forum & Milnerton Cluster
Mentor, C and J		Atlantis RDP (Forum 1)
Rass, Wendy		Atlantis Womens Movement
Leslie, Warren		Bloubergstrand Residents Association
Gee, Patricia		Blaauwberg Coast Tourism Association
Dorse, Clifford		Blaauwberg Conservation area
Raubenheimer, Louis		Blaauwberg Conservation area
La Grange, Smokie	Chairperson	Koeberg Public Safety Information Forum
Taylor, John	Chairperson	Melkbosstand Neighbourhood Watch, Melkbosstrand Community Police Forum
Kleynns, Samie	Chairperson	Melkbosstrand Community Police Forum
Courtney, Trevor		Melkbosstand Neighbourhood Watch
Titus, Charles	Chairperson	Mamre CoC Executive Members

Fritz-Whyte, Amanda		Melkbosstrand Ratepayers Association
Johnson, Kurt		Melkbosstrand Ratepayers Association
Johnson, Teresa		Melkbosstrand Ratepayers Association
Laing, Brett		Melkbosstrand Ratepayers Association
Simon, Mark		Melkbosstrand Ratepayers Association
Smith, Gary		Melkbos Resident Association
Williamson, Raymond	Member	Melkbosstrand Ratepayers Association
Van Der Merwe, Andre	Chairperson	Neighbourhood Watch (NHW)
Smith, Shawn		South African Police Service (SAPS)
Munro, Lisa	Communication Officer	Tableview SAPS
Colonel Vosloo	Station Commander	Tableview SAPS
Jarrett, Barrie	Chairman (Sector 1)	Table View Community Police Forum
Jordaan, Anne Marie		Table View Ratepayers Association
Siyo, Phinda		Table View/ Parklands Residents Association
Mr Marthinus	Chairperson	Atlantis Principals Forum
Mr Sedeman	Secretariat	Atlantis Principals Forum
David Willemse	Fire and Safety Education Co-ordinator	Atlantis Fire Station
Smith, Renier	Group Manager	Garden Cities NPC (RF)
Moodley, Trevor		Tygerberg Ratepayers Association
F- Project Team		
Fick, Nettie	Project Management	Eskom
Petersen, Sarkina	Planner	Eskom
September, Anita	Project Administrator	Eskom
Sekoko, Israel	Nuclear Sites	Eskom
Olivier, Jaco	Corporate Affairs	Eskom
Herbert, Michelle	Environmental Management	Eskom
Sataar, Haaroen	Spent Fuel Storage Project Manager	Eskom
Makhothe, Matse	Spent Fuel Storage Project Chief Physicist- Licencing	Eskom
	Coordinator	
Krause, Martin	Security Representative	Eskom
Lavelot, Randall	Spent Fuel Storage Project Manager	Eskom
Phidza, Lewis	Koeberg Stakeholder Management Manager	Eskom
Jappie, Tayeb	Project Director	Eskom
Lawrence, Alan	Design Engineer	Eskom
Jeannes, Deon	Koeberg Environmental Management	Eskom
Vernon, Mark	Design Engineer	Eskom
Pieterson, Stephen	Radiation Protection Engineer	Eskom
Potgieter, Luka	Project Manager Phase 2 of Project	Eskom
Davis, Sedick	Nuclear Project Management	Eskom

Jonas, Ryan	Environmental Management	Eskom
G - Other stakeholders		
Adair, Gaynor		NMC
Adair, Rosemary		NMC
Ahmed, Yekeen		Metro EMS
Alias, L		Thusong Centre
Anderson, Melville	Private	
Andrews, Melanie		Cuddle Care ECDt, Atlantis COS
Baker, Alto		
Baptista, Moira		
Bevan, Cynthia		
Botes, Maralise		
Boulanger, Catherine Irene		
Brandt, HL		BCD Town Planners
Braswell, Jackie		Cape Theological Seminary
Brown, Mike and Clare	Private	
Browne, Peter	Private	
Cannel, Roger	Private	
Ceglowski, Renata	Private	
Christian, Eric Dominique	Private	
Cloete, Priscilla	PRO and fundraiser	Orion Organisation
Cwaile, Tshepo Shane		
Dampies, Jeremiah		
Decinti, Maurizio		
De Villiers, Carin	Private	
De Waal, Daniel		
Dobson, Clive		
Ducase, Daryl	Private	
Ellis, Cornia		
Farrand, Steve		
Gelant, Alida	Private	
Grose, Nora	Private	
Gunda, Ronald	Private	
Hall, Gary	Private	
Handt, Brema	Private	
Hotten, Alexandra	Private	
Iosiphakis, John	Private	
Jentu, Mwezi	Private	
La Grange, Duval		

Lakhani, Muna		Earthlife Africa (Cape Town)
Lategan, Peter		Atlantis Media & Publicity Office
Lee, Nick	Private	
Lewies, Ben		Orion Organisation
Lewis, Deidré		
Lewis, Lloyd		
Luhanga, Peter		Media Impact24
Macalex, Justin		
MacGiver, Margaret		Friend of Riettvlei
Malusi, Sizeka	Private	
Manguwo, L		UGS
Maigrot ,Mr and Mrs	Private	
Makubalo, Zanoxolo	Private	
Matthews, John		Garden Cities
Mayhew, Robert and Sylvia	Member of Koeberg PISF	
Mettler, Ferdinand		
Meyer, Carola	Private	
Meyer, Yolande	Centre Manager	Eden on the Bay Mall
Meyrick, M.A.C	Private	
M'Gill Grant		My Gas
Mtya, Sizeke	Private	
Mtya, Yuneka	Private	
Mvunelwa, Maphelo	Private	
Nilsson, Napoleon		
Nyoka, Tembile		Nceduluntu Academy of Learning
Odendaal, WJ		
Olifant, Danny		
Opperman, Elbe	Private	
Opperman, Francois	Private	
Pannaye, Angelique	Private	
Payne, Samantha-Ann	Private	
Pereira, Jose		Lesedi
Pienaar-Bouwer, Audrey	Private	
Pierre-Eugene, Sav	Private	
Piloso Mogale, Wilson	Private	
Pombo-van Zyl, Nicolette		
Radmyn, Dave	Private	
Ralston, Samantha		Birdlife SA
Renier, Smith		Garden Cities

Richards, Ananda	Private	
Rothen, Ueli	Private	
Saayman, Desmond		
Schwarz, Elke	Private	
Slabbert, J A	Private	
Sleggs, W	Private	
Speed, Belinda		
Speed, Kenneth		
Thomas, Daniël	Private	
Trussell, Clement	News Officer	Radio Atlantis
Longden-Thurgood, M		
Van Schalkwyk, J	Private	
Van Rooyen, Natio		Joyce's Dairy Farms
Watney, Tertius		
Wetter, Chris	Private	
Wilkinson, David and Donree	Private	
Williamson, Raymond and Mrs	Private	
Wilson, B.S.J	Private	
Wilson, Tug and S	Koeberg PSIF	
Griffen, Herschell		Saxon Sea SS
Mr Marthinissen	Principal	Atlantis SS
Langenhoven, Henry		Robinvale HS
Ms. Figaro/Mr. Julius		Proteus SS
Moyo, Faith		Bloubergrant HS
Siyo, Phinda		Inkwenkwezi SS
Mr Gouws		Schoonspruit SS
Mr Gibson		Naphakade SS
Goliath, Mark		Wesbank SS
Bolttler, Patrick		CBC St. Johns
LeFeuvre, Stephen		Parklands College
Minky		Elkanah House High
Myer, Kevin		Tableview High
Mr Ngwane		Sinenjongo HS
Classen, Sandy		Milnerton High
Bassa, Bibi		UCT Debating/Rotery Club
Mr Visser	Prinicipal	Van Riebeeck Primary School
Loubser, Rina		ACVV
Ms Rodgers	Campus Manager	West Coast FET College
Lee, Nick	Local Resident	Ŭ
,		

Fig, Dr David		
Blom, Ben	Business Development Manager	NECSA
Oliver, Jonathan	Technical Director	TUV NORD Southern Africa (Pty) Ltd.
Fritz-Whyte, Amanda		
Dreyer, Oloff	coo	Melkbosstrand Private School
Iosiphakis, John	Engineer	Instrumentation Projects
Meyrick, Mike	Local resident	
Stuurman, Sydney	Chairperson	
van der Riet, Ryno		
Bamford, Helen	Staff Writer	Cape Argus
Arbuckle, Graham	Private	
Jones, Ryan	Private	
Jones, A	Private	
Neethling, A.M	Private	

SRK	Consulting:	478317	Koehera	TISE	Final Scoping	Report
SININ	Consulting.	4/03//	MOEDEIG	1101	I IIIai Scopiiic	LEPUIL

Appendix F: Advertisements placed during Pre-Application Phase We are all heartsown the passing of the loved father and the partet bases

Dr. ISAAC MOFESOHM

siways be an inspir

She will be deeply mourned and lovingly remembered by the McCracken, Hastie amembered by the McCracken, Hastie

KOSSILEK

Memorial Service on Friday 16th October at 2:30pm at the Rathfelder,

Private Gremation

10/10/2012

**A38** 

- 6461/40/10

EDWARD I

Deaths

948 - T08

FOURIE

(011) Consectations

NEWS

CAPE TIMES WEDNESDAY, OCTOBER 14, 2015

# Lifetime of service wins Ethel Leisa, 101, first Tutu Heroes award

#### **Staff Writer**

THE Desmond & Leah Tutu Legacy Foundation's inaugural Unsung Heroes Award has been handed to 101-year-old Ethel Leisa from Soweto.

Sala as a class

The ceremony will take place in Cape Town today, which coincides with Leah Tutu's 82nd birthday, and will honour Leisa for her voluntary work, providing extraordinary service and improving the community at large.

Leisa was born in Sekhukhune in Limpopo and trained as a nurse at Crown Mines in Joburg.

She worked at Modderbee Mines Hospital and Good Hope Mission in Limpopo before joining the Johannesburg City Council at Orlando Clinic.

She later moved to Shanty Clinic, and retired after 35 years of service.

The foundation's executive director, Reverend Canon Mpho Tutu, said the award

recognised individuals who, in their ordinary lives, were doing voluntary work, providing extraordinary service and improving the community

Your daily work was not limited to your profession as a nurse, but you expanded your efforts in serving your church by assisting the rectors. If not cleaning the church yourself, you were co-ordinating others in doing so. From wiping the floors to washing the linen, a humble, outstanding woman.

You took care of the elders, visiting them regularly and, like Jesus did for His disciples, washed their feet and clipped their toenails," Mpho Tutu said about Leisa.

Leisa was one of the founding members of the African Self Help Crèche in the 1960s.

Leisa's daughter Mpho Mguli said the initiative helped draw upearly childhood development training programmes for under-skilled practitioners and owners of

home-based crèches.

Leisa was also the chairwoman of Khanyile Crèche in Mzimhlophe, Soweto, for 25 vears, for which she raised funds and distributed secondhand clothes to the needy.

In the Federation of South African Women Leisa was an activist who worked closely · with her cousin, Lillian Ngoyi, helping Ngoyi to hide from police.

Ngoyi was a politician and anti-apartheid activist, Treathe ANC Women's League. Leisa also took care of

Ngoyi's children when she was arrested. Leisa said she never

Mguli said: "My mother

The Foundation also said in

son Trialist and President of mother who did not allow the breakup of her own family by the apartheid government which deported her husband and forced her to send the children away to be raised by relatives - to dim her compassion for others.

remained active in her church



## Fruit Growers staff hit hard by impasse

#### Michael Nkalane

EMPLOYEES at Cores Fruit Growers (CFG) are bearing the brunt of a prolonged strike in its sixth week, while union and employers are at loggerheads over the wage agreement.

The Food and Allied Workers Union (Fawu) and CFG have been negotiating a wage increase of 12.5 percent and a profit share of R1 300 for each worker for the past six weeks. They were still locked in negotiations by the time of publishing vesterday.

Fawu is accusing CFG of not being willing to negotiate, while CFG is accusing the union of not negotiating in good faith.

"We are disgusted by the manner in which CFG has handled the negotiations on the genuine and legitimate demands of the workers," said Fawu's provincial head of operations, Meshack Nteshani.

CFG hit back, with managing director Francois Malan saying: "Negotiations in good faith are a prerequisite to settling a dispute of this nature. However, to achieve

this, it is of great concern that Fawu has continuously revised their wage demand upwards and downwards."

Nozuko Zweli, who has been with CFG for the past 15 years, said: "I have not had my full pay for more than five weeks since the strike began. I used to buy groceries for a month on my first week's salary, then buy some necessities and clothes for my children with three weeks' salary."

Nomonde Gongxeka said by using the unemployed as their replacements during the strike, CFG remains unaffected.

"While we are busy striking for a wage increase, which is our right, they (CFG) continue to make a profit. They go around the area looking for the unemployed and pay them a day's salary. No one can say no to a day's wages, especially when you have not had money for a while," she said.

Malan said Fawu changes their wage demands like a see saw. He denied that they are not willing to negotiate. "We said from the beginning that we are always

ready to negotiate."

He said a wage demand of 12.5 percent was revised to 8 percent, thereafter to 10 percent.

"In the next communication. Fawu demanded 8.5 percent, which was again revised to 9 percent in writing on October 7 as their latest wage demand. On October 8, CFG received correspondence that the wage demand has been revised to 12.5 percent (negotiable).

"This is in vivid contrast to what has been reported in the media as Fawu's position and also does not correspond to what was communicated at the negotiation table. It is extremely difficult to reach an agreement under these circumstances, despite our management's best efforts."

Nteshani said they were disgusted by the manner in which CFG had handled the negotiations.

"We are calling on CFG to return to the negotiating table. These demands are noble and reasonable in the face of hard work." michael.nkalane@inl.co.za

@siyaks

## Brewers' record deal follows 'phenomenal' success stories

historic Newlands Breweries site, which today still proudly boasts of brewing beer with "pure Table Mountain" water.

In 1999, SA Breweries formed SAB plc, and moved its primary listing to London, and in May 2002, it acquired Miller Brewing, to establish SABMiller plc.

It was the signal for a phenomenal period of growth, becoming Miller Light and Aguila. second only to AB InBev in the world market.

The Megabrew blog says AB InBev produces 410 million hec-

tolitres of beer every year, compared with SABMiller's 324 million hectolitres (one hectolitre equals 100 litres).

Between them, the two companies produce eight of the 10 most popular beer brands in the world. The most popular of the AB InBev brands are Bud Light, Budweiser, Stella Artois, Corona and Brahma.

SABMiller is best known for

SABMiller employs about 70 000 people in more than 80 countries, while AB InBev impresses with about 155 000 employees.

To sak consulting



#### STAKEHOLDER ENGAGEMENT PROCESS

Environmental Impact Assessment (EIA) for the Proposed Used Fuel Transient Interim Storage Facility at Koeberg Nuclear Power Station

SRK Project No: 478317

Notice is hereby given of a stakeholder engagement process in terms of the National Environmental Management Act 107 of 1998 and the Environmental Impact Assessment (EIA)

Project description: Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of used nuclear fuel from the reactors for the operational life of Koeberg Nuclear Power Station (KNPS), thereby ensuring the continued operation of KNPS.

Location: the proposed TISF will be constructed on vacant land within the KNPS Owner Controlled

Application for Environmental Authorisation (EA) to undertake the following activities:

Listing Notice 1: (27) clearance of indigenous vegetation

Listing Notice 2: (3) development for nuclear activities; and Listing Notice 3: (12) clearance of indigenous vegetation

In addition to EA, licensing is also required from the National Nuclear Regulator

#### Opportunity to participate:

A Background Information Document is available at: Koeberg Public Library; Wesfleur Public Library; Cape Town Public Library; Koeberg Visitors Centre; SRK's office in Rondebosch; and www.srk.co.zr (via the 'Library' and 'Public Documents' links).

Stakeholders are invited to submit comments and/or register on the project database. Submissions from stakeholders must include their name, contact details (specifying the preferred method of notification, e.g. e-mail) and an indication of any direct business, financial, personal, or other interes which they have in the application, to the contact person below, by 9 November 2015. Note that only registered stakeholders will be notified of future meetings and opportunities to provide comment or

A Public Open Day, where the project will be discussed, will be held at the Koeberg Visitors Centre from 15:00 until 19:00 on Tuesday, 27 October 2015. Stakeholders are invited to attend the Open Day anytime between the above times, and are requested to confirm their intention to attend the Open Day with the contact person below. Proof of identity will be required for access to the KNPS site.

To submit comments, register, or request information, please contact: Jessica du Toit of SRK Consulting at jedutoit@srk.co.za; Postnet Suite #206, Private Bag X18, Rondebosch, 7701; Fax: 021 685 7105; Tel: 021 659 3060.

Don't miss Drive TIMES

every Thursday. Only in your

CAPE TIMES

expected to be honoured for the work that she did, as she did it only for the benefit of

loved working with people and for people."

a statement that Leisa was a

"She was a Warden at St Augustine's Church in Soweto, where she first met Desmond and Leah Tutu, and has throughout her life," the statement read.



**ETHEL LEISA** 

# Lifetime of service wins Ethel Leisa, 101, first Tutu Heroes award

**Staff Writer** 

THE Desmond & Leah Tutu Legacy Foundation's inaugural Unsung Heroes Award has been handed to 101-year-old Ethel Leisa from Soweto.

The ceremony will take place in Cape Town today, which coincides with Leah Tutu's 82nd birthday, and will honour Leisa for her voluntary work, providing extraordinary service and improving the community at large.

was born in Sekhukhune in Limpopo and trained as a nurse at Crown Mines in Joburg.

She worked at Modderbee Mines Hospital and Good Hope Mission in Limpopo before joining the Johannesburg City Council at Orlando Clinic.

She later moved to Shanty Clinic, and retired after 35 years of service.

The foundation's executive director, Reverend Canon Mpho Tutu, said the award

recognised individuals who, in You took care of the elders, vistheir ordinary lives, were doing voluntary work, providing extraordinary service and improving the community.

"Your daily work was not limited to your profession as a nurse, but you expanded your efforts in serving your church by assisting the rectors. If not cleaning the church yourself, you were co-ordinating others in doing so. From wiping the floors to washing the linen, a humble, outstanding woman.

iting them regularly and, like Jesus did for His disciples, washed their feet and clipped their toenails," Mpho Tutu said

Leisa was one of the founding members of the African Self Help Crèche in the 1960s. Leisa's daughter Mpho Mguli said the initiative helped upearly childhood development training programmes for under-skilled practitioners and owners of

about Leisa.

home-based crèches.

Leisa was also the chairwoman of Khanyile Crèche in Mzimhlophe, Soweto, for 25 years, for which she raised funds and distributed secondhand clothes to the needy.

In the Federation of South African Women Leisa was an activist who worked closely with her cousin, Lillian Ngoyi, helping Ngoyi to hide from police.

Ngoyi was a politician and anti-apartheid activist, Treathe ANC Women's League. Leisa also took care of

Ngoyi's children when she was arrested. said she never Leisa

expected to be honoured for the work that she did, as she did it only for the benefit of

Mguli said: "My mother loved working with people and for people.'

The Foundation also said in a statement that Leisa was a

son Trialist and President of mother who did not allow the breakup of her own family by the apartheid government which deported her husband and forced her to send the children away to be raised by relatives - to dim her compassion for others.

"She was a Warden at St Augustine's Church in Soweto, where she first met Desmond and Leah Tutu, and has remained active in her church throughout her life," the statement read.



**ETHEL LEISA** 

# 'SABC job given to Hlaudi on a whim'

From Page 1

interview process. "There were no interviews, no shortlisting. The recommendation and appointment had not complied with the SABC's charter. The only conclusion was that the man was more important than the rule of

law," argued Katz. He said Communications Minister Faith Muthambi had acted "on a whim" in seemingly rushing through Motsoeneng's appointment.

While Muthambi, in her submission, argued that Motsoeneng had achieved "great things at the SABC", there was no mention of the findings against him by the Public Protector, which cite his mismanagement and purging of opponents inside the corporation.

SABC counsel Ngwako Maenetje said Motsoeneng's insistence that he clear his name was not a concession to the public protector's report into his appointment. "There will be a disciplinary hearing, at a time to be determined."

Judge Dennis Davis fired back that he could not ignore the finding of the SCA. The hearing continues today. quinton.mtyala@inl.co.za

Muthambi made no mention of findings by the public protector

## INTERNATIONAL DAY TO HIGHLIGHT WORK, WAGES, HEALTH

# Focus is on plight of rural women

#### **Raphael Wolf**

INTERNATIONAL Rural Women's Day tomorrow should highlight the difficult work and living conditions of women in rural areas.

This is the view of Sikhula Sonke farmworkers' trade union general secretary Henriette Abrahams.

"I want this day to bring the plight of rural women under the microscope, so that all (farming) stakeholders can get to the table to work on solutions that will ensure decent work and decent lives for our rural women," Abrahams said.

She was referring to the women's grievances about an inadequate national minimum wage for farmworkers, their lack of access to adequate health and education facilities and safety and rehabilitation centres for women and children, as well as the unresolved issue of land ownership for farmworkers.

"We want government and business to take responsibility for providing places of safety for women and children who are affected by violence and abuse (in households and workplaces)," she added.

She complained that rural women had work for only about four to five months of the year during the harvest season, "and what happens to them (concerning income) for

Such women also lacked housing security, as a farmer forced them and their families to vacate his house once the women or their spouses left his employ, sometimes after a life-

time of labour. Abrahams explained that the R120 minimum wage women earned a day on a farm was inadequate after deduc-

tions by a farmer – for rent,



CYCLE OF DEBT: Sara Claasen, a farmworker in Stellenbosch, reflects on the role of rural women.

electricity, transport and other ment funds, or medical aid.

"It is a slavery type of situation where you are caught up in a cycle of debt. In addition to that there is also the issue of social protection involving pension, provident or retire-

Sara Claasen, 52, has been

working on Stellenbosch farms since the age of 19. "We have been underpaid for a very long time. Government had put in place a mini-

mum wage, but that is not

enough. She lamented that some farmers sometimes refused to implement relevant legislation, and said International Rural Women's Day should be used to express freedom for the

rights of rural women, and for

the government and the world to ensure that women were treated with dignity and

respect Women on Farms Project programme co-ordinator Carmen Louw said they regularly celebrated International Rural

Picture: ARMAND HOUGH

Women's Day and rural women and their contribution towards food security.

'We also use the time to highlight the challenges that rural women face on a daily basis," added Louw.

raphael.wolf@inl.co.za

# City stands firm despite being told it's unconstitutional, fails to fulfil obligations

**Carlo Petersen** 

DESPITE being labelled by two high court judges as acting unconstitutionally and failing in its duty to fulfil its statutory obligation, the City insists it is acting within the law.

The City became the subject of two matters recently, one involving Boycott, Divestment and Sanctions (BDS) South Africa, which took issue with American singer Pharrell Williams's recent visit to Cape

BDS targets Woolworths for selling Israeli goods and had demanded that Williams end his partnership with the

A BDS protest was then Williams September 21.

planned outside Grand West Arena in Goodwood, where performed on

The City had granted BDS the right to protest, but insisted that only 150 people could gather outside the venue. BDS took the matter to the

Western Cape High Court, requesting that 16 000 people be allowed to protest. Judge Siraj Desai ruled in

BDS's favour, saying the City permit's limitations had encroached on the freedom of assembly.

The second matter, involving the South Road Families Association (SRFA) of Wynberg, relates to a court ruling which again slammed the City for acting unconstitutionally.

SRFA had hauled the City to court after 26 families living in South Road, Wynberg, received termination of lease notices in December last year.

South Road is located along the City's "preferred route" for

a planned MyCiTi bus route which would connect Khayelitsha to Wynberg and cut through the residential area in South Road, leaving the 26

families homeless. Judge Leslie Weinkove ruled in SRFA's favour on Monday, saying: "The City did not comply with their statutory obligations in terms of the constitution.

"They did not engage the

public in meaningful public participation."

Mayor Patricia de Lille's spokesperson, Zara Nicholson, refuted this yesterday, saying the City was awaiting the written judgments on both matters

"We believe that we always follow legal and statutory requirements in order to create value for our residents," Nicholson said.

South Road resident Laurie Peregrino said it was clear that the City was avoiding meaningful public participation to steamroll projects.

"We see City councillors constantly getting away with half-truths and erroneous actions. They need to be held accountable for making the people suffer," Peregrino said. carlo.petersen@inl.co.za

@carlo\_petersen

## Boland **ANC** secretary Snyman gets boot

### **Quinton Mtyala**

ANC Boland secretary Jonton Snyman has been kicked out of the party following a disciplinary process over numerous complaints, barely a month after he was elected to the position in July.

Yesterday, ANC deputy provincial chairman Khaya Magaxa said a decision was taken to charge Snyman on August 14 for numerous acts of misconduct.

These included: That he had been

convicted of a financial crime without informing the ANC. Behaving in a manner which brought the ANC into

disrepute. Undermining the respect for, and impeding the functioning of any structure or committee of the ANC.

• Prejudicing the integrity of the ANC. In a Facebook message,

Snyman said that while he respected the ANC, he would appeal the finding. "I respect the outcome of

the ANC PDC Western Cape as a disciplined member of the ANC. I therefore will follow due process as per the ANC constitution and appeal

The ANC found that Snyman had been dishonest about the fact that he had been convicted of fraud in the Worcester Magistrate's Court last October.

And for failing to inform the party of his criminal conviction while standing for a leadership position.

For this the party found that Snyman had brought it into disrepute.

In terms of the ANC's disciplinary procedures,

Snyman has 21 days to appeal. Magaxa said: "The PDC wishes to reiterate that ANC members are expected to act honestly at all times as obliged by the ANC constitution. In this particular matter the image of the ANC was brought into disrepute, which could have been avoided. Therefore the PDC will at all times act swiftly on any matter where

the ANC is brought into

quinton.mtyala@inl.co.za @mtyala

# Fruit Growers staff hit hard by impasse

### Michael Nkalane

EMPLOYEES at Ceres Fruit Growers (CFG) are bearing the brunt of a prolonged strike in its sixth week, while union and employers are at loggerheads over the wage

The Food and Allied Workers Union (Fawu) and CFG have been negotiating a wage increase of 12.5 percent and a profit share of R1 300 for each worker for the past six weeks. They were still locked in negotiations by the time of publishing vesterday.

Fawu is accusing CFG of not being willing to negotiate, while CFG is accusing the union of not negotiating in good faith.

"We are disgusted by the manner in which CFG has handled the negotiations on the genuine and legitimate demands of the workers," said Fawu's provincial head of operations, Meshack Nteshani.

CFG hit back, with managing director Francois Malan saving: "Negotiations in good faith are a prerequisite to settling a dispute of this nature. However, to achieve

this, it is of great concern that Fawu has continuously revised their wage demand upwards and downwards.'

Nozuko Zweli, who has been with CFG for the past 15 years, said: "I have not had my full pay for more than five weeks since the strike began. I used to buy groceries for a month on my first week's salary, then buy some necessities and clothes for my children with three weeks' salary."

Nomonde Gongxeka said by using the unemployed as their replacements during the strike, CFG remains unaffected.

"While we are busy striking for a wage increase, which is our right, they (CFG) continue to make a profit. They go around the area looking for the unemployed and pay them a day's salary. No one can say no to a day's wages, especially when you have not had money for

a while," she said. Malan said Fawu changes their wage demands like a see-saw. He denied that they are not willing to negotiate. "We said from the beginning that we are always

ready to negotiate."

He said a wage demand of 12.5 percent was revised to 8 percent, thereafter to 10 percent.

"In the next communication, Fawu demanded 8.5 percent, which was again revised to 9 percent in writing on October 7 as their latest wage demand. On October 8, CFG received correspondence that the wage demand has been revised to 12.5 percent

(negotiable). "This is in vivid contrast to what has been reported in the media as Fawu's position and also does not correspond to what was communicated at the negotiation table. It is extremely difficult to reach an agreement under these circumstances, despite our management's best efforts.

Nteshani said they were disgusted by the manner in which CFG had handled the negotiations. "We are calling on CFG to return to the negotiating table.

These demands are noble and reasonable in the face of hard work." michael.nkalane@inl.co.za @siyaks

## Brewers' record deal follows 'phenomenal' success stories

From Page 1

historic Newlands Breweries site, which today still proudly boasts of brewing beer with "pure Table Mountain" water.

In 1999, SA Breweries formed SAB plc, and moved its primary listing to London, and in May 2002, it acquired Miller Brewing, to establish SABMiller plc. It was the signal for a phenom-

enal period of growth, becoming second only to AB InBev in the world market.

InBev produces 410 million hec-

The Megabrew blog says AB

lion hectolitres (one hectolitre equals 100 litres). Between them, the two companies produce eight of the 10 most popular beer brands in the world.

The most popular of the AB InBev

tolitres of beer every year, com-

pared with SABMiller's 324 mil-

brands are Bud Light, Budweiser, Stella Artois, Corona and Brahma. SABMiller is best known for Miller Light and Aguila.

SABMiller employs about 70 000 people in more than 80 countries, while AB InBev impresses with about 155 000 employees.

Don't miss Drive TIMES every Thursday. Only in your **CAPE TIMES** 





Transient Interim Storage Facility at Koeberg Nuclear Power Station SRK Project No: 478317 Notice is hereby given of a stakeholder engagement process in terms of the National

Environmental Impact Assessment (EIA) for the Proposed Used Fuel

Environmental Management Act 107 of 1998 and the Environmental Impact Assessment (EIA) **Project description:** Eskom proposes to construct a Transient Interim Storage Facility (TISF)

for the temporary storage of used nuclear fuel from the reactors for the operational life of Koeberg Nuclear Power Station (KNPS), thereby ensuring the continued operation of KNPS. **Location:** the proposed TISF will be constructed on vacant land within the KNPS Owner Controlled

Application for Environmental Authorisation (EA) to undertake the following activities:

Listing Notice 1: (27) clearance of indigenous vegetation Listing Notice 2: (3) development for nuclear activities; and

Listing Notice 3: (12) clearance of indigenous vegetation n addition to EA, licensing is also required from the National Nuclear Regulator **Opportunity to participate:** 

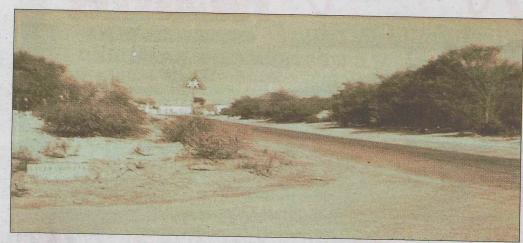
A **Background Information Document** is available at: Koeberg Public Library; Wesfleur Public Library; Cape Town Public Library; Koeberg Visitors Centre; SRK's office in Rondebosch; and www.srk.co.za (via the 'Library' and 'Public Documents' links). Stakeholders are invited to submit comments and/or register on the project database. Submissions rom stakeholders must include their name, contact details (specifying the preferred method of

which they have in the application, to the contact person below, by 9 November 2015. Note that only registered stakeholders will be notified of future meetings and opportunities to provide comment of A **Public Open Day**, where the project will be discussed, will be held at the Koeberg Visitors Centre from 15:00 until 19:00 on Tuesday, 27 October 2015. Stakeholders are invited to attend the Open Day

notification, e.g. e-mail) and an indication of any direct business, financial, personal, or other interes

Day with the contact person below. Proof of identity will be required for access to the KNPS site To submit comments, register, or request information, please contact: Jessica du Toit of SRK Consulting at jedutoit@srk.co.za; Postnet Suite #206, Private Bag X18, Rondebosch 7701; Fax: 021 685 7105; Tel: 021 659 3060.

nytime between the above times, and are requested to confirm their intention to attend the Oper



■ Steenoven Street's intersection with De Grendel Road was no more than sandy lanes and surrounded by bush when Bothasig was founded. ■ Right: The late Tony Fraquet and Claudette Lee are previous ward councillors of Bothasig.



# Best wishes as Bothasig celebrates its 50th

SUMMER JACOBS

othasig has come a long way from its humble beginnings as a township with only two streets and 30 houses.

Now sporting its own shopping centres, churches, schools, and sporting and recreational facilities, Bothasig proudly celebrates its 50th anniversary as a unique town dearly loved by its residents.

Bothasig was founded on 26 October 1965. Originally named Bosmansdam, the name was changed to Bothasig, on February 4 1966, after the minister of housing at the time, PW Botha.

Ward councillor Helen Carstens says the area has grown fantastically.

"The infrastructure has more than tripled since its humble beginnings," she said.

On Saturday October 17, there will be a formal event in the town hall where you can learn something about the history of the community.

"There will also be a community get-together, on a date yet to be confirmed, at the Abe Sher stadium with a ceremonial treeplanting as well as a craft market and sports activities", said Ms

Hazel Priest, chairwoman for the Golden Age Seniors' Club, has lived in Bothasig for 22 years, and she remembers when they were still busy building the first

"My cousin and I had both just married and we came to look at the houses. They had built in Tafel Road and were building in D'urban Street, and we fell in

**Netcare Blaauwberg Hospital** 

Waterville Crescent, Sunningdale

Tel: 021 554 9000

**Breast Disease Education** 

**Atlantic Breast Centre** 

Saturday, 17 October 2015, 10h00 - 12h00

Netcare Blaauwberg Hospital, Training Room

RSVP - Joan Sharpe 021 554 9036 or email joan.sharpe@netcare.co.za

**Presenters and Topics: Breast Cancer: The holistic approach** 

Dr Liezl du Toit - Plastic & Reconstructive Surgeon Dr Wilandi Jacobs - General Surgeon **Mammography: What to expect** 

Dr Phindi Mnguni - Radiologist

All Welcome • No Charge • Refreshments will be served

love with the houses.

"My cousin bought one. I went home and told my husband, and he said, 'What about transport?' When we visited family in the area, he said, 'I don't want to live here, it's just bush'," laughed Ms

She said after their children had moved out of the house, ironically to Bothasig, and then to surrounding areas, she and her husband sold their big house in Observatory and were looking for something smaller.

They ended up buying a small cottage in a close just behind Shoprite centre in Bothasig.

T've got no complaints. It's very convenient living here. It's fantastic that the area is celebrat-

ing its 50th," said Ms Priest. She said the Golden Age Seniors' Club knitted 50 teddy

bears to mark the occasion. They were given to Grade R pupils at the ACVV crèche, Bothasig's oldest crèche, in a get-together which included a large birthday cake.

With a number of parks dotted around the area today, it's hard to believe that Bothasig was once referred to as a "sandy wasteland".

James Vos, Bothasig's previous ward councillor, grew up here, and he remembers when the neighbourhood's library was run out of a bus and the post office operated from someone's

When he became the ward councillor at the tender age of 19, establishing a library was his first mission.

Stopping at the shopping centre in Vryburger Avenue, Mr Vos points out where the first library used to be.

"It was too small and cramped. Books were packed to the ceiling and there was a Portuguese greengrocer next door," Mr Vos recalls fondly.

Continued on facing page





## STAKEHOLDER ENGAGEMENT PROCESS

Environmental Impact Assessment (EIA) for the Proposed Used Fuel Transient Interim Storage Facility at Koeberg Nuclear Power Station SRK Project No: 478317

Notice is hereby given of a stakeholder engagement process in terms of the National Environmental Management Act 107 of 1998 and the Environmental Impact Assessment (EIA)

**Project description:** Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of used nuclear fuel from the reactors for the operational life of Koeberg Nuclear Power Station (KNPS), thereby ensuring the continued operation of KNPS.

Location: the proposed TISF will be constructed on vacant land within the KNPS Owner Controlled Area.

Application for Environmental Authorisation (EA) to undertake the following activities:

Listing Notice 1: (27) clearance of indigenous vegetation;
Listing Notice 2: (3) development for nuclear activities; and

• Listing Notice 3: (12) clearance of indigenous vegetation.

In addition to EA, licensing is also required from the National Nuclear Regulator.

Opportunity to participate:

A Background Information Document is available at: Koeberg Public Library; Wesfleur Public Library; Cape Town Public Library; Koeberg Visitors Centre; SRK's office in Rondebosch; and www.srk.co.za (via the 'Library' and 'Public Documents' links).

Stakeholders are invited to submit comments and/or register on the project database. Submissions from stakeholders must include their name, contact details (specifying the preferred method of notification, e.g. e-mail) and an indication of any direct business, financial, personal, or other interest which they have in the application, to the contact person below, by **9 November 2015**. Note that only registered etakeholders will be partified of fitting mostlings and popularities to remide a service of the project registered stakeholders will be notified of future meetings and opportunities to provide comment on relevant documentation.

A **Public Open Day**, where the project will be discussed, will be held at the Koeberg Visitors Centre from 15:00 until 19:00 on Tuesday, 27 October 2015. Stakeholders are invited to attend the Open Day anytime between the above times, and are requested to **confirm their intention to attend the Open Day with the contact person below**. Proof of identity will be required for access to the KNPS site.

To submit comments, register, or request information, please contact: Jessica du Toit of SRK Consulting at jedutoit@srk.co.za; Postnet Suite #206, Private Bag X18, Rondebosch, 7701; Fax: 021 685 7105; Tel: 021 659 3060.



Reach for Recovery



## Intercare

#### INTERCARE BUILT A MEDICAL CENTRE TO KEEP YOU OUT OF HOSPITAL

Recently Intercare launched a state of the art medical centre in Century City – a medical centre designed to make it easier and more affordable for you to maintain your health and keep you out of hospital.

According to Intercare co-founder and CEO Dr Hendrik Hanekom, traditional healthcare systems are on their way out. "They're too fragmented," he explains. The new thinking is integrated healthcare where you can walk into one facility and receive multidisciplinary, team-based care.

Intercare is proud to have four well experienced General Practitioners consulting at the centre; Drs Jenny Hanley, Saville Furman, Harold Marcus and Lauren Cloete. Just some of the services offered at the Medical Centre are general medical and nursing services, pathology, physiotherapy and preventative care. Additional services offered include dieticians, biokineticists and a Diabetic Clinic. Not only will you find all these services in one facility, you also have accepted them. These services in one facility, you also have access to them 7 days a week, including on public holidays, and for extended hours during the week.

Intercare is also the largest provider of Discovery Vitality Wellness Centres in the country, which means that you can complete almost the full spectrum of Vitality assessments at the Intercare Medical Centre in Century City.



Be patient We are just around the corner.

Cnr Century Way & Park Lane Grand Central Precinct

Mon - Fri: 07h30 - 19h00 Sat: 08h00 - 15h00 Sun & PH: 09h00 - 14h00



Go to www.intercare.co.za for more information

In Intercare Group

### Diary | Dagboek

- > St Luke's Hospice West Coast will host their annual meeting at their offices in Hof Street, Table View on Wednesday 14 October at 13:00. All are welcome. Call 021 557 8925 or visit www.hospicewestcoast.co.za.
- Annual meeting The Community Intervention Centre will hold its annual general meeting on Wednesday 14 October at 18:30 for 19:00 at the Milnerton police station. For more information call the administration office on 0215283005 between 08:30 to
- Police forum The Table View Community Police subforum for sector 3 which covers Table View, Sunridge, West Riding, Flamingo Vlei and Doornbach will meet on Thursday 15 October at Kingsgate Fellowship on the corner of Study and Athens roads at 19:00. For more info call Marietjie Ruster on 083 371 944.
- Seminar Coastlands Community Church in Janssens Road will host a prophetic seminar on Saturday 17 October at 09:00 for 09:30. Dawn Hartzenberg will be speaking on "The Anointing". Call Dawn on 083 555 2959 or 021 556 8367 to RSVP.
- Exhibition Junior students of the Maré Bruwer Art School are hosting an art exhibition at Koeberg Library, Duynefontein during October. Call 021 553 3280 for more infor-
- SAARP Milnerton will host their next social meeting on Wednesday 21 October at Milnerton Library at 09:00. There will be a presentation on Shipwreck Hikes by Tony Pearson. Non-members are welcome. Call Alice Rheeder on 021 551 7370 for more informa-
- A train affair The Cape Model and Toy Club will be hosting a train fair at the Theo Marais park hall in Koeberg Road, Milnerton on Saturday 24 October from 09:00 to 14:00. Entry is R5 for adults and children under 16 enter free. Call Edward Keown on 082 775 5003 for more information.
- > St Luke's Hospice West Coast will hold their Time to Remember service at 1 Hof Street, Table View on Saturday 24 October at 14:00. All are welcome to share as they celebrate fond memories of loved ones who may no longer be with us but will never be forgotten. Call 021 557 8925 to RSVP or for more information.
- Fashion show Table View Lions Club and Woolworths will host a fashion show at West Riding Primary School, 142 Circle Road, Table View on Saturday, 24 October at 10:00. Tickets are R100 and the proceeds are in aid of a school bus. Tickets are available from Post-Net, Lifestyle Centre, Parklands (opposite Planet Fitness) or call Gisela Weitz 083 556 9818 or email mangela@telkomsa.net.

# Tonie wins lifetime award

West Beach resident has received one of the highest honours in the continent's film industry.

Tonie van der Merwe, once dubbed the father of the "black" film industry in South Africa, received the Lifetime Achievement award at the Africa Movie Academy awards in Port Elizabeth.

Van der Merwe created some 400 films in the 1970s and '80s, including Joe Bullet, one of the country's first all-black cast films.

His movies launched the careers of many African actors and nurtured a generation of African film technicians and production hands. The majority of his films were distributed by means of an informal rural distribution network, reaching audiences estimated at well over hundreds of thousands

In 1973 the South African film Joe Bullet was banned by the apartheid government after its second screening at the Eyethu cinema in Soweto. Though the ban was later lifted, producers never pursued another release until 2013.



West Beach's Tonie van der Merwe poses next to a poster for the iconic film Trompie, one of the many films he directed.

The film premiered at the 2014 Durban the near future. International Film Festival. It also featured at the To Save and Project film preservation festival in New York in November last year before being screened at the Carthage international film festival in Tu-

nisia, and the 65th Berlinale film festival in February 2015.

Established in 2005, AMAA aims to facilitate the development and relevance of African film and cinema by providing a rewards and recognition platform for filmmakers on the conti-

African film makers work hard with very little and have, not through serendipity but through sheer audacity, managed to build the third largest film industry in the world, and are poised to take poll position, beating America and India.

"I've had a good inning as a filmmaker and it's probably time to pack away the cameras and lights, but I want to make one last film with an African producer," Van der Merwe said on receiving his award

This will hopefully happen in

Forty of Van der Merwe's films are being restored by Gravel Road Studios and are being released under Gravel Road's Retro Afrika Bioscope label.

Visit www.retroafrika.com for more.

## Shelley Point a gem on the West Coast

Situated on a private peninsula surrounded by three beautiful beaches, Shelley Point is one of the only places in the country where the sun rises and sets over the sea.

BON Hotel Shelley Point, on the Shelley Point Estate, is one of the finest resorts on the Cape West Coast and just a 90-minute drive from Cape Town.

Suitable for family holidays, corporate getaways, weddings and a variety of events, the resort has plenty to offer: a challenging and officially rated 9-hole golf course, restaurants and cocktail bars, two swimming pools, a spa and wellness centre, tennis courts and bowling greens and, for the family holiday, a kids' club to keep the young ones busy while parents play golf, enjoy a pamper at the spa or just laze about at the

The conference centre has three venues that cater for team building, training, workshops, cocktail functions and wedding receptions - a great place to host a celebration, and the best part is that no one has to drive

The restaurants cater for all – from buffet breakfasts to fabulous lunches, not to mention being the perfect setting for a romantic dinner (apparently to date, they have had 28



The Bon Hotel Shelly Point is a real gem on the West Coast.

marriage proposals at the resort).

The famous cocktail bar overlooks the first tee, the ocean and palm trees and there's a good chance you will feel as if you are on an island holiday, enjoying piña coladas or taking a last sip of your mojito.

Keep a lookout on their website and Facebook page for good deals and specials and a good tip: they often run competitions and giveaways on their Facebook page.

Visit www.bonhotels.com for more information.

## - srk consulting

#### **OPENBARE DEELNAMEPROSES**

Omgewingsimpakbepalingsproses (OIB) vir die Voorgestelde Tussentydse Oorgangbergingsfasiliteit vir Gebruikte Brandstof by Koeberg Kernkragsentrale SRK Projek No: 478317

U word hiermee in kennis gestel van die openbare deelnameproses in terme van die Wet op Nasionale Omgewingsbestuur, 1998, en die Omgewingsimpakbepalings (OIB) Regulasies van 2014.

Beskrywing van projek: Eskom beoog om 'n Tussentydse Oorgang-bergingfasiliteit (TOBF) te bou om gebruikte brandstof uit die reaktors, tydelik – vir die duur van die kragsentrale se bedryfsleeftyd – by die Koeberg Kernkragsentrale (KKKS) te berg om die voortgesette bedryf van KKKS te verseker.

Ligging: die voorgestelde TOBF sal op vakante grond binne die KKKS Eienaar Beheerde Gebied gebou word.

ansoek vir Omgewingsgoedkeuring vir die volgende gelyste aktiwiteite: Lystingskennisgewing 1 (27) klaring van inheemse plantegroei; Lystingskennisgewing 2 (3) ontwikkeling vir kern aktiwiteite; en Lystingskennisgewing 3 (12) klaring van inheemse plantegroei.

Bykomend tot die Omgewingsgoedkeuring, word daar lisensiëring van die Nasionale Kernreguleerder ook vereis.

Geleentheid om deel te neem aan die Openbare Deelnameproses:
'n Agtergrondinligtingsdokument is beskikbaar by: Koeberg Openbare Biblioteek; Wesfleur Openbare Biblioteek; Kaapstad Openbare Biblioteek; Koeberg Besoekers Sentrum; die SRK kantoor in Rondebosch; en <a href="www.srk.co.za">www.srk.co.za</a> (via die 'Library' en 'Public Documents' skakels).

Belanghebbers is genooi om voorleggings te maak en/of te registreer op die projek databasis. Indien u as 'n belanghebber registreer, verstrek asseblief u naam, kontakbesonderhede (sluit in die voorkeurmetode vir kennisgewing, bv. e-pos) en 'n aanduiding van enige direkte belang – hetsy sake, finansieel, persoonlik of ander – in die aansoek. Voorleggings moet voor of op 9 November 2015 aan die kontakpersoon hieronder gestuur word. Wees bewus dat <u>slegs geregistreerde</u> belanghebbers in kennis gestel sal word van verdere vergarderings en geleenthede om voorleggings te maak op relevante dokumentasie.

'n **Opedag** om die voorgestelde projek te bespreek sal tussen 15:00 en 19:00 op Dinsdag, 27 Oktober 2015, by die Koeberg Besoekersentrum plaasvind. Belanghebbers is genooi om tussen enige van die bogenoemde tye die Opedag by te woon en u word gevra om u voorneme om die Opedag by te woon aan die kontakpersoon hieronder te bevestig. Bewys van identiteit word vereis vir toegang tot die KKKS gebied

Om kommentaar te lewer, registreer, of inligting te vra, kontak gerus: Jessica du Toit van SRK Consulting by jedutoit@srk.co.za; Postnet Suite #206, Privaatsak X18, Rondebosch, 7701; Faks: 021 685 7105; Tel: 021 659 3060.



#### STAKEHOLDER ENGAGEMENT PROCESS

Environmental Impact Assessment (EIA) for the Proposed Used Fuel Transient Interim Storage Facility at Koeberg Nuclear Power Station SRK Project No: 478317

Notice is hereby given of a stakeholder engagement process in terms of the National Environmental Management Act 107 of 1998 and the Environmental Impact Assessment (EIA) Regulations, 2014.

<u>Project description:</u> Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of used nuclear fuel from the reactors for the operational life of Koeberg Nuclear Power Station (KNPS), thereby ensuring the continued operation of KNPS.

Location: the proposed TISF will be constructed on vacant land within the KNPS Owner Controlled Area

Application for Environmental Authorisation (EA) to undertake the following activities:

Listing Notice 1: (27) clearance of indigenous vegetation;
Listing Notice 2: (3) development for nuclear activities; and
Listing Notice 3: (12) clearance of indigenous vegetation.

In addition to EA, licensing is also required from the National Nuclear Regulator.

Opportunity to participate:

A Background Information Document is available at: Koeberg Public Library; Wesfleur Public Library; Cape Town Public Library; Koeberg Visitors Centre; SRK's office in Rondebosch; and <a href="https://www.srk.co.za">www.srk.co.za</a> (via the 'Library' and 'Public Documents' links).

Stakeholders are invited to submit comments and/or register on the project database. Submissions from stakeholders must include their name, contact details (specifying the preferred method of notification, e.g. e-mail) and an indication of any direct business, financial, personal, or other interest which they have in the application, to the contact person below, by **9 November 2015**. Note that <u>only registered</u> stakeholders will be notified of future meetings and opportunities to provide comment on relevant

A **Public Open Day**, where the project will be discussed, will be held at the Koeberg Visitors Centre from 15:00 until 19:00 on Tuesday, 27 October 2015. Stakeholders are invited to attend the Open Day anytime between the above times, and are requested to **confirm their intention to attend the Open Day with the contact person below**. Proof of identity will be required for access to the KNPS site.

To submit comments, register, or request information, please contact: Jessica du Toit of SRK Consulting at jedutoit@srk.co.za; Postnet Suite #206, Private Bag X18, Rondebosch, 7701; Fax: 021 685 7105; Tel: 021 659 3060.





(Eskom

OPENBARE DEELNAMEPROSES ngsimpakbepalingsproses (OIB) vir die Voorgestelde Tussentydse rgingsfasiliteit vir Gebruikte Brandstof by Koeberg Kernkragsenti SIKP rbysk Na. 478317

U word hiermee in kennis gestel van die openbare deelnameproses in terme van die Wet op Nasionale Omgewingsbestuur, 1998, en die Omgewingsimpakbepalings (OIB) Regulasies van

Beskrywing van projek: Eskom beoog om 'n Tussentydse Oorgang-bergingfasiliteit (TOBF) te bou om gebruikte brandstof uit die reaktors, tydelik – vir die duur van die kragsentrale se bedryfsleeftyd – by die Koeberg (kernkragsentrale (KKKS) te berg om die voortgesette bedryfvan KKKS te verseker. Ligging: die voorgestelde TOBF saf op vakante grond binne die KKKS Eienaar Beheerde Gebied gebou word.

- Aansoek vir Omgewingsgoedkeuring vir die volgende gelyste aktiwiteite:

   Lystingskennisgewing 1 (27) klaring van inheemse plantegroei;

   Lystingskennisgewing 2 (3) ontwikkeling vir kern aktiwiteite; en

   Lystingskennisgewing 3 (12) klaring van inheemse plantegroei.

  Bykomend tot die Omgewingsgoedkeuring, word daar lisensiëring van die Nook vereis.

#### Geleentheid om deel te neem aan die Openbare Deelnameproses

Seisentinerio din dele in friemman di e Djerhoare Destinamptroses. 

"Agtergrondinifiglingsdokument is besikkhaar by Koeberg Openhare Biblioteek; Wesfleur Open Biblioteek; Kaapstad Openhare Biblioteek; Koeberg Besoekers Sentrum; die SRK kantoo Rondebosch; en www.srk.co.zg (via die Library'en Public Douments' skakelt.

Belanghebbers is genooi om voorleggings te maak en/of te registreer op die projek databasis. Indien uas 'n belanghebber registreer, verstrek assebilert u naam, kontakbesonderhede (sluit in die voorkeurmetode wir kennisgewing, by e-pos je n'n sandrulding van en/og direkte belang- hetsy saks, finansiele presure wir kennisgewing, by e-pos je n'n sandrulding van en/og direkte belang- hetsy saks, finansiele presure of ander – in die aansoek. Voorleggings moet voor of op 9 November 2015 aan die kontakpersoon hieronder gestuur word. Wees bewus dat <u>slegs geregistreerds</u> belanghebbers in kennis gestel sal word van verdere vergarderings en geleenthede om voorleggings te maak op relevante dokumentaale.

Opedag om die voorgestelde projek te bespreek sal tussen 15:00 en 19:00 op Dinsdag, 27 Oktober 2015, by die Koeberg Besoekersenfrum plaaswind. Belanghebbers is genooi om tussen enige van die bogenoemde tye die Opedag by te woon en u word gevra om u voormeme om die Opedag by te woon aan die kontakpersoon hieronder te bevestig. Bewys van identiteit word vereis vir loegang tot die KKKS gebied.

Om kommentaar te lewer, registreer, of inligting te vra, kontak gerus: Jessica du Toit van SRK Consulfing by <u>ied.tolit@ark.co.za</u>; Postnet Suite #206, Privastsak X18, Rondebosch, 7701; Faks: 021 685 1705, Tel: 021 685 9360.

workshop at Atlantis Beacon Hill Church to introduce local enterpreneurs to the company's Enterprise Development programme Building business skills is one of the major challenges small business own-ers face, said Kamil Gihwala, area sales manager. Enterprise development is an integral part of fos-tering and develop-ing black small, medium and micro enterprises. Business plans, cash flow, licences, permits, registration regulations and the documents required to start and/or register a new business are emphasised in these wor-

shops. PHOTO:

MONICA HERNE

# Championing renewable energy

Thanks to the Department of Energy's Renewable Energy Independent Power Producers Procurement Programme (REIPPPP), four men also succeeded in bringing added benefits to the indus-

They are young, dynamic and are already enriching the renewable energy industry.

Obakeng Moloabi, Gqi Raoleka, Fumani Mthembi, Boipelo Moloabi and Thapelo Motlogeloa started Pele Green Energy (PGE) in 2009. They have backgrounds in the financial service sector but left the corporate world to start social development enterprises, focusing on youth upliftment. Obakeng Moloabi explains: "Having gone to good schools and been given fantastic opportunities in the corporate sector, we wanted to assist those who may have been very bright, but didn't receive the same opportunities we did.

Their strong social development model unexpectedly introduced them to the ener-

They encountered international energy companies that needed to offset carbon footprints and wanted developing projects to help unlock the concept of carbon credits in South Africa and the rest of the conti-

These companies used PGE's social development programmes to help access the carbon credits they needed. Gaining a better understanding of the energy value chain, the PGE team realised their com-bined expertise could pave their way in entering the industry as energy providers, and then looked for off-grid energy projects in which to invest while still learning the business

PGE collaborated with companies that were initiating green energy projects with local municipalities through processing landfill gas.

'We were encountering problems of bankability, had a very small customer base to sell power to, and the cost of renewable energy was too prohibitive to sell to intensive energy users such as mines and large factories," says Raoleka. That all changed in 2011 when the De-

partment of Energy announced the launch of the REIPPPP, giving PGE the opportunity to move into the national green energy sphere. "REIPPPP gave us the opportunity to produce electricity for the national grid," explains Mthembi, "and it was rather fortuitous that all the elements which we had been developing in our business,

such as our social enterprise development programme and our landfill gas projects, fitted perfectly into the REIPPP's green energy proposition.

Since the inception of the REIPPPP programme, PGE has won bids on seven renewable energy projects. Each PGE renewable energy project also has a local community shareholding, the largest be-

The company is also involved in engineering, procurement, operations and maintenance on three other solar and wind projects.

PGE is one of several companies in the Pele Energy Group. The other subsidiaries within the Group are Pele Natural Energy, with a natural gas-to-power project in Mozambique, and Knowledge Pele -PEG's social development subsidiary -which provides research and development services to more than 10 renewable energy projects in South Africa. Mthembi says Knowledge Pele is filling a gap in the renewable energy sector.

"While the energy sector has strong ca-pabilities in technical and financial aspects, the economic development aspects are not well understood," she says, "especially by our international partners, and this is where Knowledge Pele is making

"We use our professional expertise and scientifically grounded development programs to ensure the needs of communities that surround our plants are met, and that their aspirations and community assets become visible.

"We're passionate about economic par-ticipation and would like to see underprivileged areas becoming productive economic hubs, which they have traditionally not been." She adds that the company is looking to invest in community-based industrial opportunities that absorb a semiskilled labor force, and provide opportuni-ties for the community to create sustainable businesses around the anchor industry - business that will outlive the life of the

'We feel that industries that plug into the renewable energy sector are a good bet, as it's a growth sector on the continent and therefore offers a long-term supply chain," she comments. Raoleka adds that the Department of Energy's IPP office has created a platform for entities like PGE to embark on the journey of becoming majority shareholders, through the Small Projects REIPPPP, with the aim of creating a strong local IPP industry

juwi Renewable Energies (Pty) Ltd is 'n algehele diens projek ontwikkelaar en 'n filiaal van die die juwi Groep, een van die wereld se voorloper maatskappye in hernubare energie produksie. Ons visie is om 100% skoon energie te verskaf, versekering van konstante krag verskaffing en onafhanklikheid van wisselvallige energie invoere. Ons fokus is op die wind- en son-energie sektore in Suid-Afrika en het geweldige groei gewys sedert ons begin hier in 2010.

#### **O&M SONAANLEG TOESIGHOUER**

In jou kapasiteit as O&M (Operations and Maintenance) Toesighouer, sal jy verantwoordelik wees vir die monitering en uitvoering van die onderhoud en bedryf van die aanleg.

#### Primêre Verantwoordelikhede

- Verseker dat alle onderhoud en bedryf aktiwiteite uitgevoer sal word in ooreenstemming met die maatskappy se doelwitte en mikpunte
- Uitvoering van alle administratiewe vereistes insluitend SHE (Safety, Health and Environment) verpligtinge
- Samestelling en indiening van verslae
- Samestelling en indiening van verslae Monitering van die aanleg dmv MeteoControl Uitvoering van gereelde inspeksies Foutsporing van alle PV toerusting Alle onderhoud en herstel van PV toerusting Uitvoering van alle geskeduleerde dienste

- Skoonmaak en onderhoud van gereedskap en toerusting

#### Kwalifikasies, Ondervinding en Persoonlike Eienskappe

- N3 Flektries of hoër kwalifikasie
- N3 Elektries of hoër kwalifikasie
  Ondervinding in Elektriese en Meganiese onderhoud
  Vorige werksondervinding op sonaanlegte in verkieslik die konstruksie fase sal n aanbeveling wees
  Rekenaar geletterdheid MS Office
  Goeie administratiewe vaardighede
  Bereidwilligheid om skofte/oortyd te werk indien nodig

- Liggaamlik fiks en gesond om in uiterste weerstoestande te werk
- Engels en Afrikaans taalmagtig wees Geldige bestuurs lisensie (Kode 8)

#### Ander Vereistes en Voorkeure

- Aansoeker moet in besit wees van 'n Suid Afrikaanse Identiteitsdokument
- Aansoeker moet 'n lokale inwoner (binne 'n radius van 50km) van Malmesbury wees bewys van adres moet beskikbaar wees met die onderhoud
- Voorkeur sal gegee word aan kandidate wat reeds vorige sonaanleg werksondervinding het

#### Sluitingsdatum vir aansoel

#### Aanvangsdatum

Om aansoek te doen, stuur asb jou aansoek dmv epos na career@juwi.co.za, insluitend 'n dekbrief, volledige CV en geloofsbriewe (betreffende skool, universiteit, werk, ens) asook jou salaris verwagting. Skryf asseblief die pos beskrywing titel in die epos Onderwerp lyn. juwi

Ons sien uit na jou energie!!

## Your online presence can make or break your business

#### MONICA HERNE

Is your online presence a strong deterrent to investors, or a drawcard?

At a recent Engen Pitch & Polish workshop, Jodi Lynn Karpes from Greenqueen was hoping to make entrepreneurs understand the importance of portraying themselves in a presentable manner on social network pages

"Living in the digital age means that as an entrepreneur you have a footprint that extends beyond your business card, CV and business as-pirations," she told business people.
"This footprint includes your so-

cial media presence on sites such as Facebook, Twitter and LinkedIn."

Karpes knows that potential investors are looking at your online story to gain insight into your character, authenticity and to see the bigger picture.

"Your online profile could make or break an opportunity for you," she added. The En-gen Pitch & Polish annual programme, now in its sixth year, is designed to help entrepre-neurs polish their pitch to understand their business, know the numbers and gain investor confidence.



Business incubator Raizcorp, sponsor Engen Petroleum Ltd, the QuadPara Association of South Africa, national media partner SAfm, as well as local stakeholders False Bay College, NYDA, TSiBA, LaunchLab and IN-VE Business Consultants would like to see entrepreneurs access funding based on their ability to express their businesses or business ideas effectively.

# Abafazi bafumana iinkonzo zocwangciso kufuphi

bafumane uncedo lwekliniki yocwangciso nozalo abafazi base Joe Slovo Park bekulindeleke ukuba bahlawule iR20 kwizithuthi zikawonke wonke besiya eAlbow Gardens Clinic e Milnerton. Ukunqongophala kwemali bekuye

kuthethe ukuba bambi abaphumeleli ukutyelela lekliniki. Kodwa ke okuvuyisayo kukuba kuvulwe ikliniki ekufuphi yi City of Cape Town. Lekliniki yenziwe kwi khonteyna kwaye izisa inkonzo ebaluleke gqitha eluntwini lwasethyini - onkoliso yalo ixhomekeke kuheke wokondla abantwana.

"Asinayo imali yokuya e- Albow Gardens Clinic e Milnerton.Ngoku sivuya gqitha kukuvulwa kwalekliniki ecaleni kwezindlu zethu, siya ngenyawo naxeshaliphi," utsho uPheliswa Msaseni (31) ngethuba ezise intwanazana yakhe enyanga zili-18 ekliniki ukuze iholwe. UMsaseni njengentlaninge yamanina alapha e Joe Slovo inkoliso yabo ilulutsha ibithatha uhambo olutyabula iR20 besiya e- Albow Gardens Clinic ukuze bafumane iinkonzo ezifana nokucwangcisa nokuvikela ezisulelwa zintlobano zesini.

Uthi bavuyiswa kakhulu kukufumana ezinkonzo kufuphi kangaka, kwaye bezifumana mahala.

"Ikufuphi kakhulu kwindawo endihlala kuyo," ungqinile u- Olwethu Nhose (25) obequqa eMilnerton esuya kuncuntsa inaliti yovalo-zalo.

Bayincome kakhulu indlela ekusetyenzwa ngayo ngaphakthi kule khonteyna ngabongikazi.

"Asilindi thuba lide, kwaye ukuba ugulelwa ngumntwana ukhawuleza afumane unyango," ulebele ngelitshoyo u-Olwethu.

Noo tata imbala bayavuya kukufika kwalekliniki kuba ngoku abasarholi mali yokukhwela iteksi.

"Kungcono kakhulu kuba ngoku songa imali kwaye wonke umfazana nentombi unethuba lokufumana uncedo olukufuphi.," uKhayalethu Dyani oyinkokheli yokuhlala elizwe ngabantwana abahlanu.

Kodwa lo ka Dyani uhlabe ikhwelo kwi Sixeko se Kapa ukubasakhe ikliniki ekumgangatho ophezulu kuba esithi lekhonteyna incinci.Ehlabela mgama ucele nokuba kwandiswe amaxesha okusebenza kwalekhonteyna nanjengoko ivulwa ngoMvulo ukusuka ngo 10am ukuya kuthi ga ngeyesithathu. "Abafazana bayathanda ukusebenzisa lekliniki, bathanda gqitha," uDyani utshilo.

IsiXeko seKapa sivuyile sakuva



NAMADODA ngokwawo akuvuyele ukuvulwa kwekliniki ekwikhonteyna eJoe Slovo Park eMilnerton. Inkokheli yokuhlala uKhayalethu Dyani ofotiweyo uncumele intatheli yeso Isolabantu ngovuyo. Uthi ukuvulwa kwalekliniki kuluncedo olungathethekiyo eluntwini - abafazana bazakufumana ithuba lokucwangcisa. PHOTO. PETER LUHANGA.

izincomo ezivela eluntwini.

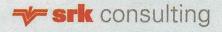
"Kuhle ukuva ukubona uluntu luvuyela umhlaba esinokuthi siwuthenge size inkonzo eziswa siSixeko seKapa. Lento sibeke le khonteyna kuwo," uMamkeli ibangela abasebenzi bafune ukwenza ngakumbi," uSiyabulela Mamkeli onguceba okwikomiti kasodolophu ejongene nezempilo.

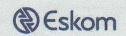
Malunga nesicelo sokwakhiwa kwekliniki enkulwana uMamkeli uthe ngelishwa abakwazi ukwenza njalo ngoku ngenxa yebhajeti engavumiyo.

"Kwalomhlaba ikhonteyna eme kuwo asingowethu, ntoleyo ibangela kubenzima

ukwenza uphuculo kuyo. Sisakhangela utshilo.

INTATHELI YETHU





#### INKQUBO YONXULUMANO NOLUNTU OLUCHAPHAZELEKAYO Uvavanyo Lokuchaphazeleka Kwendalo (EIA) lwesakhiwo esicetywayo sokugcina amafutha asetyenzisiweyo eNyukliya kwiSitishi sombane weNyukliya saseKoeberg

SRK Project No: 478317

Esi sisaziso ngenkqubo yonxulumano noluntu oluchaphazelekayo, ngokugunyaziswe nguMthetho we107 kaZwelonke Wokuphathwa Kwendalo Nokusingqongileyo wonyak ka 1998 (National Environmental Management Act 107 of 1998) kwakunye neMigaqo yonyaka ka 2014 yoVavanyo Lokuchaphazeleka Kwendalo (EIA).

Inkcazelo ngeliphulo: UEskom uceba ukwakha Isakhiwo Sethutyana Sokugcina amafutha asetyenzisiweyo enyukliya aphuma kwi-reactor. Esi sakhiwo sicetywayo siyakuthi sisetyenziswe ukugcina la malahle side sifikelele ekupheleni kokusebenza kwaso isitishi senyukliya zaseKoeberg. Ukwakhiwa kwesi sakhiwo kuza kuthi kuncede ukuba siqhubekeke sisebenza esi sitishi sombane wenyukliva

Indawo yesakhiwo: esi sakhiwo sicetywayo siyakuthi sakhiwe kwisiza esingakhiwanga esikwaphakathi kumhlaba wesitishi saseKoeberg.

Isicelo seMvume Yezendalo Nokusingqongileyo (Environmental Authorisation - EA) yokuthabatha ezi

zicwangciso zilandelayo: Isicelo 1: (27) ukususwa kwezityalo zendalo

Isicelo 2: (3) ukwenziwa kwemisebenzi enxulumene nenyukliya; kwakunye

Isicelo 3: (12) nokususwa kwezityalo zendalo

Nxalenye nesicelo seEA, imvume izakucelwa naKubalawuli beNyukliya kuZwelonke (NNR).

Ithuba lokuzibandakanya:

UXwebhu Oluqulethe linkcukacha luyafumaneka kula mathala eencwadi alandelayo: Ithala lencwadi laseKoeberg, ithala le ncwadi laseWesfleur, ithala le ncwadi laseKapa; ukanti likwa fumaneka nakwezindawo zilandelayo – Koeberg Vistors Centre, kwi ofisi zenkampani yakwaSRK eziseRondebosch, kwakunye nakwi website yakwaSRK ethi www.srk.co.za (uye kwiphepha elithe 'Library' ne 'Public Documents')

Uluntu oluchaphazelekayo luyacelwa ukuba lufake izimvo zalo okanye lubhalise kuLuhlu LweNkcukacha zeliphulo (project database). Izimvo ezisuka kuluntu oluchaphazelekayo kufuneka ziquke igama lomntu, inkcukacha zokuqhakamshelana nomntu lowo (xela ukuba ukhetha ukwaziswa njani na, umzekelo - email) kwaye uxele ukuba ngaba uneshishini elichaphazelekayo kusini na kweli phulo, okanye uchaphazeleka wena isiqu sakho, kwaye xela nayiphi na enye indlela ochaphazeleka ngayo kwesi sicelo. Izimvo zoluntu oluchaphazelekayo kufuneka zithunyelwe kuJessica du Toit, iinkcukacha zakhe zibhaliwe ngezantsi, kwaye kufuneka zifike kuye ngomhla we 9 kuNovember 2015. Qaphela ukuba ngabantu ababhalisileyo bodwa abayakuthi baziswe ngeentlanganiso ezilandelayo kwakunye namanye amathuba okufaka

Imini Evulelwe Umntu Wonke, apho kuzakuthi kuchazwe ngokubanzi ngeliphulo, iyakuthi ibekho ngoLwesibini umhla we27 October 2015, ibanjelwa eKoeberg Visitors Centre ngentsimbi yeSithathu ukuya kweyeSixhenxe malanga. Uluntu oluchaphazelekayo luyacelwa ukuba luzimase olusuku nangaliphi na ixesha phakathi kwa la achazwe ngentia. kwaye luyacelwa ka nanjalo ukuba lwazise uJessica du Toit ngesicwangciso sokuzimasa olusuku. Nceda uphathe isazisi sakho nje ngoba sizakufunwa phambi kokuba ungeniswe kumasango esikhululo sombane

<u>Ukufaka izimvo, ukubhalisa okanye ukucela iinkcukacha ezithe vetshe! Nceda uqhakamshelane no:</u>
Jessica du Toit waseSRK Consulting ku – jedutoit@srk.co.za; Postnet Suite #206, Private Bag X18, Rondebosch, 7701; Fax: 021 685 7105; Tel: 021 659 3060.



### Redaksioneel / Editorial

### 65 DAYS AND **COUNTING DOWN...**

t's official - the silly season has arrived. You can see some of the signs everywhere. I saw the first advertisement for Christmas on TV, and now the other day I could swear I heard a Boney M song being played somewhere in my neighbourhood. And then it struck me how 2015 will soon be nothing but a distant memory. Scary how time flies, and despite the old adage that time normally flies when you are having fun, 2015 was surely not just fun. In fact, economist is describing 2015 as one of the worst years for the world's economy and that of South Africa.

Om alles te kroon is 2015 ook een van die droogste jare in 'n lank tyd. Wat vir Jan Alleman net een ding gaan beteken - hoër kospryse! Ons rapporteer hierdie maand oor die plaaslike misdaad statistieke en dit lyk ook nie te waffers nie. Ons artikel oor Internasionale dag vir ouer persone op bladsy 4 herinner ons daaran om dalk 'n bietjie meer tyd te spandeer om diesulkes wat hierdie land help bou het, te waardeer en vir 'n oomlik te dink oor waar ons sou wees sonder ons voorgeslag. Ten spyte van soveel negatiwiteit moet ons nooit vergeet om ons seëninge te tel nie. Maak 'n punt daarvan om te soek na die goeie, die mooi, die interressante en dit wat werd is om gevier te word.

Daar is net so bietjie meer as sestig dae van 2015 oor, - let's make it count!

Groete tot volgende maand!

### Peter Lategan

#### **Psychologist** counseling Sielkundige **Voorligting** PR8630453

ATLANTIS TOWN CENTRE Wesfleur Privaatkliniek (MED24)

MELKBOSSTRAND

Janel van Vliet M.A. SIELK. B.A. Honn. SIELK. B. Com. BSIELK



TEL: 021 572 0088 For all your wedding gowns, matric ball & prom night dress, gala-evening gowns, mini brides dresses, bridesmaids, mens & boys suits.

Whatever your event, we have the outfit to suit you best! Special rates on matric ball & prom night dresses Come visit us at shop LS03, Atlantis shopping mall



Nicole Greef

Roxxanne Pretorius



Layout Designer Dermot Petersen

# Another entrepreneurship hub open its doors

PETER LUHANGA

skom and the South African ManufacturingTechnology Demonstration Centre (SMTDC) unveiled a brand new entrepreneurship incubator in Atlantis at the end of September.

The facility - situated in Tom Henshilwood Street, Atlantis Industria - has been funded by Eskom and the Department of Trade and Industry. The aim is to boost business and successful enterprises. The manufacturing demonstration centre's Chief Executive Officer, Cornelius Scheepers, told IMPACT NEWS that the incubator will provide a one-stop-shop approach for potential entrepreneurs to turn projects into profitable businesses. He said it will cater for promising entrepreneurs all around the mother city. "Our aim is to train 100 entrepreneurs a year and we are targeting individuals and enterprises that are serious about making their businesses successful". The centre will be opened as soon as the city has issued an occupying certificate, which has delayed the opening. Scheepers said the facility will be equipped with the latest manufacturing equipment to assist selected entrepreneurs in making their business a success. He said interested business people and enterprises will have to apply and will be screened in order to select people and enterprises that are likely to succeed in their business. The focus is the manufacturing of renewable energy, but other businesses that fall outside the renewable energy spectrum, will also be assessed to determine what they offer.



PLACE OF OPPORTUNITY: Eskom's Lewis Phidza and Cornelius Scheepers (right) at the unveiling of its entrepreneurship incubator in Atlantis.

He said training will be provided for free of charge, but once business start producing revenue using the resources at the facility, they will start paying in order to sustain the centre. Koeberg Power Station stakeholder management manager, Lewis Phidza, said they provided seed funding for the facility in order to assist entrepreneurs. "Once the entrepreneurs were trained and start manufacturing products, Eskom will consume some of their products. Through our tendering process entrepreneurs can tender on products that Eskom can consume. It's a good opportunity for them and they should grab it with both hands" said Phidza. He said while the target is the entire province, the main identified beneficiaries of the incubator were people from Atlantis, Pella, Mamre, Darling and Dunoon, they should use the centre to their advantage.

# waarsku oor bedrog

ie Stad Kaapstad is tans besig om voorvalle te ondersoek waar begunstigdes wat kwalifiseer vir 'n gesubsidieerde behuisingsgeleentheid, na bewering uit hulle eiendom geswendel word.

In 'n onlangse mediaverklaring het die Stad gesê dat 'n persoon wie kwalifiseer in terme van die nasionale kriteria, nie geld moet betaal aan enigiemand om op die behuising databasis geplaas word of om 'n eiendom te ontvang nie. Hierdie koste word deur die Stad gedra. Hulle doen 'n beroep op begunstigdes om verkalrings te maak by hul naaste polisiekantoor sodat die saak ondersoek kan word. "Ons kan nie toelaat dat hierdie misdadigers wegkom hiermee nie. Ongelukkig teiken hulle ons mees kwesbare en desperate inwoners, "lui die verklaring. Inwoners kan ook die Stad se Bedrog Hulplyn kontak op 0800 32 31 30. Voorbeelde van behuising swendelary sluit in:

- wettige begunstigdes betaal om op die amptelike Behuising databasis geplaas te
- wettige begunstigdes betaal om op 'n gesubsidieerde behuising eenheid (RDP huis) of gedienste erf te ontvang
- die 'verkoop' eenhede, huise of gedienste erwe wat aan die stad behoort
- die onwettige 'koop' van HOP-huise

"Ons kan slegs bedrog stop as ons almal saamwerk," het die menslike Burgemeesterskomiteelid vir nedersettings, Raadslid Benedicta van Minnen aangevoer.

# **ENTRAL MEAT**

MAMRE Tel: 021 576 1715 ATLANTIS Markstreet behind Solly Garage Tel: 021 572 8819 CENTRAL MEAT Atlantis City Mall Tel: 021 572 9075







PRICES VALID TILL SUNDAY INOVEMBER



ENTRAL MEAT

### JUST STARTED YOUR OWN BUSINESS? IMPACT **NEWS IS THE BEST LOCAL ADVERTISING OPTION.** CALL PETER ON 082 4393 023

srk consulting



## STAKEHOLDER ENGAGEMENT PROCESS

Environmental Impact Assessment (EIA) for the Proposed Used Fuel Transient Interim Storage Facility at Koeberg Nuclear Power Station

SRK Project No: 478317

Notice is hereby given of a stakeholder engagement process in terms of the National Environmental Management Act 107 of 1998 and the Environmental Impact Assessment (EIA) Regulations, 2014.

**Project description**: Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of used nuclear fuel from the reactors for the operational life of Koeberg Nuclear Power Station (KNPS), thereby ensuring the continued operation of KNPS.

Location: the proposed TISF will be constructed on vacant land within the KNPS Owner Controlled Area.

Application for Environmental Authorisation (EA) to undertake the following

activities:

Listing Notice 1: (27) clearance of indigenous vegetation;

Listing Notice 2: (3) development for nuclear activities; and

Listing Notice 3: (12) clearance of indigenous vegetation.

In addition to EA, licensing is also required from the National Nuclear Regulator.

Opportunity to participate:

A Background Information Document is available at: Koeberg Public Library; Wesfleur Public Library; Cape Town Public Library; Koeberg Visitors Centre; SRK's office in Rondebosch; and www.srk.co.za (via the 'Library' and 'Public Documents' links). Stakeholders are invited to submit comments and/or register on the project database. Submissions from stakeholders must include their name, contact database. Submissions from stakeholders must include their name, contact leading the preferred method of notification. project database. Submissions from stakeholders must include their name, contact details (specifying the preferred method of notification, e.g. e-mail) and a indication of any direct business, financial, personal, or other interest which they have in the application, to the contact person below, by **9 November 2015.** Note that only registered stakeholders will be notified of future meetings and opportunities to provide comment on relevant documentation.

A **Public Open Day,** where the project will be discussed, will be held at the Koeberg Visitors Centre from 15:00 until 19:00 on Tuesday, 27 October 2015. Stakeholders are invited to attend the Open Day any time between the above times, and are requested to **confirm their intention to attend the Open Day with the contact person below.** Proof of identity will be required for access to the KNPS site.

To submit comments, register, or request information, please contact: Jessica du Toit of SRK Consulting at jedutoit@srk.co.za; Postnet Suite #206, Private Bag X18, Rondebosch, 7701; Fax: 021 685 7105; Tel: 021 659 3060.

peter@impact247.co.za 021 5722 054 or 082 4393 023

Peter Luhanga

Physical Address Corner of Reygersdal Drive & Magnolia Street, Protea Park , Atlantis

> Publisher Impact Unlimited Media & Communication

#### DISCLAIMER

Impact News subscribes to the South African Press Code that prescribes news that is truthful, accurate, fair and balanced. If we don't live up to the standards set in the Code, please contact the Public Advocate in the Press Council at 011 484 3612/8 or fax: 011 4843619.

The views and opinions of all contributors, writers and columnist are not necessarily that of the publishers, editor or employees. While we take every reason able precaution to deal with only ethical advertisers, neither Impact News nor its publishers, editor or employees are responsible for any loss, harm or damage aris-

ing out of or contributed by as a

result of any transaction entered into pursuant to any advertisement, advertorial or classified advertisement appearing in this publication.

Impact News reserves the right the right to vary, alter or omit any advertisement and will not be held liable for any failure to

Atlantis, Mamre, Melkbosstrand, Duynefontein, Darling, Pella, Philadelphia, Witsand and surrounding farming

communities









#### Status of the units

**Unit 1:** 99.40% - 970MW **Risk rating:** green **Sent out:** 930MW

Unit 2: Outage 221 – Day 58 Risk rating: yellow Unit 9: Risk rating: green

Total sent out: 930MW Seawater temperature: 12.3°C

**Duty work controller** 

Romeo Stigling - tel. 3162

**Duty ALARA SRPA** 

Poen Ellis - tel. 4400

#### Baby boom

The OCC would like to congratulate **Cameron** and **Jill Fredericks** on the birth of their twin sons (Matthew and Zachary) yesterday, 26 October 2015. Mom and babies are doing well.



#### WiN Committee - congratulations!

It is with great pleasure that we announce the new WiN Koeberg committee and extend a heartfelt thank you to all the ladies who voted. The candidates were nominated and chosen by the ladies in the KOU and nominations were sent to the NNR. Congratulations to Noloyiso Mtoko, the new WiN Chairperson and the new committee. We wish you every success in taking Women in Nuclear to new heights. The new committee members are:

Roeberg win Committee	Megawatt Park Win Committee
Noloyiso Mtoko (Chairperson)	<ul> <li>Boitumelo Hollo ( Chairperson</li> </ul>
Naomi Mokoto	and the board representative)
Crystal Robinson	<ul> <li>Nonhlanhla Mokoena</li> </ul>
Kiran Vajja	<ul> <li>Sebenzile Magagula</li> </ul>

Mpfeni Mapholi

Ntsoaki Tlape

Welcome and congratulations!

Darcelle Schouw
Outgoing WiN Chairperson

#### Who's where?

**Tactical Procurement** and **Materials Management** will be away from the office from 10:30 until 12:30 tomorrow, 28 October 2015. For any emergencies, please contact Paul Erasmus (Tactical Procurement) at tel. 5267 or Michael Zatu (Materials Management) at tel. 2769.

#### Heads up

In an effort to encourage **good safety practices**, and to prevent serious injuries and fatalities, a system has been implemented at the OCC that will help everyone working at Koeberg, to raise near misses quickly and effectively during Outage 221. All you have to do is contact the OCC Hotline (tel. 4903), and provide the details. All information received will be sent to OH&S, who will complete the Flash Reports on your behalf.



## Hand safety Importance of wearing gloves

- Your hands are your wage-earners. Hands are hurt more often than any other part of the body. Hand injuries don't have to occur. As talented as your hands are, they can't think, they're your servants, and it is your responsibility to keep them out of trouble.
- Be sure you wear the right kind of gloves for the particular kind of work you are doing.



- When you wear gloves, you're not taking unnecessary chances.
- Wear gloves when you are doing a job that requires it, but not around moving machinery.
- Time spent in preparing your hands for the job, will not only save you trouble, you but will probably save you time in doing the job.

Chose alternative methods to get the job done where there may be

a potential for your hands to be trapped in or under anything.

**Fundamental:** know the hazards of chemicals and comply with the chemical MSDs requirements.

Occupational Hygiene and Safety

#### **Public Open Day**

Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of dry casks at Koeberg Nuclear Power Station (KNPS). The purpose for it is to accommodate used nuclear fuel from the reactors for the operational life of the power station. A Public Open Day will be held at the Koeberg Visitors Centre, today, 27 October 2015 from 15:00 until 19:00.



Stakeholders are invited to attend the Open Day anytime between the above-mentioned times, and are requested to confirm their intention to attend the Open Day with the contact person below. Proof of identity will be required for access to the Koeberg site. To submit comments, register, or request further information, please contact: Jessica du Toit of SRK Consulting at <a href="jedutoit@srk.co.za">jedutoit@srk.co.za</a>: Postnet Suite #206, Private Bag X18, Rondebosch, 7701; Fax: 021 685 7105; Tel: 021 659 3060. Also please note the following:

- The ACP 1 car park area will be reserved for the public for the Public Open Day.
- Note that Eskom staff do not need to RSVP, however their Eskom permit is required to gain access to the Koeberg Visitors Centre on the day.



# Appendix G: BID and I&AP Registration Form





#### **BACKGROUND INFORMATION DOCUMENT:**

## **Environmental Impact Assessment for the Proposed Used Fuel Transient Interim Storage Facility at Koeberg Nuclear Power Station**

SEPTEMBER 2015 SRK PROJECT NUMBER 478317

#### 1 INTRODUCTION

The Koeberg Operating Unit of Eskom (Eskom) proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of dry casks at the Koeberg Nuclear Power Station (KNPS) to accommodate used nuclear fuel from the reactors for the operational life of the power station, thereby ensuring the continued operation of KNPS (Figure 1).

SRK Consulting (South Africa) Pty Ltd (SRK) has been appointed by Eskom to undertake the Scoping and Environmental Impact Reporting (S&EIR, also referred to as Environmental Impact Assessment [EIA]) process required in terms of the National Environmental Management Act 107 of 1998, as amended (NEMA), and the EIA Regulations, 2014.

This Background Information Document aims to:

- Provide a brief motivation and description of the project;
- Briefly describe the affected environment;
- Describe what is involved in the EIA process; and
- Provide information on how you can participate.

See page *iv* for details on how you can participate in the process.



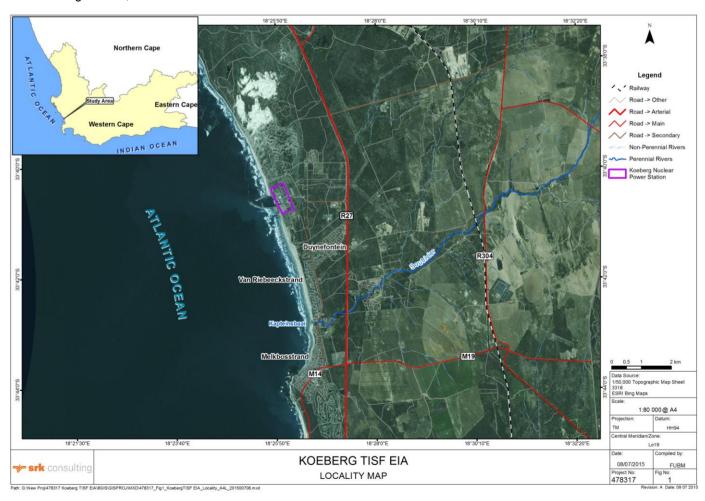


Figure 1: Locality Map

#### 2 PROJECT MOTIVATION AND DESCRIPTION

Used fuel assemblies from the nuclear reactors are stored in spent fuel pools (SFPs) within KNPS. These SFPs are nearing capacity and additional storage capacity is required to accommodate used fuel. KNPS Reactor Unit 1 and Reactor Unit 2 will have filled their SFPs by March 2018 and September 2018, respectively.

**Used fuel assemblies** are rods of nuclear fuel that have been irradiated in a nuclear reactor to the point where the fuel is no longer useful in sustaining a nuclear reaction. The used fuel assemblies are stored underwater in storage racks in **spent fuel pools**. Water cools the fuel and serves as an effective shield to protect workers in the fuel storage building from radiation (Eskom, 2015).

As the current SFPs are reaching their storage capacity, additional space will be created by moving used fuel from the SFPs into dry storage casks. This strategy forms part of Eskom's Koeberg Spent Fuel Storage Project, which is made up of three phases:

#### • Phase 1:

- Phase 1A: Procure seven dry storage metal casks to ensure the KNPS Reactor Units can operate beyond 2018 without reaching SFP capacity by removing some used fuel assemblies. These casks will be stored with four existing metal casks in the on-site Cask Storage Building (CSB).
- Phase 1B: Procure spent fuel inserts to regain blocked storage cells in the SFPs due to a checker-boarding arrangement.
- Phase 2: Procure approximately 40 additional dry storage casks to allow ongoing operation of KNPS.
- Phase 3: Construct the TISF for the storage of the casks procured in Phase 2.

The TISF will store the used fuel dry storage casks procured during Phase 2 of the Spent Fuel Storage Project.

Dry cask storage is a method of storing used fuel that has already been cooled the SFP. Casks are typically concrete or steel cylinders that either welded or bolted closed to provide leak-tight containment of the used fuel. The used fuel assemblies inside are surrounded by inert gas and each cylinder is surrounded by additional steel, concrete, or other material to provide radiation shielding to workers and members of the public (www.wikipedia.org).

This strategy assumes that a national offsite Central Interim Storage Facility (CISF) is unavailable for use by 2025. Due to the uncertainty of the development of the CISF, the TISF may be required up until the end of the expected operational life of KNPS.

The **Central Interim Storage Facility** is a proposed central storage facility for nuclear used fuel and waste. The establishment of the CISF is the responsibility of the National Radioactive Waste Disposal Institute.

The TISF will be constructed on vacant land within the KNPS Owner Controlled Area. The TISF is proposed to comprise of a concrete pad covering an area of approximately 12 800m² onto which up to 160 dry storage casks can be placed. The dry storage casks will be either metal or concrete casks. The TISF will be filled with casks in a modular manner. An auxiliary building to house ancillary equipment will be constructed within the TISF operational area. A secure perimeter fence, with controlled access, will surround the TISF. The TISF will meet the requirements of the National Nuclear Regulator (NNR) and will be built and managed according to International Atomic Energy Agency (IAEA) safety standards.

The KNPS Owner Controlled Area is a restricted area surrounding the reactor units to which only authorised personnel have access.

Construction of the TISF will commence in 2018 and will take approximately 12 months. The construction laydown area will be located within the proposed TISF operational area to reduce the disturbance footprint. Temporary site offices and a parking area for construction vehicles and equipment will be located in this area. The construction haul routes will use the existing KNPS internal road network.

The dry storage casks are proposed to accommodate used fuel assemblies removed from the reactor units and cooled in the SFPs. The cooling period of used fuel in the SFPs depends on the fuel characteristics and the cask design selected. The dry storage system is a passive system which is not reliant on human action or active components to maintain a suitable safety level. Heat generated from used fuel radioactive decay will dissipate through the external surfaces of the dry casks.

Used fuel assemblies will be loaded into casks at the reactor unit fuel buildings and transferred to the TISF in batches. The sequence of loading and transferring one dry storage cask to the TISF will take approximately 10 working days.

The TISF will be decommissioned in accordance with the KNPS decommissioning plan.

#### 3 PROJECT ALTERNATIVES

The EIA Regulations, 2014, require that all S&EIR processes must identify and describe feasible and reasonable alternatives.

Eskom identified six potential sites at Koeberg for the location of the TISF, which were evaluated against various criteria. The site selection process identified two viable site locations for the TISF (refer to Figure 2) - the CSB site, the preferred alternative (Alternative 1), and the Ekhaya site (Alternative 2). Alternative 1 is located adjacent to the CSB on the northern boundary of KNPS and Alternative 2 is located along the southern boundary of KNPS next to the Ekhaya Building.

The No Go alternative will be considered in the EIA in accordance with the requirements of the EIA Regulations, 2014. The No Go alternative entails no change to the *status quo*, in other words the proposed TISF will not be built.

#### 4 THE AFFECTED ENVIRONMENT

Koeberg is located on a sandy coastline of the West Coast, approximately 27 km north of the Cape Town CBD and 1.5 km north of the residential area of Duynefontein (Figure 3). KNPS is situated on Farm Duynefontyn No. 1552 and access to KNPS is via the R27 which runs along the property's eastern boundary.

The topography of the area is relatively flat with an active dunefield extending north of KNPS. A stabilised primary dune inland of KNPS screens much of the KNPS buildings although the two nuclear reactor units are prominent landmarks in the region.

The vegetation of the area consists of low coastal shrub (Cape Dune Strandveld and Atlantis Fynbos) up to 1.5 m high, typical of much of the West Coast. The Koeberg Nature Reserve, a 3000 ha reserve managed by the Koeberg Managing Authority, surrounds KNPS.

The TISF will be located within the KNPS Owner Controlled Area, on a flat area disturbed by previous construction activities when the reactor units were built and by current operational activities on site. There are no surface water features in close proximity to KNPS.



Figure 3: KNPS from Duynefontein residential area



Figure 2: Site Alternatives

#### 5 ENVIRONMENTAL PROCESS

The EIA Regulations, 2014, list certain activities that are considered potentially harmful to the environment and must undergo an EIA and be authorised by the competent authority before they can be undertaken. The construction of the TISF is likely to involve activities listed in Listing Notice 1 and 3 (requiring a Basic Assessment) and Listing Notice 2 (requiring a S&EIR process):

- · Listing Notice 1: Listed activity 27;
- Listing Notice 2: Listed activity 3; and
- · Listing Notice 3: Listed activity 12.

Before commencing with the project, Eskom is thus required to undertake a S&EIR process and to obtain authorisation in terms of NEMA from the National Department of Environmental Affairs (DEA). An overview of the S&EIR process proposed for this project is shown in Figure 4.

The aims of the S&EIR process are to:

- Notify stakeholders of the proposed development (and EIA process);
- Provide stakeholders with the opportunity to participate effectively in the process and identify relevant issues and concerns:
- Ensure that stakeholders' issues and concerns are addressed in the assessment and are accurately recorded and reflected in the Scoping and EIA Reports;
- Assess the potential positive and negative environmental impacts associated with the proposed activity; and
- Make recommendations as to how the potential negative impacts can be effectively mitigated and the benefits enhanced.

Consultation with the public and authorities forms a critical part of the S&EIR process and is intended to provide all stakeholders with opportunities to raise issues and concerns that should be addressed in the S&EIR process and to comment on the documentation submitted to DEA.

SRK plans to conduct a thorough consultation process that makes provision for public meetings as well as focus group meetings with directly affected stakeholders (if necessary) throughout the process.

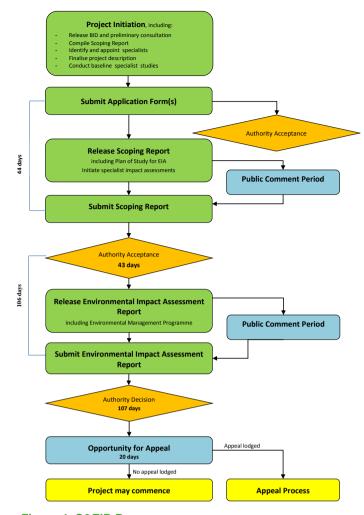


Figure 4: S&EIR Process

In addition to EA, licensing is also required from the NNR.

The **National Nuclear Regulator** is a public entity established and governed in terms of the National Nuclear Regulator Act 47 of 1999 to provide for the protection of persons, property and the environment against nuclear damage through the establishment of safety standards and regulatory practices (www.nnr.co.za).

#### HOW CAN YOU PARTICIPATE IN THE EIA PROCESS?

We value your input into the S&EIR process. If you or your organisation would like to be involved in the S&EIR process, please submit your contact details for registration as a stakeholder on our database. Relevant Organs of State will be automatically registered as stakeholders. According to the EIA Regulations, 2014, all other persons must request in writing to be placed on the register, submit written comments or attend meetings in order to be registered as stakeholders and be included in future communication for the project.

### REGISTER OR PROVIDE YOUR OPINION

Register or send written comment to:

Jessica du Toit SRK Consulting

Postnet Suite #206, Private Bag X18, Rondebosch, 7701

> Tel: + 27 21 659 3060 Fax: +27 21 685 7105

Email: jedutoit@srk.co.za

Please refer to the SRK project number in your submissions. If registering as a stakeholder, please provide your name, contact details (preferred method of notification, e.g. email), and an indication of any direct business, financial, personal or other interest in the application.

#### ATTEND A MEETING

SRK provides an opportunity for the public to engage with the team and ask questions about the project at a **Public Open Day**:

Venue: Koeberg Nuclear Power Station:

Visitors Centre

Date: Tuesday, 27 October 2015

Time: 15h00 to 19h00

The public are invited to view the information provided at any time during the advertised times and discuss the project with members of the project team.









#### AGTERGRONDINLIGTINGSDOKUMENT:

#### Omgewingsimpakbepaling vir die Voorgestelde Tussentydse Oorgangbergingsfasiliteit vir Gebruikte Brandstof by Koeberg Kernkragsentrale

SEPTEMBER 2015 SRK PROJEKNOMMER 478317

#### 1 INLEIDING

Eskom se Koeberg-bedryfseenheid beoog om 'n Tussentydse Oorgang-bergingfasiliteit (TOBF) te bou om droë vate, wat gebruikte brandstof uit die reaktors bevat, tydelik – vir die duur van die kragsentrale se bedryfsleeftyd – by die Koeberg Kernkragsentrale (KKKS) te berg om die voortgesette bedryf van KKKS te verseker (Figuur 1).

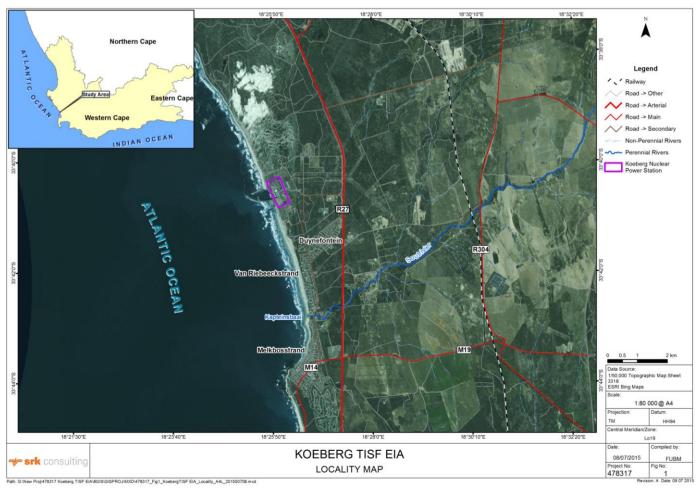
Eskom het SRK Consulting (Suid-Afrika) (Edms) Bpk (SRK) aangestel om die Omvangbepaling- en Omgewingsimpakverslaggewing (OB&OIV – ook die Omgewingsimpakbepalingsproses [OIB] genoem) te doen, wat kragtens die Wet op Nasionale Omgewingsbestuur, 1998 (Wet 107 van 1998) (NEMA), soos gewysig, en die OIB-regulasies van 2014 vereis word.

Hierdie Agtergrondinligtingsdokument (AID) poog om:

- 'n Kort motivering en beskrywing van die projek te verskaf;
- Die omgewing wat geraak word, kortliks te beskryf;
- Te beskryf wat die OIB-proses behels; en
- Inligting te verskaf oor hoe u kan deelneem.

As u aan die proses wil deelneem, verwys na bladsy *iv* vir besonderhede.





Figuur 1: Liggingsplan

#### 2 PROJEKMOTIVERING EN -BESKRYWING

KKKS berg gebruikte brandstofmontasies in gebruiktebrandstofbaddens (GBB's). Hierdie GBB's is besig om vol te raak, en addisionele bergingskapasiteit is nodig om gebruikte brandstof te berg. KKKS Reaktoreenheid 1 en Reaktoreenheid 2 se GBB's sal onderskeidelik teen Maart 2018 en September 2018 vol raak.

**Gebruiktebrandstofmontasies** is kernbrandstofstawe wat in 'n kernreaktor uitgestraal het totdat die brandstof nie meer gebruik kan word om 'n kernreaksie te veroorsaak nie. Die gebruiktebrandstofmontasies word in onderwaterrakke in **gebruiktebrandstofbaddens** geberg. Die water koel die brandstof af en dien as 'n doeltreffende skut om werkers in die brandstofstoor teen bestraling te beskerm (Eskom, 2015).

Aangesien die huidige GBB's besig is om vol te raak, sal bykomende ruimte geskep word deur gebruikte brandstof van die GBB's na droë bergingsvate te skuif. Hierdie strategie vorm deel van Eskom se Gebruikte Brandstof Bergingsprojek vir Koeberg, wat uit drie fases bestaan:

- Fase 1:
  - Fase 1A: Verkry sewe metaalvate vir droë berging om te verseker dat KKKS-reaktoreenhede deur die verwydering van gebruiktebrandstofmontasies ná 2018 aanhou werk sonder om GBB-kapasiteit te bereik. Hierdie vate sal saam met vier bestaande metaalvate in die Vatstoor op die perseel geberg word.
  - Fase 1B: Verkry gebruiktebrandstof-inlegsels om geblokkeerde bergingselle weens skaakbordpatroon in die GBB's te herwin.
- Fase 2: Verkry ongeveer 40 bykomende droë vate om deurlopende werking van KKKS te verseker.
- Fase 3: Bou die TBGB vir die berging van die vate wat in Fase 2 verkry is.

Die TOBF sal die droë bergingsvate wat tydens Fase 2 van die Gebruikte Brandstof Bergingsprojek verkry is, huisves.

Droëvatberging is 'n bergingsmetode om gebruikte brandstof te stoor wat reeds in die GBB afgekoel het. Die vate is gewoonlik beton- of staalsilinders wat toegesweis of toegebout word om lekvrye berging van die gebruikte brandstof te verseker. Die gebruiktebrandstofmontasies word deur onaktiewe gas omring, en elke silinder word deur bykomende staal, beton of ander materiaal bedek om werkers en lede van die publiek teen bestraling te beskut (www.wikipedia.org).

Hierdie strategie veronderstel dat daar nie teen 2025 'n nasionale Sentrale Tussentydse Bergingsfasiliteit (STBF) beskikbaar sal wees nie. Weens onsekerheid oor die ontwikkeling van die STBF, kan die TOBF moontlik vir die duur van KKKS se verwagte bedryfsleeftyd nodig wees.

Die **Sentrale Tussentydse Bergingsfasiliteit** is 'n voorgestelde sentrale bergingsgerief vir gebruikte kernbrandstof en -afval. Die totstandkoming van die STBF is die verantwoordelikheid van die Nasionale Radioaktiewe Afval Wegdoeningsinstituut.

Die TOBF sal op vakante grond binne die KKKS Eienaar Beheerde Gebied gebou word. Die voorstel is dat die TOBF uit 'n betonblad van ongeveer 12 800m² sal bestaan wat as staanplek vir tot 160 droë bergingsvate kan dien. Die droë bergingsvate sal óf uit metaal óf uit beton bestaan. Die vate sal modulêr op die TOBF geplaas word. 'n Gebou om aanvullende toerusting te huisves sal binne die operasionele gebied van die TOBF gebou word. Die TOBF sal 'n sekerheidsheining met toegangsbeheer hê. Die TOBF sal aan die Nasionale Kernregulator (NKR) se vereistes voldoen, en sal volgens die Internasionale Atoomenergie-agentskap (IAEA) se veiligheidstandaarde gebou en bestuur word.

Die KKKS Eienaar Beheerde Gebied is 'n beheerde gebied rondom die reaktoreenhede waar slegs gemagtigde personeel toegelaat word.

Bouwerk aan die TOBF sal in 2018 begin, en sal ongeveer 12 maande duur. Die bouperseel sal tot die voorgestelde TOBF-bedryfsgebied beperk word om die versteuringsvoetspoor te verklein. Tydelike perseelkantore en 'n parkeergebied vir konstruksievoertuie sal binne hierdie gebied val. Toegang tot hierdie bouperseel sal deur middel van KKKS se bestaande interne padnetwerk verkry kan word.

Daar word voorgestel dat die reaktoreenhede se gebruikte brandstofmontasies in GBB's afgekoel en in die droë bergingsvate geplaas word. Die gebruikte brandstof se afkoeltydperk in die GBB's hang van die brandstofeienskappe en die gekose vat-ontwerp af. Die droë bergingstelsel is 'n passiewe stelsel wat nie op menslike optrede of aktiewe komponente staatmaak om 'n gepaste veiligheidsvlak te handhaaf nie. Hitte wat deur die radio-aktiewe afbreking van die gebruikte brandstof vrygestel word, sal deur die droë vate se buitekant ontsnap.

Gebruikte brandstofmontasies sal in die reaktoreenheidbrandstofgeboue in vate gelaai en in groepe na die TOBF verskuif word. Die prosedure om een droë bergingsvat te laai en na die TOBF te skuif sal nagenoeg 10 werksdae duur.

Die TOBF sal volgens die KKKS se uitdiensstellingsplan uit diens gestel word.

#### **PROJEKALTERNATIEWE**

Die OIB-regulasies van 2014 vereis dat alle OB&OIVprosesse billike, lewensvatbare alternatiewe moet identifiseer.

Eskom het ses potensiële persele vir die TOBF by Koeberg geïdentifiseer en aan verskeie kriteria gemeet. Die proses om 'n perseel aan te wys het twee werkbare liggings vir die TOBF geïdentifiseer (verwys na Figuur 2) – die Vatstoor-perseel, die voorkeuralternatief (Alternatief 1), en die Ekhaya-perseel (Alternatief 2). Alternatief 1 is langs die Vatstoor op die noordelike grens van KKKS, en Alternatief 2 is teen KKKS se suidelike grens, langs die Ekhaya-gebou.

Die 'Geen ontwikkeling'-alternatief sal in die OIB oorweeg word, soos vereis deur die OIB-regulasies van 2014. Die 'Geen ontwikkeling'-alternatief behels dat die status quo behou word, m.a.w. die voorgestelde TOBF sal nie gebou word nie.

#### 4 DIE OMGEWING WAT GERAAK WORD

Koeberg is geleë op 'n sanderige kuslyn van die Weskus, sowat 27 km noord van Kaapstad se SSG en 1.5 km noord van die Duynefontein-woonbuurt (Figuur 3). KKKS staan op plaasnommer Duynefontyn 1552 en toegang geskied via die R27 wat teen die eiendom se oostelike grenslyn loop.

Die gebied se topografie is betreklik plat, met 'n aktiewe duineveld wat noord van KKKS strek. 'n Gestabiliseerde duin aan die landwaartse kant verberg baie van die KKKS-geboue, maar die twee kernreaktoreenhede is prominente landmerke in die omgewing.

Die gebied se plantegroei bestaan uit lae kusstruike (Kaapse Duin Strandveld en Atlantis Fynbos) van tot 1.5 m hoog, wat tipies van 'n groot gedeelte van die Weskus is. KKKS word omring deur die Koeberg Natuurreservaat, 'n 3000 ha reservaat wat deur die Koeberg Bestuursowerheid bestuur word.

Die TOBF sal binne die Eienaar Beheerde Gebied van KKKS geleë wees, 'n plat gebied wat voorheen deur konstruksiebedrywighede versteur is toe die reaktoreenhede opgerig is, asook deur huidige bedryfsaktiwiteite op die perseel. Daar is geen oppervlakwater naby KKKS nie.



Figuur 3: KKKS vanaf die Duynefontein-woonbuurt



Figuur 2: Alternatiewe persele

#### 5 OMGEWINGSPROSES

Die OIB-regulasies van 2014 lys sekere aktiwiteite wat potensieel skadelik vir die omgewing kan wees, en wat 'n OIB noodsaak en deur 'n bevoegde owerheid gemagtig moet word voordat dit kan voortgaan. Die konstruksie van die TOBF sluit waarskynlik aktiwiteite in wat in Kennisgewingslys 1 en 3 (wat 'n Basiese Evalueringsproses) en Kennisgewingslys 2 (wat 'n OB&OIV-proses vereis) gelys word:

- Kennisgewingslys 1: Gelyste aktiwiteit 27;
- Kennisgewingslys 2: Gelyste aktiwiteit 3; en
- Kennisgewingslys 3: Gelyste aktiwiteit 12.

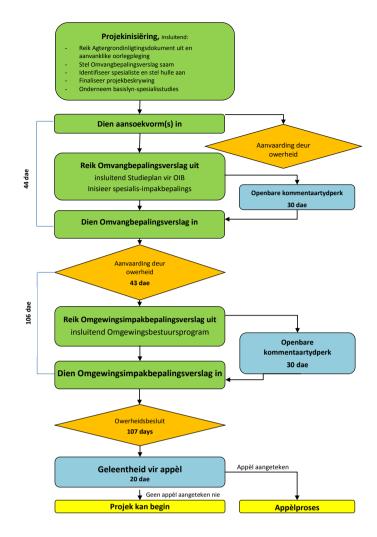
Eskom moet dus 'n OB&OIV-proses aanpak om ingevolge NEMA magtiging by die Nasionale Departement van Omgewingsake (DOS) te kry. 'n Oorsig van die OB&OIV-proses wat vir hierdie projek voorgestel word, verskyn in Figuur 4.

Die doelwitte van die OB&OIV-proses is:

- Om belanghebbers oor die voorgestelde ontwikkeling (en OIB-proses) in te lig;
- Om aan belanghebbers die geleentheid te bied om doeltreffend aan die proses deel te neem en om die betrokke kwessies of kwelpunte te identifiseer;
- Om te verseker dat belanghebbers se kwessies en kwelpunte in die bepaling aangespreek word, en dat dit noukeurig in die Omvangbepaling- en OIBVverslag aangeteken en weerspieël word;
- Om die potensieel positiewe en negatiewe omgewingsuitwerkings wat met die voorgestelde bedrywighede verband hou te bepaal; en
- Om aanbevelings te doen oor hoe potensieel negatiewe uitwerkings doeltreffend versag kan word en voordele uitgebou kan word.

Oorlegpleging met die publiek en owerhede vorm 'n kritieke deel van die OB&OIV-proses en het ten doel om vir alle belanghebbers die geleentheid te bied om kwessies en kwelpunte te opper wat in die OB&OIV-proses aangespreek moet word, en om kommentaar te lewer op die dokumentasie wat aan die DOS voorgelê word.

SRK beplan om 'n deeglike oorlegplegingsproses aan te pak wat deurlopend voorsiening maak vir openbare vergaderings, asook fokusgroepvergaderings met belanghebbers wat direk geraak word (indien nodig).



Figuur 4: OB&OIV-proses

Buiten toestemming van Omgewingsake, is 'n NKR-lisensie ook nodig.

Die Nasionale Kernreguleerder is 'n openbare liggaam wat ingevolge die Wet op die Nasionale Kernreguleerder, 1999 (Wet No. 47 van 1999) gestig is en bestuur word om voorsiening te maak vir die beskerming van persone, eiendom en die omgewing teen kernskade deur die uitvaardiging van veiligheidstandaarde en regulatoriese praktyke (www.nnr.co.za).

#### HOE KAN U AAN DIE OIB-PROSES DEELNEEM?

Ons stel u insette tydens die OB&OIV-proses op prys. Indien u of u organisasie by die OB&OIV-proses betrokke wil wees, stuur asseblief u kontakbesonderhede vir registrasie as 'n belanghebber in ons databasis. Die betrokke staatsliggame sal outomaties as belanghebbers geregistreer word. Volgens die OIB-regulasies van 2014 moet alle ander persone skriftelik aansoek doen om op die register geplaas te word, skriftelik kommentaar te lewer of vergaderings by te woon ten einde as belanghebbers geregistreer te word en in die toekoms korrespondensie oor die projek te ontvang.

#### **REGISTREER OF LUG U MENING**

Registreer by of stuur skriftelike kommentaar aan:

Jessica du Toit SRK Consulting

Postnet Suite #206, Privaatsak X18,

Rondebosch, 7701

Tel: + 27 21 659 3060

Faks: +27 21 685 7105

E-pos: jedutoit@srk.co.za

Verwys asseblief na die SRK-projeknommer in u voorleggings. Indien u as 'n belanghebber registreer, verstrek asseblief u naam, kontakbesonderhede (voorkeurmetode vir kennisgewing, bv. e-pos) en 'n aanduiding van enige direkte belang – hetsy sake, finansieel, persoonlik of ander – in die aansoek.

#### WOON 'N VERGADERING BY

SRK nooi die publiek om die span te ontmoet en hulle oor die projek uit te vra by 'n **Openbare Opedag**:

Plek: Koeberg Kernkragsentrale:

Besoekersentrum

Datum: Dinsdag, 27 Oktober 2015

Tyd: 15h00 tot 19h00

Ons nooi die publiek om die inligting wat verskaf word te eniger tyd tydens die geadverteerde tye te besigtig en die projek met die lede van die projekspan te bespreek.





# ENVIRONMENTAL IMPACT ASSESSMENT PROCESS FOR THE PROPOSED USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER STATION

SRK PROJECT NO: 478317

#### STAKEHOLDER REGISTRATION AND COMMENT FORM

Please complete and submit this form by hand, post, fax or email to:

#### **SRK Consulting**

Jessica du Toit

The Administrative Building, Albion Springs, 183 Main Road, Rondebosch, 7700
Postnet Suite #206, Private Bag X18, Rondebosch, 7701
Fax: 021 685 7105 Tel: 021 659 3060,

E-mail: jedutoit@srk.co.za

#### PLEASE PRINT CLEARLY

TO REGISTER AS A STAKEHOLDER:			
Name:	Date:		
Organisation (if any):			
Capacity (if applicable):			
Postal address:			
	Postal code:		
Telephone number:	Fax number:		
E-mail:			
Preferred communication method (email / fax	( / post):		
Please indicate any direct business, finan	icial, personal or other interest that you may have in the application:		
	you may have regarding the proposed project can be w and/or on a separate page:		

#### OMGEWINGSIMPAKBEPALINGSPROSES (OIB) VIR DIE TUSSENTYDSE OORGANG-BERGINGSFASILITEIT VIR GEBRUIKTE BRANDSTOF BY KOEBERG KERNKRAGSENTRALE

SRK PROJEK NO: 478317

#### BELANGHEBBENDE REGISTRASIE EN KOMMENTAAR VORM

Voltooi asseblief hierdie form en dien dit asseblief in per pos, faks of e-pos aan:

#### **SRK Consulting**

Jessica du Toit

Die Administratiewe Gebou, Albion Springs, 183 Hoofweg, Rondebosch, 7700 Postnet Suite #206, Privaatsak X18, Rondebosch, 7701 Faks: 021 685 7105 Tel: 021 659 3060,

E-pos: jedutoit@srk.co.za

#### SKRVE ASSERI IEE DI IIDEI IK

SKRIF ASSERTIEL DOIDETIK			
OM TE REGISTREER AS 'N BELANGHEBBENDE EN GEAFFEKTEERDE PARTY			
Naam:	Datum:		
Organisasie (indien enige):			
Kapasiteit (indien van toepassing):			
Posadres:			
	Poskode:		
Telefoonnommer:	Faksnommer:		
E-pos:			
Verkose metode van kommunikasie pos):	e (epos / faks /		
Dui asseblief aan enige besigheid,	finansiële, persoonlike of ander belange wat u in die aansoek mag hê:		
	of bekommernisse wat u oor die voorgestelde projek mag hê kan n / of op 'n aparte bladsy aangeteken word:		

Appendix H: Site Notices placed during Pre-Application Phase





# STAKEHOLDER ENGAGEMENT PROCESS

# **Environmental Impact Assessment (EIA) for the Proposed Used Fuel Transient Interim Storage Facility at Koeberg Nuclear Power Station**

SRK Project No: 478317

Notice is hereby given of a stakeholder engagement process in terms of the National Environmental Management Act 107 of 1998 and the Environmental Impact Assessment (EIA) Regulations, 2014.

<u>Project description:</u> Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of dry casks at Koeberg Nuclear Power Station (KNPS) to accommodate used nuclear fuel from the reactors for the operational life of the power station.

<u>Location</u>: the proposed TISF will be constructed on vacant land within the KNPS Owner Controlled Area, approximately 30km northwest of Cape Town. Two viable site locations for the TISF have been identified (refer to Figure 1).



Figure 1: the two viable site locations for the Koeberg TISF

### Application for Environmental Authorisation (EA) to undertake the following activities:

- Listing Notice 1: (27) clearance of indigenous vegetation;
- Listing Notice 2: (3) development for nuclear activities; and
- Listing Notice 3: (12) clearance of indigenous vegetation.

In addition to EA, licensing is also required from the National Nuclear Regulator.

<u>Opportunity to participate:</u> a <u>Background Information Document</u> is available at: Koeberg Public Library, Duynefontein; Wesfleur Public Library, Atlantis; Cape Town Public Library; Koeberg Visitors Centre; SRK's office in Rondebosch; and www.srk.co.za (via the 'Library' and 'Public Documents' links).

Stakeholders are invited to submit comments and/or register on the project database. Submissions from stakeholders must include their name, contact details (specifying the preferred method of notification, e.g. e-mail), and an indication of any direct business, financial, personal, or other interest which they have in the application, to the contact person below, by **9 November 2015**. Note that <u>only registered</u> stakeholders will be notified of future meetings and opportunities to provide comment on relevant documentation.

A **Public Open Day**, where the project will be discussed, will be held at the Koeberg Visitors Centre from 15:00 until 19:00 on Tuesday, 27 October 2015. Stakeholders are invited to attend the Open Day anytime between the above times, and are requested to **confirm their intention to attend the Open Day with the contact person below**. Proof of ID will be required for access to the KNPS site.

<u>To submit comments, register, or request further information please contact:</u> Jessica du Toit of SRK Consulting at <u>jedutoit@srk.co.za</u>; Postnet Suite #206, Private Bag X18, Rondebosch, 7701; Fax: 021 685 7105; Tel: 021 659 3060.





# **OPENBARE DEELNAMEPROSES**

# Omgewingsimpakbepalingsproses (OIB) vir die Voorgestelde Tussentydse Oorgang-bergingsfasiliteit vir Gebruikte Brandstof by Koeberg Kernkragsentrale

SRK Projek No: 478317

U word hiermee in kennis gestel van die openbare deelnameproses in terme van die Wet op Nasionale Omgewingsbestuur, 1998, en die Omgewingsimpakbepalings (OIB) Regulasies van 2014:

**Beskrywing van Projek:** Eskom beoog om 'n Tussentydse Oorgang-bergingfasiliteit (TOBF) te bou om droë vate, wat gebruikte brandstof uit die reaktors bevat, tydelik – vir die duur van die kragsentrale se bedryfsleeftyd – by die Koeberg Kernkragsentrale (KKKS) te berg om die voortgesette bedryf van KKKS te verseker.

<u>Ligging</u>: die voorgestelde TOBF sal op vakante grond binne die KKKS Eienaar Beheerde Gebied gebou word, ongeveer 30km noordwes van Kaapstad. Twee werkbare liggings vir die TOBF was geïdentifiseer (veryws na Figuur 1).



Figuur 1: die twee werkbare liggings van die Koeberg TOBF

### Aansoek vir Omgewingsgoedkeuring vir die volgende gelyste aktiwiteite:

- Lystingskennisgewing 1 (27) klaring van inheemse plantegroei;
- Lystingskennisgewing 2 (3) ontwikkeling vir kern aktiwiteite; en
- Lystingskennisgewing 3 (12) klaring van inheemse plantegroei.

Bykomend tot die Omgewingsgoedkeuring, word daar lisensiëring van die Nasionale Kernreguleerder ook vereis.

<u>Geleentheid om deel te neem aan die Openbare Deelnameproses:</u> 'n **Agtergrondinligtingsdokument** is beskikbaar by: Koeberg Openbare Biblioteek, Duynefontein; Wesfleur Openbare Biblioteek, Atlantis; Kaapstad Openbare Biblioteek; Koeberg Besoekers Sentrum; die SRK kantoor in Rondebosch; en www.srk.co.za (via die 'Library' en 'Public Documents' skakels).

Belanghebbers is genooi om voorleggings te maak en/of te registreer op die projek databasis. Indien u as 'n belanghebber registreer, verstrek asseblief u naam, kontakbesonderhede (sluit in die voorkeurmetode vir kennisgewing, bv. e-pos) en 'n aanduiding van enige direkte belang – hetsy sake, finansieel, persoonlik of ander – in die aansoek. Voorleggings moet voor of op **9 November 2015** aan die kontakpersoon hieronder gestuur word. Wees bewus dat <u>slegs geregistreerde</u> belanghebbers in kennis gestel sal word van verdere vergarderings en geleenthede om voorleggings te maak op relevante dokumentasie.

'n **Opedag** om die voorgestelde projek te bespreek sal tussen 15:00 en 19:00 op Dinsdag, 27 Oktober 2015, by die Koeberg Besoekersentrum plaasvind. Belanghebbers is genooi om tussen enige van die bogenoemde tye die Opedag by te woon en u word gevra om u voorneme om die Opedag by te woon aan die kontakpersoon hieronder te bevestig. Bewys van ID word vereis vir toegang tot die KKKS gebied.

Om kommentaar te lewer, registreer, of verdere inligting te vra, kontak gerus: Jessica du Toit van SRK Consulting by jedutoit@srk.co.za; Postnet Suite #206, Privaatsak X18, Rondebosch, 7701; Faks: 021 685 7105, Tel: 021 659 3060.





# INKQUBO YONXULUMANO NOLUNTU OLUCHAPHAZELEKAYO

Uvavanyo Lokuchaphazeleka Kwendalo (EIA) lwesakhiwo esicetywayo sokugcina amalahle asetyenzisiweyo eNyukliya kwiSitishi sombane weNyukliya saseKoeberg

SRK Project No: 478317

Esi sisaziso ngenkqubo yonxulumano noluntu oluchaphazelekayo, ngokugunyaziswe nguMthetho we107 kaZwelonke Wokuphathwa Kwendalo Nokusingqongileyo wonyaka ka 1998 (National Environmental Management Act 107 of 1998) kwakunye neMigaqo yonyaka ka 2014 yoVavanyo Lokuchaphazeleka Kwendalo (EIA).

<u>Inkcazelo ngeliphulo</u>: UEskom uceba ukwakha Isakhiwo Sethutyana Sokugcina amalahle (TISF) asetyenzisiweyo enyukliya aphuma kwireactor. Esi sakhiwo sicetywayo siyakuthi sisetyenziswe ukugcina la malahle side sifikelele ekupheleni kokusebenza kwaso isitishi senyukliya saseKoeberg. Ukwakhiwa kwesi sakhiwo kuza kuthi kuncede ukuba siqhubekeke sisebenza esi sitishi sombane wenyukliya.

<u>Indawo yesakhiwo</u>: esi sakhiwo sicetywayo siyakuthi sakhiwe kwisiza esingakhiwanga esikwaphakathi kumhlaba wesitishi saseKoeberg, kumgama oqikelelwa kumashumi amathathu ekhilomitha kumantla entshona yaseKapa. Iziza ezimbini ziye zachongwa ukwenzela ukwakha le-TISF (jonga kumfanekiso 1).



Umfanekiso 1: Iziza ezimbini ze-Koeberg TISF

### Isicelo seMvume Yezendalo Nokusingqongileyo (Environmental Authorization - EA) yokuthabatha ezi zicwangciso zilandelayo:

- Isicelo 1: (27) ukususwa kwezityalo zendalo;
- Isicelo 2: (3) ukwenziwa kwemisebenzi enxulumene nenyukliya; kwakunye
- Isicelo 3: (12) ukususwa kwezityalo zendalo

Nxalenye nesicelo seEA, imvume izakucelwa naKubalawuli beNyukliya kuZwelonke (NNR).

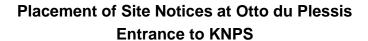
<u>Ithuba lokuzibandakanya</u>: UXwebhu Oluqulethe linkcukacha luyafumaneka kula mathala eencwadi alandelayo – Ithala lencwadi laseKoeberg, ithala le ncwadi laseWesfleur, ithala le ncwadi laseKapa; ukanti likwa fumaneka nakwezindawo zilandelayo – Koeberg Vistors Centre, kwi ofisi zenkampani yakwaSRK eziseRondebosch, kwakunye nakwi website yakwaSRK ethi <u>www.srk.co.za</u> (uye kwiphepha elithe 'Library' ne 'Public Documents').

Uluntu oluchaphazelekayo luyacelwa ukuba lufake izimvo zalo okanye lubhalise kuLuhlu LweNkcukacha zeliphulo (project database). Izimvo ezisuka kuluntu oluchaphazelekayo kufuneka ziquke igama lomntu, inkcukacha zokuqhakamshelana nomntu lowo (xela ukuba ukhetha ukwaziswa njani na, umzekelo – email) kwaye uxele ukuba ngaba uneshishini elichaphazelekayo kusini na kweli phulo, okanye uchaphazeleka wena isiqu sakho, kwaye xela nayiphi na enye indlela ochaphazeleka ngayo kwesi sicelo. Izimvo zoluntu oluchaphazelekayo kufuneka zithunyelwe kuJessica du Toit, iinkcukacha zakhe zibhaliwe ngezantsi, kwaye kufuneka zifike kuye ngomhla we **9 kuNovember 2015**. Qaphela ukuba ngabantu ababhalisileyo bodwa abayakuthi baziswe ngeentlanganiso ezilandelayo kwakunye namanye amathuba okufaka izimvo.

Imini **Evulelwe Umntu Wonke**, apho kuzakuthi kuchazwe ngokubanzi ngeliphulo, iyakuthi ibekho ngoLwesibini umhla we27 October 2015, ibanjelwa eKoeberg Visitors Centre ngentsimbi yeSithathu ukuya kweyeSixhenxe malanga. Uluntu oluchaphazelekayo luyacelwa ukuba luzimase olusuku nangaliphi na ixesha phakathi kwa la achazwe ngentla, kwaye luyacelwa ka nanjalo ukuba lwazise uJessica du Toit ngesicwangciso sokuzimasa olusuku. Nceda uphathe isazisi sakho nje ngoba sizakufunwa phambi kokuba ungeniswe kumasango esikhululo sombane saseKoeberg.

<u>Ukufaka izimvo, ukubhalisa okanye ukucela iinkcukacha ezithe vetshe! Nceda uqhakamshelane no</u>: Jessica du Toit waseSRK Consulting ku – <u>jedutoit@srk.co.za</u>; Postnet Suite #206, Private Bag X18, Rondebosch, 7701; Fax: 021 685 7105; Tel: 021 659 3060.













Placement of Site Notices at R27 Entrance to KNPS





SRK	Consulting:	478317	Koehera	TISE	Final Scoping	Report
SININ	Consulting.	4/03//	MOEDEIG	1101	I IIIai Scopiiic	LEDOIL

Appendix I:
Posters and attendance register from Pre-Application Phase
Public Open Day

# Proposed Used Fuel Transient Interim Storage Facility at Koeberg Nuclear Power Station (KNPS)

# ENVIRONMENTAL IMPACT ASSESSMENT (EIA):

**Pre-Application Stakeholder Engagement Process** 



Koeberg Nuclear Power Station

PUBLIC OPEN DAY 27 October 2015

#### **srk** consulting



# WELCOME TO THE EIA PUBLIC OPEN DAY

#### **PURPOSE OF THE OPEN DAY:**

- To introduce the proposed project to the public;
- To provide a platform for stakeholders to discuss the proposed project; and
- The independent environmental consultants (SRK) and proponent (Eskom) are at the Open Day to discuss the project and answer your questions.

#### **YOU ARE INVITED TO:**

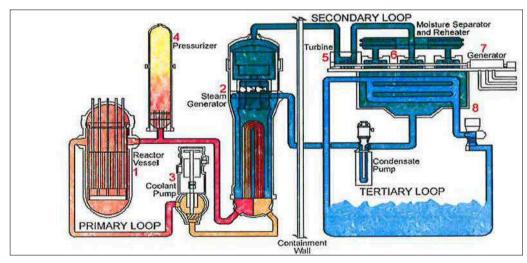
- Fill in the attendance register;
- Read about the proposed project;
- Raise and discuss issues and concerns with the project team;
- Record your views on a comment sheet; and
- Register as a stakeholder on the project database and be informed of further opportunities to participate in the project.





# THE NUCLEAR PROCESS

- \* Koeberg has two nuclear reactor units, which are essentially heat sources. Heat is generated through the nuclear fission process, making use of uranium.
- Heat is transferred by water to steam generators where water from a secondary loop is turned into steam. This steam drives a turbine which is connected to a generator, which uses the rotational energy to generate electricity.



The Nuclear Process

Source: Eskom Fact Sheet "Generating Electricity at a Nuclear Power Station", 2015



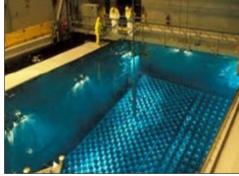


# THE NUCLEAR PROCESS

- Nuclear fuel in the reactor core consists of pellets of enriched uranium dioxide encased in long pencil-thick metal tubes, called fuel rods. These fuel rods are bundled to form fuel assemblies.
- Used fuel is nuclear fuel that has been used in the fission process and is no longer useful in sustaining a nuclear reaction.
- Used fuel assemblies are currently stored underwater in storage racks in spent fuel pools (SFPs) at Koeberg. Water cools the fuel and serves as a shield from radiation.







Spent fuel stored in spent fuel pools Source: Eskom, 2015





# PROJECT MOTIVATION

- The SFPs storing used fuel assemblies at Koeberg are nearing capacity.
- ❖ To ensure continued plant operation, additional storage capacity is required to accommodate further used fuel generated at KNPS.
- Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of used fuel in dry storage casks at the KNPS.
- ❖ The TISF will be designed to accommodate used nuclear fuel from the reactors for the operational life of the power station, thereby ensuring the continued operation of KNPS.



Horizontal concrete systems
Source: http://berniesteam.com/wp-content/uploads/2012/12/DSC02774.jpg



Concrete dry storage casks

# **PROJECT MOTIVATION**

- The proposed TISF forms part of the Koeberg Spent Fuel Storage Project :
  - Phase 1A: Procure 7 dry storage casks to facilitate operation.
  - Phase 1B: Maximise storage capacity in spent fuel pools.
  - Phase 2: Procure approximately 40 additional dry storage casks to allow ongoing operation of KNPS until 2025.
  - Phase 3: Construct the TISF for the storage of the casks procured in Phase 2.
- The project assumes that a Central Interim Storage Facility CISF will be developed for use by 2025.
- Used fuel assemblies generated beyond 2025 will also be stored in casks at the TISF should the CISF not be available.







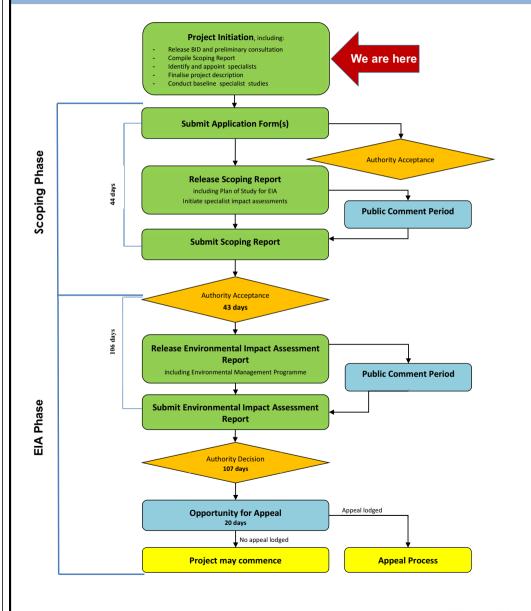
# AUTHORISATIONS REQUIRED

- The proposed Transient Interim Storage Facility (TISF) requires Environmental Authorisation (EA) in terms of the National Environmental Management Act 107 of 1998 (NEMA) and the EIA Regulations, 2014, for the following listed activities:
  - Listing Notice 1: (27) clearance of more than 1ha, but less than 20ha, of indigenous vegetation
  - Listing Notice 2: (3) development for nuclear activities (for storage of used fuel)
  - Listing Notice 3: (12) clearance of 300m² or more of indigenous vegetation within any critically endangered or endangered ecosystem in the Western Cape
- The proposed TISF requires licensing from the National Nuclear Regulator (NNR) in terms of the National Nuclear Regulator Act 47 of 1999.





# **EIA PROCESS**







# **EIA PROCESS**

- A Background Information Document (BID) has been released to inform potential stakeholders about the proposed project and EIA process.
- Once stakeholders have registered and raised initial comments, an Application Form for Environmental Authorisation (EA) will be submitted to the Department of Environmental Affairs (DEA).
- The Scoping Report and Plan of Study for EIA will be released for public comment before submission to DEA.
- Specialist studies will be completed to inform the Environmental Impact Assessment Report.
- The EIA Report and the Environmental Management Plan will be released for public comment before submission to DEA.
- The DEA will then make their decision to grant or refuse Environmental Authorisation.
- Stakeholders will be informed of the DEA's decision and the opportunity to appeal.

# NATIONAL NUCLEAR REGULATOR

- The NNR is a public entity established in terms of the National Nuclear Regulator Act 47 of 1999 to provide for the protection of persons, property and the environment against nuclear damage through the establishment of safety standards and regulatory practices.
- \* KNPS is licenced with the NNR but must amend their existing licence to include the TISF.
- The licence amendment application will be submitted to the NNR once Environmental Authorisation has been received.
- This application process will include a separate stakeholder engagement process.
- ❖ Eskom must undertake a radiological assessment to determine the potential radiological effects on the public to inform this application.







# **PROJECT ALTERNATIVES**

- Eskom initially identified 6 potential location alternatives at Koeberg for the TISF.
- ❖ The feasibility of the location alternatives was evaluated against key criteria, eliminating 4 potential sites.
- ❖ Two viable site locations for the TISF were identified within the existing KNPS Owner Controlled Area (OCA): Alternative 1 (the preferred alternative) and Alternative 2.
- The No Go Alternative will also be considered in accordance with the EIA Regulations. This entails no change to the status quo, i.e. the TISF will not be built.





# PROJECT DESCRIPTION

- ❖ The TISF is proposed to comprise of a concrete pad covering an area of approximately 12800m² onto which up to 160 dry storage casks can be placed.
- The TISF will be constructed on vacant land within the KNPS Owner Controlled Area and will be surrounded by a perimeter fence with controlled access.
- Used fuel assemblies will be loaded into casks at the reactor unit fuel buildings and transferred to the TISF.
- The loading and transferring of one dry storage cask to the TISF will take approximately 10 working days.

TISF comprising a concrete slab onto which dry storage casks can be placed, with a secure perimeter fence

Source: Maine Yankee







# AFFECTED ENVIRONMENT

- The area is relatively flat with an active dunefield extending north of KNPS and a dominant ridgeline inland of the KNPS.
- There are no significant sources of air pollution or noise in the area.
- There are no surface water features in close proximity to KNPS.
- \* KNPS occurs on the Strandveld Aquifer, an important aquifer supplying water to the surrounding towns (e.g. Atlantis).
- \* KNPS is located within the Cape Flats Dune Strandveld vegetation type.
- Vegetation was historically disturbed during the construction of KNPS, but has re-established in the area.

Koeberg Nuclear Power Station with dunefields in the



# AFFECTED ENVIRONMENT

- ❖ The location of the site within KNPS largely precludes the existence of fauna, however, a variety of bird species are likely to inhabit the sites.
- ❖ A 5km Precautionary Action Planning Zone and 16km Urgent Protective Action Planning Zone have been delineated around KNPS, where development is restricted. The population density around KNPS is thus low.
- While the area is rich in heritage resources, the site alternatives are significantly transformed by previous construction activities.
- \* KNPS is a substantially modified landscape with high levels of visual impact caused by the reactor units and associated infrastructure.



View of KNPS from the conservation area with Table Mountain in the background





# POTENTIAL ENVIRONMENTAL CONCERNS

- Geohydrology: potential impact on groundwater levels and the need for dewatering may exist, depending on the proposed excavation depth and depth of aquifer.
- Terrestrial ecology: due to the ecological sensitivity of both site alternatives and the presence of sensitive vegetation types, the project may negatively impact threatened and/or protected floral species.
- Socio-economic: potential negative impacts on the surrounding communities associated with noise and dust conditions during construction. Benefits of the TISF include ensuring the continued operation of the KNPS, a significant electricity producer in the Western Cape.





Cape Flats Dune Strandveld vegetation indigenous to the KNPS site, although the site has been disturbed by previous construction activities





# POTENTIAL ENVIRONMENTAL CONCERNS

- Radiation and Human Health: potential exposure of Eskom employees as well as surrounding communities to radiation due to the handling and storage of used fuel at the TISF and the potential negative impacts on human health.
- Heritage: due to previous disturbance of the site and heritage landscape, the possibility of finding sites of archaeological or palaeontological importance is highly unlikely.
- Visual: the TISF will be located in the KNPS OCA, a substantially modified landscape and is therefore unlikely to have significant negative visual impacts for receptors.





The landscape surrounding KNPS is highly modified by existing infrastructure. Source: http://www.vocfm.co.za/koeberg-tender-case-partly-withdrawn/; www.melkbos.com



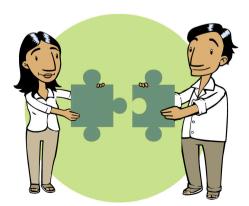


# **SPECIALIST STUDIES**

- A number of specialist studies will be commissioned during the EIA Phase to assess the impacts of the TISF:
  - Geohydrology;
  - Terrestrial Ecology (vegetation & fauna);
  - Socio-economic;
  - Human Health;
  - Heritage; and
  - Visual.
- Less significant impacts will be assessed by SRK.
- A Radiological Assessment was commissioned by Eskom prior to the EIA process. An independent review of the Radiological Assessment will inform the EIA process.
- Eskom's existing Emergency Response Plan will be reviewed to ensure compliance with legislation and best practice.

# **SPECIALIST STUDIES**

- The generic Terms of Reference and principal objectives for each specialist study are to:
- Describe the existing baseline characteristics of the study area and place this in a regional context;
- Identify and assess potential impacts of the project (including the construction and operation phases), using SRK's prescribed impact rating methodology;
- Identify and describe potential cumulative impacts in relation to proposed and existing developments in the surrounding area;
- Recommend mitigation measures to minimise impacts and/or optimise benefits associated with the proposed project; and
- Recommend and draft a monitoring campaign, if applicable.





€ Skom





# **PLAN OF STUDY** FOR THE EIA

Specialists studies will be done to provide detailed information regarding the affected environment and potential impacts of the project.



- \* Key potential issues and impacts standard investigated and assessed using impact rating methodology.
- Mitigation / Optimisation measures will be identified to prevent / minimise negative impacts and enhance benefits.
- Environmental Impact Assessment Report (EIAR) will be compiled, including the Environmental Management Programme (EMPr).
- Public consultation will be conducted.
- ❖ Final EIAR and EMPr will be compiled and submitted to authorities to inform their decision.

# PUBLIC PARTICIPATION

- \* Stakeholders will be given the opportunity to participate throughout the EIA process.
- \* The first opportunity to participate is during the BID release (currently).
- Stakeholders can provide comment on the BID for the TISF until 9 November 2015.
- \* After the release of the Scoping Report. stakeholders will have 30 days to provide comment.
- \* After the Scoping Report is accepted by the DEA, stakeholders will be given an opportunity to comment on the EIA Report and the EMP (30 day commenting period).
- Stakeholders will be informed of the DEA's final decision on the project.











## **WAY FORWARD**

The Background Information Document is available for viewing at:



- \* Koeberg Public Library, Duynefontein
- Wesfleur Public Library, Atlantis
- Cape Town Public Library
- ❖ KNPS Visitors' Centre
- SRK's Cape Town office; and
- SRK's website: www.srk.co.za
- Stakeholders are invited to submit comments and/or register on the project database. Submissions from stakeholders must include their name, contact details (preferred method of notification, e.g. e-mail) and an indication of any direct business, financial, personal or other interest which they have in the application, to the contact person below, by 9 November 2015.
- Registered stakeholders will be notified of the availability of the Scoping Report for comment and of future meetings.
- All written comments can be addressed to Jessica du Toit at SRK Consulting:
  Nov 2015

SRK Consulting Fax: 021 685 7105
Postnet Suite #206, Tel: 021 659 3060
Private Bag X18, email: jedutoit@srk.co.za

Rondebosch 7701









NAME	CAPACITY / ORGANISATION (if any)	POSTAL ADDRESS	CONTACT DETAILS
		PHOLANLO ESTOM.G.Za.	Tel/Cell 0720826867
10. All	Eston		Fax 01
Lewis Philoza	C OPO/M	·	E-mail PHIDZANCO EStom 6- Za
			Tel/Cell 08-2 806 7871
Ren Blon	Necsa	ben. blom ce necsa, coiza	Fax
		,	E-mail bon. blom @ necsa, co. 2a
			Tel/Cell 07/ 894 1035
Israel Selato	Eskon	sekeled Perkon, co, 29	Fax \$86 665 (915)
			E-mail Sekalos Tees Low, co. 79
			Tel/Cell
Luka Potgiete	1,	Potgiel TO eskan.co.za	Fax
Lunding			E-mail
			Tel/Cell .
NIKKI JONKER	tı	JONKERN @ESKOM. CO.ZA	Fax
MIKKI JONKER			E-mail
			Tel/Cell 082 332 92 13
LINDLE/ PERRMAN	ESKOM	lindley. perymon o ostom. co.zu	Fax
			E-mail
		246 Voortrekker Road Vasco	Tel/Cell 021 590 5200
Lynelle Matthys	CCT: Air Quality Management	ado multiples 1000 V	Fax
3,13,13	, inches garene		E-mail lypelle mostlyse capetown gov. 20
			Tel/Cell
KNDIE KRUGEL	Eskon / Isaszan MANAGEMANN	13 SAMUEL CLOSE, DYYNEFONNEIN	Fax
MIDIC MUNICE NOTICE NOTICE MICHES	Eskom / DISASTER MANAGEMENT WECKSOS		E-mail Kruger / Weskom. co. 201



NAME.	CAPACITY / ORGANISATION (if any)	POSTAL ADDRESS	CONTACT DETAILS
		PHOLANLO ESTOM.G. Za.	Tel/Cell 0720826867
0.01	Eston		Fax 01
Lewis Phidza	COPON	·	E-mail PHIDZANCO ESKOM GO ZO
			Tel/Cell 08-2 806 7871
Ren Blon	Necsa	ben. blom a necsa.coiza	Fax
		1	E-mail bon. blom a necsa, co. 2a
			Tel/Cell 071 894 1035
Israel Selato	Ellan	SekokaTe elkom, co, 29	Fax 086 665 (915)
- 19 3000			E-mail Sekelo I @ e & Lou, co, 79
			Tel/Cell
Luka Potgiete	4	Potgiel TO eskan. co. 29	Fax
Lunding			E-mail
			Tel/Cell .
NIKKI JONKER	t <sub>1</sub>	JONKERN @ESKOM. CO.ZA	Fax
MIKKI JONKER			E-mail
		t 1:	Tel/Cell 08Z 33Z 9Z 13
LINDUE/ PERRMAN	ESKOM	lindley. permin @ oston. co.zu	Fax
			E-mail
·		246 Voortrekker Road Vasco	Tel/Cell 021 590 5200
Lynelle Matthys	CCT: Air Quality Management	240 1011121	Fax
	J. Maragarene		E-mail lynelle mostlyse capetown gov. 20
	1 2 1		Tel/Cell
LUDIE KRUGEL	Eskon / DISASTER MANAGEMENT WECKERS	13 SAMUEL CLOSE, DYYNEFONKIN	Fax
			E-mail Kruger / Weskom. ca. 201.



NAME	CAPACITY / ORGANISATION (if any)	POSTAL ADDRESS	CONTACT DETAILS
		15 Battersea Bond	Tel/Cell 0798874607
Nettie Fick	Project Management	Parklands	Fax
	Eskon, KNPS	74-H	E-mail fidereceskom, caza
		17 New Way	Tel/Cell 621 522 1186.
Han Lawrence.	Design Engineer	Pinelands	Fax
		7405	E-mail lawrenca @ estem. w. Za.
		584 Queen Victoria Rd	Tel/Cell 0721754461
Mark Vernon	Design Engineer	Claremont	Fax
		7708	E-mail Vernonm-@eskon.co.Za
	Nuclear Management	49 Montagy Street	Tel/Cell 0844089080
Anita Soptember	Proj Management Eskom.	Atlantis	Fax
Frita Soptioned	eskon i	7349	E-mail expterna@eston.co.zg
	Estorn	Koeberg Power Steetion.	Tel/Cell 0718979729
Dean Jeannes		·	Fax
			E-mail jeannes d@ eskon. co. za
		11 Centaur Street	Tel/Cell 08 2 44 77 116
Sarking Petersen	Eskom-Planner	Attentic	Fax
assirted Leversell	The state of the s	7349	E-mail osarkingsp@gmail.com
		PO Box 561	Tel/Cell 021 880 8039
MATSE MAKHOPAL	Eckom- RFE	THEKROSIRAND 7440	Fax
			E-mail telebohile. mothathe Debonico. 20
			Tel/Cell 079797 0363
TRWOR SOUDLEY	FSKOM - QC	KUPS	Fax
, , , , ,			E-mail TRUM. MODELY @ USCON. C.ZA



NAME	CAPACITY / ORGANISATION (if any)	POSTAL ADDRESS	CONTACT DETAILS
		15 Battersea Bend	Tel/Cell 07988746c7
Nettie Fick	Project Management	Parklands	Fax
	Eskon, KNPS	74-14	E-mail fiderececkom, co. 29
·		17 New Way	Tel/Cell 621 522 1186.
Han Lawrence.	Design Engineer	Pinelands	Fax
		7405	E-mail lawrenca @ estom. wo. Za.
		584 Queen Victoria Rd	Tel/Cell 0721754461
Mark Vernon	Design Engineer	Claremont	Fax
		7708	E-mail Vernonm-@eskon.co.Za
	Nuclear Management	49 Montagy Street	Tel/Cell 0844089080
Anita Saptember	Proj Management eskom.	Atlantis 7349	Fax
Frita September	eskon 1	104-1	E-mail Septema@cston.co.zg
	Estorn	Koeberg Power Station.	Tel/Cell 6718979729
Dean Jeannes			Fax
			E-mail Jeannes d@ eston.co.za
		11 Centaur Street	Tel/Cell 08 2 44 77 116
Sarking Petersen	Eskom-Planner	Attentic	Fax
The second second	The state of the s	7349	E-mail osarkingsp@gmail.com
		PO Box 561	Tel/Cell 021 550 5039
MATSE MAKHOPAL	Eskom- UFE	TOLKROSTRAND 7440	Fax
			E-mail Kelebohile. mathathe Oetoon, co. 20
			Tel/Cell 079797 0363
TRWOR SOUDLEY	FCKOM - QC	KUPS	Fax
, , , , , , , , , , , , , , , , , , , ,	2310		E-mail TRWON. YOUDLEY @ GSCON, C.ZA



NAME	CAPACITY / ORGANISATION (if any)	POSTAL ADDRESS	CONTACT DETAILS
		4 RAVENSWOOD ROAY	Tel/Cell 02/ 557 2752
R MAYZIEW	PSIF	PARKLANDS 7441	Fax
		·	E-mail
		18 18-PHN8-10NL	Tel/Cell 072 436 4510
5 W1650N	1/	111154	Fax
J WILSON		1 0/00 4	E-mail
			Tel/Cell 072 3035649
	-2-20	KOEBERG	Fax
V XuluBANA	ROGBERCH	1 SOCKY	E-mail Vruge @ hotmail.com
		, 14 RONWOOD RONG	Tel/Cell 0837272820
Mandisi Stwayi	Roebel 7	\$ Partifornals, 744)	Fax M
Mandis: Stway		1 11 11 11 11 1991	E-mail Mandisi. Studayi @ ebcom, co.ZA
	$\nu$		Tel/Cell 574 669 1864
, ·			Fax 086 668 6573
Jong, Dygbaza	hoeperg UCI	hoeber	E-mail Jorgiodyglaza Restou. Co. 2a
	U	U	Tel/Cell
JAN NORMAN	RESID ENT	25 EDWARD CRISCENT	Fax
Jan 11010. C. 1		DUYMEFONTEIN	E-mail
			Tel/Cell 003.26494
RENEE OVIJ	Kou	PO BOX 20159	Fax 0866615571
70.000		316 844 7448	E-mail ovis no es com. co.74
			Tel/Cell 082 308 8535
Michelle Herbert	Eskon: Environmental Managem.	Koeberej	Fax 086 509 5755.
			E-mail michelle herbert a advision com



NAME	CAPACITY / ORGANISATION (if any)	POSTAL ADDRESS	CONTACT DETAILS
		4 RAVENSWOOD ROAY	Tel/Cell 02/ 557 2752
R MAYZIEW	PSIF	PARKLANDS 7441	Fax
	<b>6</b> 3 / P		E-mail
		18 18-PHN 5-10NL	Tel/Cell 072 436 4510
J WILSON	1/	11 V1154	Fax
3 W12 SON			E-mail
	· ·		Tel/Cell 0723035649
$\sim$	# ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	KOEBERG	Fax
V Xulubana	ROCBIRC		E-mail Vruge & hotmail. com
		L 14 (RONWOOD ROND)	Tel/Cell 0837272820
Mandisi Stwayi	Roeber 7	14 (RONWOOD ROAD) 5 Parlymols, 744)	Fax M/A
1 melia, almilil		1 111.011.011 1791	E-mail Mandisi. Study, @ ebcom, co. ZA
	$\nu$		Tel/Cell @74 6691864
		1/ / 0	Fax 086 668 6573
Jong, Dyabaza	hoeperg UCI	hoebes	E-mail Jorgio dyalaza Olstem. Co. 2a
7			Tel/Cell /
JAN NORMAN	RESID ENT	25 EDWARD CRESCENT	Fax
J4/// 1/01/2/ 1/		BUYNEFON PEIN	E-mail
			Tel/Cell 003026994
RENEE OVIJ	Kou	PO BOX 20159	Fax 0866615571
70.00		319 844 7448	E-mail ovis no es com. co.74
			Tel/Cell 082 308 8535
Michelle Herbert	Eskon: Environmental Managem.	Koeberej	Fax 086 509 5755.
ZII ( *			E-mail michelle herbert a advicion con



NAME	CAPACITY / ORGANISATION (if any)	POSTAL ADDRESS	CONTACT DETAILS
		PO BOX 382	Tel/Cell 082 - 8444858
4. KRBUCKLE.		MEUCBOSS TRAND.	Fax /
Graham.		process of warming	E-mail grahematichle e gmail.con.  Tel/Cell 682 257 2637.
\( \tag{1.1.6}	0	Wat Beach	Tel/Cell 68 257 26 37.
( Sounds	Private		Fax
Ryan			E-mail ryan Osctsu.co.za
^ _	Self - Private	9 Edward Crescent	Tel/Cell 0021-5534178
A Sones	seg - mod	Melklosstvand	Fax
Junes		7441	E-mail antanajohn Qquail.com
		10 Rochestor Rd.	Tel/Cell 072 9900081
C. Terblandu	Eston - NPM	West Brach	Fax
Level of the		744	E-mail
		10 Watspria Crosant	Tel/Cell 073-454 9 456
N) Fosts	Eskom - NE	Big Bay	Fax
	,		E-mail
			Tel/Cell
			Fax
			E-mail
	-		Tel/Cell
			Fax
			E-mail
			Tel/Cell
			Fax
			E-måil

# Koeberg Transient Interim Storage Facility - EIA Report Public Open Day – 15h00 -19h00, 27 October 2015, Koeberg Nuclear Power Station: Visitors Centre ATTENDANCE REGISTER



NAME **	CAPACITY / ORGANISATION (if any)	POSTAL ADDRESS	CONTACT DETAILS
	City of Cape Jones Hood Specialised Env. Health	fo Box 2815	Tel/Cell
lan Gelelenburg	There specialised En Health	CAPE Town	E-mail lan Gibbenhuy 1@ Capetown Gov. 29
TAYEB JAPPIÉ	Plusect Director	KoEBERG	Tel/Cell x /4655
1 TATED JATTE	LS YOM	KOLOERG	Fax E-mail
	PROJECT MANAGER		Tel/Cell X2532
HARREN SATARE	Eskenn	LOEBERG	Fax
			E-mail
STEPHEN PIETERSEN	RP ENGINEER	KOEBERG	Tel/Cell Fax
JIEPPIE/ TICTORU	ESKOM	COOPCE	E-mail Stephen. Pietersen @ Eskan. Cu. Za.
	PROJECT MANAGER		Tel/Cell × 3678
RANDALL LAVELOT		KUEBERG	Fax
- Content of the cont	Eskon		E-mail
1			Tel/Cell
Kiedowaan Bakardien	Eskow Keckerg - PSM. Power Station Manager.	Koerserg	Fax
	Power Station Manager.	,	E-mail riedewaaan. bakardien@eskom. co. zq
			Tel/Cell
FECIX MATTHEF	CHEMIST	KNPS.	Fax
	FELIX, MATTHEE Q ESKOM, e O. Z.A.		E-mail
			Tel/Cell
John Jones	Emgineer		Fax
	johnjones @ eskom, o. Za	(C exas	E-måil

K Consulting: 478317: Koeberg TISF <u>Final</u> Scoping Report
Appendix J: Notes from Pre-Application Phase Focus Group Meetings



The Administrative Building Albion Spring, 183 Main Rd Rondebosch 7700 Postnet Suite 206 P Bag X18 Rondebosch 7701 South Africa

T: +27 (0) 21 659 3060 **F**: +27 (0) 21 685 7105 E: capetown@srk.co.za



# **Environmental Impact Assessment for Proposed Transient Interim** Storage Facility at Koeberg Power Station

Meeting Notes: Pre-Application Meeting with the DEA and the NNR Held: Environment House, Pretoria on 20th November 2015, 09:00 - 10:00

**Attendees:** Michelle Herbert MH Eskom

> **Deon Jeanes** DJ Eskom Randall Lavelot RLEskom John Geeringh JG Eskom NNR: ERP Henriette van Graan HvG

Peter Mkhabela PM**NNR** 

Lerato Mokoena LM DEA: SID WH DEA: SID Wayne Hector Milicent Solomons DEA: SID MS

Fiona Evans FE **SRK Consulting Sharon Jones** SJ SRK Consulting

#### 1 **Welcome and Introductions**

1.1 Sharon Jones (SJ) welcomed and thanked everybody for making the time to attend the meeting. All attendees briefly introduced themselves.

### 2 Purpose of the Meeting

- 2.1 SJ stated that the formal Environmental Impact Assessment (EIA) process has not yet commenced and the project is in pre-application phase. The purpose of the meeting is to present the project to the Department of Environmental Affairs (DEA) and the National Nuclear Regulator (NNR) as the two decision-making authorities.
- 2.2 Eskom and SRK would also like to obtain clarity about the interaction required between the two Departments and integration of the EIA process and the NNR application process. This also includes how radiological issues should be dealt with in the two respective processes and who will take decisions regarding these aspects.

#### 3 **Project Background and Description**

3.1 Randall Lavelot (RL) provided a project description and an overview of the motivation for the project i.e. the fact that the spent fuel pools (SFP) at Koeberg are reaching capacity (see attached slides). Currently four dry storage casks (metal) are stored in the cask storage building (CSB). Due to the SFP reaching their capacity, it is proposed to package the used fuel in the dry storage casks and transfer it to the proposed onsite Transient Interim Storage Facility (TISF). It is planned

that the dry storage casks will then be transported to a Centralised Interim Storage Facility (CISF), once this has been established. The CISF has not yet been established although it is anticipated that one may be developed by 2025.

- 3.2 RL stated that there are currently two site alternatives for the TISF; both are on vacant land within the Owner Controlled Area (OCA) of the Koeberg Nuclear Power Station (KNPS). Alternative 1 is the preferred option and it is situated adjacent to the CSB building (and low level waste building). Haul roads will follow existing internal roads on site; however the haul route to Alternative 1 will require lengthening of the existing road by approximately 100m to the site Alternative 1 entrance).
- 3.3 RL stated that the TISF will be a concrete pad of 12 800m<sup>2</sup> in area and will be able to accommodate up to 160 dry storage casks. The TISF will be filled with casks in a modular manner. Eskom is currently planning to place 40 casks until 2025. The TISF will also have an auxiliary building to house auxiliary equipment within the TISF operational area. Secured perimeter fence, with controlled access, will surround the TISF.
- 3.4 The TISF will meet the requirements of the National Nuclear Regulator (NNR) and it will be built and managed according to International Atomic Energy Agency (IAEA) safety standards. Eskom is considering either metal or concrete casks, although as part of the "localisation" initiative, concrete casks may be preferred as they could be manufactured locally.
- 3.5 RL noted that it is proposed to commence the construction of the TISF in 2018 can take up to 12 months to construct. The construction laydown area will be within the operational footprint of the TISF. Hence there will be no additional disturbance footprint due to construction activities. RL stressed that unless construction of the TISF starts by 2018, there is a possibility of Koeberg shutting operations.
- 3.6 Milicent Solomons (MS) noted that there needs to be a comparative assessment between the two alternatives in the EIA and that the haul road would need to be included in that. SJ confirmed that this will be done.
- 3.7 Michelle Herbert (MH) pointed out that the existing "haul roads" indicated on the slides are existing tarred surfaces and the integrity of the haul routes will be investigated to ensure they are suitable. The haul route to Alternative 1 will require an extension of approximately 100m in length.

# 4 EIA Process

## 4.1 Authorisation Requirements

- SJ identified the listed activities requiring Environmental Authorisation in terms of the EIA Regulations, 2014, noting that a Scoping and EIA process would be followed.
- Authorisations may also be required in terms of the National Heritage Resources Act (associated with changing the character of a site exceeding 5 000m³ in size) as well as the National Water Act (if dewatering is required during excavation). No application is required in terms of the National Environmental Management: Waste Act, as radioactive waste is regulated by the National Nuclear Regulatory Act and Nuclear Energy Act.

### 4.2 Status of EIA Process

Evaf/jons

- SJ provided an overview of the EIA process, indicating that the project is currently in the Project Initiation (i.e. pre-application) phase. An initial round of public consultation had taken place to make stakeholders aware of the project and identify stakeholder issues and concerns to inform the EIA process.
- It is anticipated that the application will be submitted to DEA in February 2016, and the final EIA around August/September 2016.

### 4.3 Anticipated Concerns/Potential Impacts

 SJ listed the potential impacts identified by the EIA team as well as initial comments by stakeholders (see attached slides).

# 4.4 Proposed Specialist Studies

 SJ noted the specialist studies required for the EIA as well as the companies undertaking each of the studies (see attached slides).

# 4.5 Stakeholder Engagement Process

- SJ provided an overview of the public consultation process undertaken during the Project Initiation Phase, which included the release of a Background Information Document, site notices and advertisements in six different newspapers in three languages. A Public Open Day was also held at the Koeberg Visitors' Centre and a focus group meeting is to be held with the commenting authorities such as the City of Cape Town and the provincial departments in January 2016.
- SJ also provided an overview of the anticipated public consultation during the Scoping and Impact Assessment phases, noting that this would comply with the legislative requirements.

### 5 NNR Process

- MS noted that it was important to determine how the NNR process fits in with the EIA process, and when input into the EIA process is to be provided by the NNR.
- Deon Jeannes (DJ) provided background on what is already in place in terms of licences from the NNR and stated that Eskom has begun communicating with the NNR regarding the licencing of the TISF. DJ stated that Eskom has previously successfully licenced the four casks in the CSB with the NNR. Licencing with the NNR requires high levels of detail. Studies in this level of detail can only be undertaken after a contract has been placed with a vendor after the project has received environmental authorisation.
- DJ pointed out that Eskom has conducted an internal risk assessment of a generic type of cask and has sent it to SRK for review and inclusion into the EIA in terms of the safety aspects.
- DJ described how the casks work and that they are secure and inherently safe. DJ added that
  there is no risk of liquid release as the casks are vacuumed and sealed. The biggest challenge is
  public concern surrounding the storage of nuclear waste. DJ confirmed that the NNR process will
  follow its own public consultation process as part of the licencing process.

# 5.2 Process Requirements

- DJ mentioned the radiological aspects of the project and said that it is uncertain whether the DEA
  will require the NNR as a competent authority to comment on any radiological information that is
  provided in the EIA document. The EIA will include a description of the NNR licencing process and
  the assessment of radiological safety will be left to the NNR licencing process.
- MS stated that the DEA has recently engaged with the NNR and a relationship has been established between the two Departments to deal with applications of this nature. MS also mentioned there is an existing task team established for the Nuclear 1 EIA and the same forum will be utilised for this project. It was agreed that comments would need to be obtained from the NNR during the EIA process, specifically with respect to radiological issues. Although these would be authorised separately through the NNR process, they would also need to be taken into account in the EIA process.
- MS noted that if Eskom has addressed stakeholders' or NNR's comments in the EIA process, this does not mean that Eskom has fulfilled the NNR's requirements for their application. Although the EIA process will require less detailed information regarding radiological aspects, the NNR application will need to be more detailed. MS also cautioned the NNR that they should not expect to see the level of detail required for the NNR application in the EIA. It is not possible to address all

of the NNR requirements in the EIA. MH raised the concern that the EIA might be unnecessarily loaded by addressing all technical details required by the EIA process.

- John Geeringh (JG) asked if the EIA is a prerequisite for authorisation from the NNR. It was
  confirmed that if the Environmental Authorisation is issued it will form part of, or inform, the NNR
  process. Radiological issues raised during the public consultation process for the EIA will be
  addressed in the EIA process but the formal NNR licencing process will start later.
- MH asked if the NNR will send their comments directly to DEA and if this will be facilitated by the DEA or if comments would be sent directly to SRK. MS replied that the 2014 EIA Regulations require that the comments from other authorities (organs of state) be facilitated by the Environmental Assessment Practitioner (EAP i.e. SRK). The DEA will however still communicate with the NNR during the process but comments should be submitted directly to SRK as part of the EIA process. DEA will assist if there are delays from other department in terms of the cooperative governance agreement.
- SJ noted that if the NNR is a key commenting authority in the EIA process, as for any other commenting authorities, the EIA Regulations require comments to be submitted within the stipulated 30 day comment period. Peter Mkhabela (PM) understood and agreed with this. It was agreed that where possible the NNR would be notified ahead of time when documents are due to be released for comment. If required, Eskom and SRK would also meet with the NNR to present and discuss the findings of the relevant reports with them to facilitate comments. Allowance has been made for focus group meetings of this nature.
- PM enquired about cumulative impacts and SJ confirmed that, during the Scoping and EIA
  process, information regarding other projects in the area will be considered and presented. MH
  confirmed that this would be discussed later on in the meeting.
- DJ pointed out that the NNR has authorised casks in the past and the casks already meet the standards set by the NNR. DJ stated that there are two possible licencing options that could potentially be required by the NNR, either a new licence or an amendment to the existing licence.
- PM requested the reference number (K20249.1N) of the NNR letter referencing Koeberg Spent Fuel Strategy and licensing of the TISF, which was provided (see attached slides).

### 6 General

## 6.1 Cumulative Impacts

- MH presented all current and potential projects (i.e. environmental authorisation applications)
  located at or around KNPS, noting that the potential cumulative impacts might need to be
  considered in the TISF EIA process. Projects include:
  - Nuclear 1 EIA (in process);
  - Weskusfleur Substation EIA<sup>1</sup> (in process);
  - Basic Assessment (BA) for a new pollution testing station (proposed to start in 2016);
  - o BA for a water storage tank and alternative (proposed to start in 2016);
  - Approved Ankerlig 132 kV powerline;
  - o BA for the car park (proposed in 2016);
  - o BA for diesel storage (proposed in 2016); and
  - Sunbird Energy gas pipeline EIA (in process).
- MH raised the concern that Eskom and SRK do not want the progress of the TISF EIA to be
  inhibited by the cumulative impacts of all the above-mentioned projects. MH noted further that
  given the large number of different projects, run by different EAPs and specialist teams, there is a

<sup>&</sup>lt;sup>1</sup> There was some uncertainty in the meeting regarding the correct name of this project, which has been confirmed by Eskom to be Weskusfleur

potential risk of opposing views/findings between the projects. WH stated that opposing views should not be problematic.

- MS stated that in terms of cumulative impacts: Eskom needs to identify which of these developments will impact on the TISF.
- JG said that in order to accurately determine cumulative impacts, Eskom needs to be certain about impacts of existing projects for which environmental authorisation is being applied e.g. dimensions, vegetation clearance, etc. This information is not yet all available so it will not be possible to include future/proposed impacts. SJ confirmed that the cumulative assessment will at least mention all of these projects and although exact details are not available, would comments on cumulative impacts in a qualitative manner rather that assessing the cumulative impacts in detail.
- PM stated that his concern is about the Sunbird Energy gas pipeline and asked whether Eskom
  had commented on the Draft Environmental Impact Report (EIR) for this project. DJ confirm that
  Eskom has commented, noting their objections.
- PM also asked about the legislation relating to temporary storage vs permanent storage of water (with respect to the proposed water storage tanks). DJ discussed regulations regarding temporary storage, explaining that if any facility is built within 100m of the high water mark of the sea, provided that there is no clearance of indigenous vegetation, the facility can be present for up to six weeks without requiring a BA. DJ confirmed that such temporary structures were not included in the list of projects presented.
- MS iterated how useful the image of all relevant projects in the area is. DJ suggested that in the EIA, these projects would be tabulated including details of the relevant status and application numbers of each of the projects. MS confirmed that this would be helpful to the DEA during decision making, to understand the context of each project.

# 7 Way Forward

- RL once again thank the authorities for taking the time to discuss the project with the team.
- MH asked whether DEA would consider this project to be categorised as a Strategic Infrastructure Project (SIP). MS replied that the Nuclear Energy Program falls under SIP 9 or SIP 10 but not specific projects such as this one. MH confirmed that this confirmation would be in support of prioritising the project, and not necessarily for shortened timeframes given it is a nuclear related project. MS confirmed that she had agreed to attend the meeting to understand the importance thereof, and suggested the EIA team contact the Nuclear SIP Coordinator to confirm whether this project would qualify as a SIP.
- MS iterated how important it is for Eskom to manage the consultants well and to make sure that
  they review SRK reports thoroughly. MH reassured MS that Eskom has a thorough internal review
  process. MH further stated that she is an EAP assisting Eskom prepare for the EIA process and
  with the provision of all the relevant information required by SRK.
- MS raised a concern with respect to the proposed specialist studies, stating that in-house SRK specialists may not be considered independent by the public and that Eskom should consider getting these studies peer reviewed. SJ stated that this was not SRK's interpretation of the definition of independence in terms of the 2014 EIA Regulations. WH advised that SRK and Eskom should consider getting the reports peer reviewed and be cautious with the reviews. MS advised that SRK get a written opinion in this regard from DEA's IQ desk/policy and legislation department.

• DJ mentioned that the proposed CISF is the responsibility of the National Nuclear Radioactive Waste Disposal Institute (NNRWDI). DJ stated that the national policy indicates that Eskom must keep the option of future reprocessing of used fuel open. Therefore Eskom prefers not to use the term "spent" fuel but rather "used" fuel. The fuel in the TISF may be reprocessed and recycled at some stage in the future. As soon as Eskom transfers the fuel over to the NNRWDI it is no longer Eskom's responsibility. Eskom cannot assume that the CISF will be built in 2025. Therefore, Eskom's approach is to run the TISF in a modular fashion for the remaining anticipated operational life of KNPS.

- MS confirmed that reports must be submitted to the Chief Director at DEA and that she would provide details of the relevant SIP Coordinator after the meeting.
- It was suggested by WH that SRK and Eskom take note of the stakeholder comments on the Nuclear 1 EIA project to help predict the types of concerns that may be raised through this current project.
- There were no further comments or questions. SJ thanks everyone for a valuable discussion and closed the meeting.

Meeting closed at 10.00 am Notes taken by: Fiona Evans

478317142343MInufes
8277-5837-9992-JONS
This signature has been printed digitally. The Authoritas given permission for its

SRK Consulting - Certified Electronic Signature

Sharon Jones

Signed by:

Date: 7 December 2015

Eskom Koeberg TISF EIA Pre-Application Meeting: 9h00, 20 November 2015, DEA Offices, Environment House, Pretoria ATTENDANCE REGISTER

<u>C</u>
Access .
e sasaw Lened
MINES
3
Course .
0
U
Ž.
4

NAME	CAPACITY / ORGANISATION (if any)	EMAIL ADDRESS	TELEPHONE NUMBER
	Project Managler	herbermi estom. 00.29	
Michelle Herbert	Estom: Env. Managen.	michelle.herbert@advicran.com	\ 082 308 8535
Dear Seennes	Estern: Env. Mgt.	jeannesch @ estern.co.za.	0718979729.
HENRIETTE UAN GRAUN	NNR : ERP	Avangraan Qunr. co.Za	0833080470
Peter Mehabela	N PK PR.	PTMthabe bonnice 2a.	2a. 0788394010
John Geeringt	GC: UD 860m	John egertingh @ estem co.za	083 632 7663
Lerato Mokoena	BEA: SIB	mokoeuaka envinommentigarien	0123999418
Klajne HECTOR	Det: 80	Whedreenmong	2
MICEN Sclanows	Pex 516	Molonous E annound Ille	०१३ उनन १३८२.
Fions Evans	SRK	frans (2) 51 k. co. 2a	083 380 6083
RANDALL. LAVELOT	ESKOW PROJECT MANAGER	LAVELON DERROWN. CO.ZA	074 375 3067
SHARON JONES	SRK CORTITAG	Sones Estro 20	ටසිට ප76 රූපීපී



# Agenda

- · Welcome and Introductions
- Purpose of the Meeting
- Project Background and Description
- EIA Process
- NNR Process
  - Process Requirements
  - Integration with EIA process
  - Addressing Radiological issues
- General Discussion

Koeberg TISF EIA

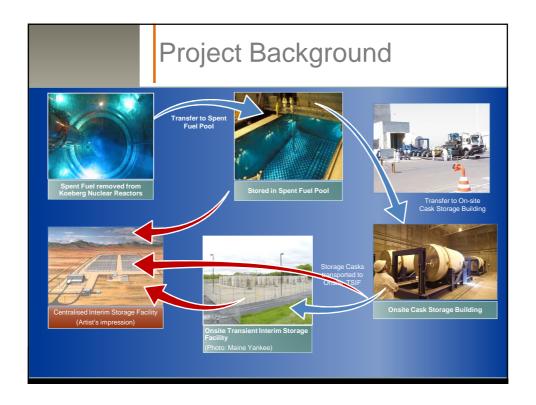
**▼ srk** consulting

# Purpose of the Meeting • Present the proposed project • Present the proposed EIA process • Clarify integration between EIA process and NNR process • Confirm how radiological issues will be addressed • Determine additional requirements by decision-making authorities \*\*STK consulting\*

Project Background and Project Description: Eskom

Koeberg TISF EIA

→ srk consulting



# **Project Description**

- Vacant land within the KNPS Owner Controlled Area.
- Concrete pad approx.12800m². Up to 160 dry storage casks.
- Dry storage casks metal or concrete casks.
- · Filled with casks in a modular manner.
- Auxiliary building to house ancillary equipment.
- Secure perimeter fence, with controlled access.
- National Nuclear Regulator (NNR) Requirements, built and managed according to IAEA safety standards.
- Proposed to commence construction in 2018, approx. 12 months.
- Construction laydown area = operational area
- Existing haul routes

**▼ srk** consulting





# NEMA EIA Regulations 2014

Listed Activities ito NEMA EIA Regulations requiring Environmental Authorisation:

# Listing Notice 1:

• 27: Clearance of >1ha indigenous vegetation Listing Notice 2:

• 3: The development and related operation of facilities or infrastructure for ...storage or disposal of ...nuclear waste

# Listing Notice 3:

 12: Clearance of >300 m<sup>2</sup> indigenous vegetation in endangered or critically endangered ecosystem (Cape Flats Dune Strandveld)

Koeberg TISF EIA

What needs to be

authorised?

**∜** srk consulting

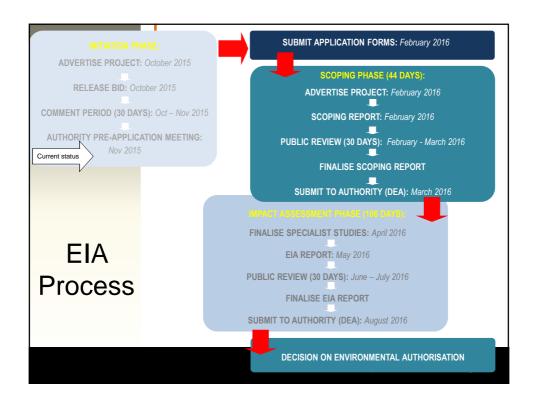
# Other Authorisations

Are any other authorisations required?

- National Heritage Resources Act: authorisation for any activity changing the character of a site exceeding 5 000 m<sup>2</sup>
- National Water Act: Authorisation required if dewatering of excavation during construction (unlikely)
- National Waste Act: does not apply to radioactive waste, which is regulated by the National Nuclear Regulator Act and the Nuclear Energy Act

Koeberg TISF EIA

**▼ srk** consulting



# Potential Impacts / Concerns Impacts on groundwater levels (dewatering) Soil and groundwater contamination Loss of sensitive vegetation and habitats Risks and impacts of radiation exposure to surrounding communities Loss of heritage resources Visual impacts of new infrastructure Need for the TISF vs a CISF Duration of "temporary" storage Cumulative impacts of various projects Neederg TISF EIA

# Specialist Studies/Input

Study	Specialist
Terrestrial Ecology	Scientific Aquatic Services
Heritage	ACO
Groundwater	SRK Consulting
Visual	SRK Consulting
Socio-Economic	SRK Consulting
Review of Radiological Assessment	SciRad
Health	Infotox
Review of Emergency Response Plan	NECSA

Koeberg TISF EIA

**▼ srk** consulting

# Stakeholder Engagement Process

# **Pre-Application:**

- Advertisements (6 newspapers 3 languages)
- · Background Information Document
- · Notification to stakeholders
- Site Notices
- Public Open Day (Koeberg Visitors Centre)
- Stakeholder Registration & Comments
- Pre-Application Meeting with decision making authorities
- Focus Group Meeting with commenting authorities

Koeberg TISF EIA

**▼ srk** consulting

# Stakeholder Engagement Process

# Scoping:

- Advertisements
- Notify registered stakeholders
- · Release executive summary
- 30 day comment period
- Public Open Day
- Focus Group Meeting(s)
- · Capture comments and responses in report

# **Impact Assessment:**

As for Scoping Phase

Koeberg TISF EIA

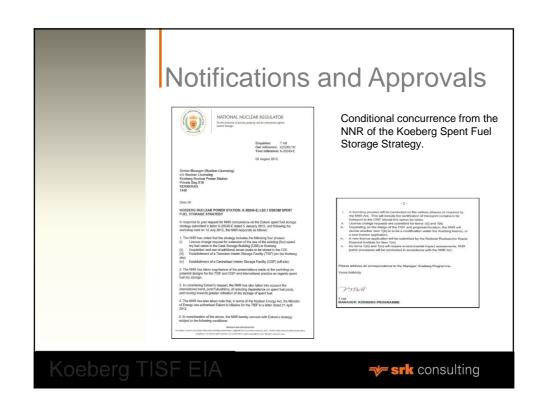
**▽ srk** consulting

# National Nuclear Regulator Process

Koeberg TISF EIA

**▼ srk** consulting

# Authorisation received from DoE: Onsite storage of spent fuel Transfer of spent fuel between SFP and storage facility Construction of TISF on the Koeberg site The Man August August











The Administrative Building Albion Spring, 183 Main Rd Rondebosch 7700 Postnet Suite 206 P Bag X18 Rondebosch 7701

T: +27 (0) 21 659 3060 F: +27 (0) 21 685 7105 E: capetown@srk.co.za

South Africa



# Environmental Impact Assessment for proposed Eskom Koeberg Transient Interim Storage Facility (TISF)

# Minutes of a Meeting: Authorities Focus Group

Held: DEA&DP Offices, Utilitas Building, 1 Dorp Street, Cape Town on 26 January 2016 at 10h00.

		2	2016 at 10h00.
Attendees:	Adri la Meyer	AM	Department of Environmental Affairs and Development Planning (DEA&DP)
	Melanese Schippers	MS	DEA&DP: Development Management (Region 1)
	Peter Harmse	PH	DEA&DP: Air Quality Management
	Bhawoodien Parker	BP	DEA&DP: Air Quality Management
	Zayed Brown	ZB	DEA&DP: Pollution Management
	Eugene Pienaar	EP	DEA&DP: Waste Management
	Alvan Gabriel	AG	DEA&DP: Development Management (Region 1)
	Lance McBain-Charles	LM	DEA&DP: Waste Management
	Russell Mehl	RM	DEA&DP: Pollution Management
	Anthony van Wyk	AW	DEA&DP: Environmental Officer
	lan Gildenhuys	IG	City of Cape Town (CoCT): City Health
	Morné Theron	MT	CoCT: Environmental Resources Management
	Pat Titmuss	PT	CoCT: Environmental Resources Management
	Tayeb Jappie	TJ	Eskom
	Randall Lavelot	RL	Eskom
	Ryan Jonas	RJ	Eskom
	Michelle Herbert	MH	Eskom
	Deon Jeannes	DJ	Eskom
	Bulelwa Ngwenya	BN	Eskom
	Chris Dalgliesh	CD	SRK Consulting
	Sharon Jones	SJ	SRK Consulting
	Jessica du Toit	JD	SRK Consulting
Apologies:	P Mkhabela	PM	National Nuclear Regulator (NNR)
	Errol Myburg	EM	Heritage Western Cape (HWC)
	Derril Daniels	DD	Department of Water and Sanitation (DWS)
	Bettie Leedo	BL	CoCT
	Eddie Hanekom	EH	DEA&DP: Waste Management
	Shaun Arendse	SA	DEA&DP: Waste Management
	Bhawoodien Parker	BP	DEA&DP

DEA&DP

GΑ

Gottlieb Arendse

Wilna Kloppers	WK	DEA&DP
Joy Leaner	JL	DEA&DP
Hadjira Peck	HP	DEA&DP

# 1 Safety Induction

1.1 Peter Visser (PV) gave a short safety induction, explaining the evacuation procedure for the Utilitas Building.

# 2 Welcome and Introductions

2.1 Chris Dalgliesh (CD) welcomed everyone to the Authorities' Focus Group Meeting and thanked them for attending. All meeting attendees introduced themselves.

# 3 Purpose of the Meeting

3.1 CD explained that the purpose of the meeting is to present the proposed Koeberg Transient Interim Storage Facility (TISF) project to the authorities, confirm authorisation requirements, outline the proposed EIA process, identify authority concerns and requirements, and to provide the authorities with an opportunity to raise any questions or concerns.

# 4 Project Motivation and Background

4.1 Tayeb Jappie (TJ) provided background to the project, including a brief motivation for the proposed development of the TISF. TJ explained that storage space for used fuel (in the spent fuel pools [SFPs]) at Koeberg Nuclear Power Station (KNPS) will reach capacity by 2018; therefore the TISF is required for the temporary storage of used fuel on site. TJ also discussed the Centralised Interim Storage Facility (CISF), which is a proposed central storage facility for nuclear used fuel and waste. The establishment of the CISF will be the responsibility of the National Radioactive Waste Disposal Institute, and the CISF is only likely to be in operation after 2025.

# 5 Project Description

TJ described the components of the TISF, which include a concrete pad(s) within a site footprint area of approximately 12 800m² (able of store up to 160 dry casks), an auxiliary building housing ancillary equipment, and a secure perimeter fence with controlled access. Storage casks will be either constructed from metal or concrete, and existing haul roads will be used to transfer the used fuel from the SFPs to the TISF. TJ explained that the construction of the TISF is proposed to commence in 2018, and will take approximately 12 months. TJ emphasised the robust technology and safety features of the casks, including two lids to prevent leakage, and polymers which absorb radiation.

# 6 Site Characteristics and Potential Impacts

- 6.1 CD discussed the site characteristics of both alternative sites, explaining that the KNPS is a well-studied site with many EIAs having been undertaken in and around the area. CD noted that the impact on vegetation on site is not seen to be a major concern, as both alternatives are on previously transformed and disturbed sites.
- 6.2 CD discussed the key potential impacts and concerns arising from the pre-application stakeholder engagement. The major concerns expressed by stakeholders thus far include the risk of radiation exposure, the duration of "temporary" storage, and the cumulative impact of various projects occurring in and around the KNPS site.
- 6.3 Morné Theron (MT) agreed that the public's main concerns are likely to be the risk of radiation exposure emanating from the casks and the storage of used fuel at KNPS becoming a permanent practise. These issues must be clearly addressed in public documents.

# 7 Authorisation Requirements

7.1 CD briefly outlined SRK's understanding of the authorisation requirements for the TISF. Authorisations will be required in terms of:

- National Environmental Management Act (NEMA) EIA Regulations, 2014;
- National Nuclear Regulator Act, 1999; and
- National Heritage Resources Act, 1999.
- 7.2 CD noted that the TISF project is unlikely to require either a Water Use Licence or a Waste Management Licence.

### 8 EIA Process

- 8.1 CD briefly explained the EIA process, noting that the project is currently in the initiation (preapplication) phase.
- 8.2 CD discussed the specialist studies which will inform the EIA. Specialist assessments will be undertaken as part of the Impact Assessment Phase of the EIA Process to investigate the key potential environmental issues and impacts identified during the Scoping Phase of the TISF project. The following specialist studies are proposed for the Impact Assessment Phase:
  - Terrestrial Ecology Impact Assessment (Scientific Aquatic Services);
  - Heritage Impact Assessment (ACO);
  - Groundwater Impact Assessment (SRK Consulting);
  - Visual Impact Assessment (SRK Consulting);
  - Socio-Economic Assessment (SRK Consulting);
  - Review of the Radiological Assessment (SciRad);
  - Health Impact Assessment (Infotox); and
  - Review of the current Emergency Response Plan (NECSA).
- 8.3 CD explained the stakeholder engagement process undertaken to date. CD noted that advertisements for the project have been placed in six newspapers, but that there has been only limited public interest thus far, and few members of the public attended the pre-application Public Open Day in October 2015. CD then provided detail on the planned stakeholder engagement process for the Scoping and Impact Assessment phases.
- 8.4 Alvan Gabriel (AG) suggested that the Draft Scoping Report be released for comment prior to the Application Form being submitted to DEA, noting that this comment period would not need to be advertised and registered stakeholders could be notified.

# 9 Cumulative Impacts

- 9.1 Michelle Herbert (MH) discussed the other current and future projects on and near the KNPS site for which EIAs are required. These include:
  - Sunbird Energy Gas Pipeline: EIA in progress;
  - Nuclear 1: EIA in progress;
  - Weskusfleur Substation: EIA in progress:
  - Stores extension: Basic Assessment in 2016;
  - Water storage tank: Basic Assessment in 2016;
  - Pollution test station: Basic Assessment in 2016:
  - Car park: Basic Assessment in 2016; and
  - Water storage (alternative site): Basic Assessment in 2016.

9.2 MH explained that three EIAs are currently underway and five Basic Assessments (BA) will commence in 2016. Environmental authorisations have been obtained for the KBG Ankerlig 132kV: EIA and the Koeberg Training Centre Complex and Administrative Centre.

9.3 Pat Titmuss (PT) and MT noted that they would be concerned about potential cumulative impacts (e.g. loss of indigenous vegetation) of the various projects on the KNPS site, and raised concerns about the difficulty faced by authorities in evaluating such cumulative impacts. MT further indicated that providing a cumulative impacts map of the various projects on the KNPS site would be of great assistance to the CoCT.

## 10 General

10.1 A number of issues and concerns were raised. These issues and concerns were discussed and responded to at the meeting, and are summarised in Table 1 below.

# 11 Way Forward

11.1 CD noted the key dates going forward. The Application Form will be submitted to DEA and the project advertised in July 2016, followed by a 30 day public and authority comment period. The release of the draft Scoping Report for comment prior to submission of the Application Form (as suggested by Elvin) would be discussed with Eskom. [Subsequent to the meeting, the decision was taken to release the Scoping Report for a pre-application public and authority comment period in February/March 2016].

**Table 1: Issues and Concerns** 

#	Issue / Concern	Authority	Response provided by the Project Applicant / Environmental Assessment Practitioner (EAP)			
Inte	Intended Lifespan of the TISF					
1.	Could the TISF potentially become permanent, until the end of Koeberg's operating life? What if the CISF is not built?	Morné Theron	The CISF is a crucial component of the government's nuclear programme, and the government intends to build the CISF by 2025. However, if the construction of the CISF is delayed, the TISF will have the capacity to accommodate used fuel for the duration of the existing Koeberg Nuclear Power Station's (KNPS) –operating life. The current EIA is for approval of the entire TISF facility (should it be required), however it will be developed in a modular fashion, as storage demand dictates.			
2.	Are there different design requirements for a temporary storage facility and a permanent facility?	Russell Mehl	A permanent facility (such as a CISF) would require a building with thick walls and a thick concrete slab, while a temporary structure requires only a thick concrete slab. A permanent structure cannot be authorised under KNPS' current licence from the NNR. Therefore a temporary storage facility is proposed at KNPS_for which the existing licence can be amended.			
Ris	k of radiation exposure					
3.	Is there any international experience of casks leaking and emitting radiation?	lan Gildenhuys	The casks are constructed of steel and concrete and contain polymers which absorb radiation. The integrity of casks is stringently tested according to NNR standards. Extremely robust technology is used to prevent radiation exposure, and casks are designed to withstand a 9m drop and temperatures of 800°C. No casks are known to have leaked to date.  Casks cost approximately R 40 to 50 million each, and are designed for at least a 50 year lifespan. Monitoring between the two lids of an individual cask takes place, so that any leaks			
4.	If the casks are damaged, will there be radiation exposure?	Morné Theron	would be detected.  Any maintenance on the casks will be conducted inside the Cask Storage Building (CSB). The lids of the casks will never be lifted, and the fuel assemblies will never be exposed to the atmosphere.			

SRK	Consulting		Page
5.	What is the security risk of used fuel storage in the TISF?	lan Gildenhuys	Each cask weighs approximately 150 tonnes, so they are not easily moved or stolen
			In terms of International Atomic Energy Agency (IAEA) requirements, the TISF will need to be monitored and will be linked to cameras at the KNPS. It will also be independently monitored by the IAEA.
6.	Will the TISF remain uncovered (without a roof structure)?	Morné Theron	Yes, the TISF will remain uncovered. An unenclosed concrete slab (on which the casks are positioned) is safer as it allows for effective heat exchange and cooling of the individual casks. In case of an emergency situation (e.g. a tsunami event) a building (with a roof structure) could collapse thus preventing adequate heat exchange of the casks. A building able to withstand a tsunami event would be extremely expensive to construct. Eskom cannot afford such a structure at present, and if constructed it could become a permanent facility.  The licence issued by the NNR would be valid for a storage period of 5 years, thereafter Eskom would need to re-apply, at which stage the NNR would re-assess the safety case.
7.	What is the cumulative exposure of radiation from the TISF, the existing nuclear plant, and the proposed new nuclear plant (Nuclear 1)?	lan Gildenhuys	The cumulative radiation from the KNPS site and the TISF is expected to be almost negligible.
	ject Description	7	
8.	Why has no contingency plan been put in place to recycle or reprocess used fuel?	Zayed Brown	Used fuel in the SFPs has already been re-cycled three times in the reactor (i.e. used for three cycles), and can't be further reused at the KNPS. Used fuel cannot be reprocessed, as it is an extremely expensive exercise.
			If encapsulated, the used fuel would need to be disposed of at an underground facility, typically 400 – 500 m deep.
9.	Will fuel assemblies be encapsulated in metal containers? Why can't they be stored at Vaalputs?	Zayed Brown	Vaalputs is not authorised to receive high level waste.
10.	What is done with contaminated water used for cooling in the SFPs.	Zayed Brown	The SFPs are in a closed system, i.e. the water stays in the pools and is filtered to remove some of the contaminants. This water will never be released into the environment.
11.	How often do (maintenance) outages occur?	Morné Theron	Outages occur every 9 months, alternating between the two reactor units.
12.	How long will it take to construct the concrete slab?	Morné Theron	It is anticipated that construction of the TISF will commence in 2018 and will take approximately 12 months.
13.	There is an ongoing EIA for new reactors (Nuclear 1 project). Will the TISF store used fuel from these new reactors as well?	Zayed Brown	The TISF will only store used fuel generated at the existing KNPS site. Any new facility would need to make allowance for the temporary storage of used fuel produced by the facility until the establishment of the CISF. For new nuclear reactors, the SPFs only have capacity to store used fuel for 10 years. It is however anticipated that the new facility would or may only be established around 2025, approximately the same time that the CISF is due to be established.
14.	Will the new casks be the same as the existing casks?	Morné Theron	The existing casts are metal casks. The nature of the new casks will depend on the tender process, but all casks will comply with the relevant NNR regulations and specifications.
15.	What is the construction lead time?	Morné Theron	The TISF facility would be required in 2019, so construction is scheduled to commence in 2018. This allows sufficient time for the EIA process to be completed.

Ge	neral		
16	Is all used fuel produced on site (to date) stored in the 4 existing dry storage casks in the CSB?	Morné Theron	No, the SFPs at the KPNS site are able to store 3 000 used fuel assemblies. In the mid-1990s the spent fuel pools were reracked (densified) to provide additional storage capacity. During this process some of the used fuel was moved to the dry storage casks.

Meeting closed at 11.50 am Notes taken by: Jessica du Toit

Sharon Jones

SRK Consulting - Certified Electronic Signature



Signed by:

This signature has been printed digitally. The Authorhas given permission forts use forthis document. The details are stored in the SRK Signature Database

\_ Date:

12 February 2016

Appendix K:
Notification Letters/Emails to Registered I&APs (Pre-Application Phase)



The Albion Spring First Floor Administrative Building 183 Main Rd Rondebosch 7700

P Bag X18 Rondebosch 7701 South Africa

T: +27 (0) 21 659 3060 F: +27 (0) 21 685 7105 E: capetown@srk.co.za

Postnet Suite #206

www.srk.co.za



17 March 2016 478317

Dear Stakeholder

# NOTICE OF RELEASE OF DRAFT SCOPING REPORT: PROPOSED USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER STATION

Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of dry casks at the Koeberg Nuclear Power Station (KNPS) to accommodate used nuclear fuel from the reactors of the power station, thereby ensuring the continued operation of the KNPS. SRK Consulting (South Africa) (Pty) Ltd (SRK) has been appointed to undertake the Scoping and Environmental Impact Reporting (S&EIR often referred to as the Environmental Impact Assessment [EIA]) process required in terms of the National Environmental Management Act 107 of 1998 (NEMA) and the EIA Regulations, 2014.

Although the EIA process has not yet formally commenced, SRK previously requested interested parties to register as stakeholders for this EIA process, at which stage you were registered as a stakeholder.

The **Draft Scoping Report** has been compiled and is now available for public review for a period of 30 days. from 18 March until 25 April 2016. Enclosed please find a copy of the Executive Summary of the Draft Scoping Report, which also provides details of how you can participate in the EIA process as well as SRK's contact details for the submission of comments.

Hard copies of the full report are available for viewing at the following venues:

- Koeberg Public Library, Duynefontein;
- Wesfleur Public Library, Atlantis;
- Cape Town Public Library;
- The KNPS Visitors Centre; and
- SRK's office in Rondebosch.

An electronic version of the report can also be accessed on SRK's website www.srk.co.za (via the 'Library' and 'Public Documents' links).

Yours faithfully,

# SRK Consulting (South Africa) (Pty) Ltd



# Jessica du Toit **Environmental Scientist**

Partners R Armstrong, AH Bracken, MJ Braune, JM Brown, CD Dalgliesh, BM Engelsman, R Gardiner, GC Howell, WC Joughin, DA Kilian, JA Lake, BF Liber, V Maharaj, DJ Mahlangu, RRW McNeill, HAC Meintjes, MJ Morris, GP Nel, VS Reddy, PE Schmidt, PJ Shepherd, MJ Sim, VM Simposya, HFJ Theart, KM Uderstadt, AT van Zyl, MD Wanless, ML Wertz, A Wood

Directors AJ Barrett, JR Dixon, GC Howell, WC Joughin, V Maharaj, DJ Mahlangu, VS Reddy, PE Schmidt,

Associate Partners N Brien, LSE Coetser, CJ Esterhuyze, CJ Ford, E Goossens, M Hinsch, SG Jones, W Jordaan, AH Kirsten, LH Kirsten, S Kisten, I Mahomed, RD O'Brien, T Shepherd, JJ Slabbert, WI Stewart,

Consultants JAC Cowan, *PrSciNat, BSc(Hons)*; JH de Beer, *PrSci Nat, MSc*; JR Dixon, *PrEng*; T Hart, *MA, TTHD*; Dr GA Jones, *PrEng, PhD*; PR Labrum, *PrEng*; PN Rosewarne, *PrSciNat*; AA Smithen, *PrEng*; TR Stacey, *PrEng, DSc*; Dr OKH Steffen, *PrEng, PhD*; PJ Terbrugge, *PrSciNat, MSc* 

African Offices: Cape Town

+ 27 (0) 21 659 3060 + 27 (0) 31 279 1200 Durban East London + 27 (0) 43 748 6292 + 27 (0) 11 441 1111 Johannesburg Kimberley + 27 (0) 53 861 5798 + 27 (0) 33 347 5069

Pietermaritzburg Port Elizabeth Pretoria

+ 27 (0) 41 509 4800 + 27 (0) 12 361 9821 Rustenburg Accra + 23 (3) 24 485 0928 Lubumbashi + 243 (0) 81 999 9775 Group Offices: Africa Australia Europe North America South America

**TCESA** 

# Du Toit, Jessica

**From:** Du Toit, Jessica

**Sent:** 18 March 2016 11:12 AM

**To:** Masson, Scott

**Subject:** 478317: Koeberg TISF EIA - Availability of Draft Scoping Report for comment

**Attachments:** 478317\_Koeberg\_TISF\_EIA\_DSR\_Executive\_Summary.pdf

Tracking: Recipient Delivery

Masson, Scott Delivered: 18/03/2016 11:12 AM

'admin@schoonshs.wcape.school.za' 'admin@naphakadess.wcape.school.za'

'admin@wesbankss.wcape.school.za'

'patrickb@cbcstjohns.co.za'

'stephen\_lefeuvre@parklands.co.za'

'minky@elkanah.co.za' 'reception@tvh.co.za'

'admin@sinenjongo.wcape.school.za' 'headmaster@milnertonhigh.co.za'

'bassa.bibi@yahoo.com'

'vrps@mweb.co.za'

'acvvkoeberg@afrihost.co.za'

'arodgers@westcoastcollege.co.za'

'Nicklee@telkomsa.net'

'davidfig@iafrica.com'

'ben.blom@necsa.co.za'

'amanda.fritz.whyte@gmail.com'

'info@melkbosprivate.co.za'

'iiosiphakis@gmail.com'

'mikecmthebike@gmail.com'

'FIS-sydney@mweb.co.za'

'rvdriet@telkomsa.net'

'helen.bamford@inl.co.za'

'graham@nimblemouse.co.za'

'grahamarbuckle@gmail.com'

'ryan@sefsa.co.za'

'ankandjohn@gmail.com'

Dear Stakeholder

# NOTICE OF RELEASE OF DRAFT SCOPING REPORT: PROPOSED USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER STATION

Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of dry casks at the Koeberg Nuclear Power Station (KNPS) to accommodate used nuclear fuel from the reactors of the power station,

thereby ensuring the continued operation of the KNPS. SRK Consulting (South Africa) (Pty) Ltd (SRK) has been appointed to undertake the Scoping and Environmental Impact Reporting (S&EIR – often referred to as the Environmental Impact Assessment [EIA]) process required in terms of the National Environmental Management Act 107 of 1998 (NEMA) and the EIA Regulations, 2014.

Although the EIA process has not yet formally commenced, SRK previously requested interested parties to register as stakeholders for this EIA process, at which stage you were registered as a stakeholder.

The **Draft Scoping Report** has been compiled and is now available for public review for a period of 30 days, from **18 March until 25 April 2016**. Please find attached a copy of the Executive Summary of the Draft Scoping Report, which also provides details of how you can participate in the EIA process.

Hard copies of the full report are available for viewing at the following venues:

- Koeberg Public Library, Duynefontein;
- Wesfleur Public Library, Atlantis;
- Cape Town Public Library;
- The KNPS Visitors Centre; and
- SRK's office in Rondebosch.

An electronic version of the report can also be accessed on SRK's website: <a href="http://www.srk.co.za/en/koeberg-tisf-eia">http://www.srk.co.za/en/koeberg-tisf-eia</a>.

Stakeholders are invited to comment, and/or to register on the project database. Stakeholders must provide their comments together with their name, contact details (preferred method of notification, e.g. email), and an indication of any direct business, financial, personal or other interest which they have in the application, to Jessica du Toit at SRK Consulting: Tel: 021 659 3060; Fax: 021 685 7105; or email: <a href="mailto:jedutoit@srk.co.za">jedutoit@srk.co.za</a>.

Jessica du Toit BSc (ConsEcol), MPhil (Env Mgmt)

**Environmental Consultant** 



SRK Consulting (South Africa) Pty Ltd

The Administrative Building, Albion Spring, 183 Main Road, Rondebosch, 7700 Postnet Suite # 206, Private Bag X18, Rondebosch, 7701

**Tel:** +27-(0)21-659-3060; **Fax**: +27-(0)21-685-7105

Mobile: +27-(0)76-133-9776; Direct: +27-(0)21-659-3083

Email: jedutoit@srk.co.za

### www.srk.co.za

This transmission is intended for the sole use of the addressee, and may contain information that by its privileged and confidential nature is exempt from disclosure under applicable law. You are hereby notified that any dissemination, distribution or duplication of this transmission by someone other than the intended recipient or its designated agent is strictly prohibited. If you have received this transmission in error, please notify the sender immediately by replying to this transmission, or by collect call to the above phone number.

Please consider the environment before printing this e-mail.

# **Du Toit, Jessica**

From: Du Toit, Jessica

18 March 2016 11:11 AM Sent:

To: Masson, Scott

Subject: 478317: Koeberg TISF EIA - Availability of Draft Scoping Report for comment

**Attachments:** 478317\_Koeberg\_TISF\_EIA\_DSR\_Executive\_Summary.pdf

Recipient Tracking:

Masson, Scott

'john@gcinc.co.za' 'robsyl@unilynx.co.za'

'ferdinand.x.mettler@gsk.com'

'carola247@gmail.com'

'carola@leangreen.co.za'

'yolande@edenonthebaymall.co.za'

'mibecmthegibe@gmail.com'

'grant@mygas.co.za'

'sizekemtya@gmail.com'

'yunekamtya@yahoo.com'

'mvunelwa@telkomsa.net'

'Napoleon.57@ovi.com'

'tembile.nyoka@gmail.com'

'wimpie.christa@absamail.co.za'

'Danoli1@vodamail.co.za'

'elbe.opperman@gmail.com'

'Opperman.fg@gmail.com'

'pannaye@netactive.co.za'

'Daryl@lantic.net'

'Jose.Pereira@lesedins.co.za'

'audreyp@melkbosprivate.co.za'

'sav@coachsav.co.za'

'Piloso2007@yahoo.com'

'Nicky.pombo@gmail.com'

'dave@brainstorm.co.za'

'energy@birdlife.org.za'

'dale.wright@birdlife.org.za'

'renier@gcinc.co.za'

'anrichards@telkomsa.net'

'u.rothen@mweb.co.za'

'saaymans1@yahoo.com'

'kazana@telkomsa.net'

'psicc@iafrica.com'

Delivered: 18/03/2016 11:11 AM

Recipient Delivery

'Bill.Marysleggs@gmail.com'

'belindatravelsusa@gmail.com'

'detective.speed@gmail.com'

'dntomas@hotmail.com'

'clementrafm@yahoo.co.za'

'mike.thurgood@imaginet.co.za'

'triplejjj@theweb.co.za'

'natiov@ebucksmail.com'

'tertiuswatney@gmail.com'

'chriswetter@telkomsa.net'

'davedon@telkomsa.net'

'Ray@wilra.co.za'

'brian@sadomain.co.za'

'tugw@iafrica.com'

'admin@saxonseass.wcape.school.za'

'admin@atlantissec.wcape.school.za'

'langenhovenh@vodamail.co.za'

'admin@proteus.wcape.school.za'

'powderedpoppy@gmail.com'

'admin@inkwenkwezi.wcape.school.za'

### Dear Stakeholder

# NOTICE OF RELEASE OF DRAFT SCOPING REPORT: PROPOSED USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER STATION

Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of dry casks at the Koeberg Nuclear Power Station (KNPS) to accommodate used nuclear fuel from the reactors of the power station, thereby ensuring the continued operation of the KNPS. SRK Consulting (South Africa) (Pty) Ltd (SRK) has been appointed to undertake the Scoping and Environmental Impact Reporting (S&EIR – often referred to as the Environmental Impact Assessment [EIA]) process required in terms of the National Environmental Management Act 107 of 1998 (NEMA) and the EIA Regulations, 2014.

Although the EIA process has not yet formally commenced, SRK previously requested interested parties to register as stakeholders for this EIA process, at which stage you were registered as a stakeholder.

The **Draft Scoping Report** has been compiled and is now available for public review for a period of 30 days, from **18 March until 25 April 2016**. Please find attached a copy of the Executive Summary of the Draft Scoping Report, which also provides details of how you can participate in the EIA process.

Hard copies of the full report are available for viewing at the following venues:

- Koeberg Public Library, Duynefontein;
- Wesfleur Public Library, Atlantis;
- Cape Town Public Library;
- · The KNPS Visitors Centre; and
- SRK's office in Rondebosch.

# **Du Toit, Jessica**

**From:** Du Toit, Jessica

**Sent:** 18 March 2016 11:09 AM

To: Masson, Scott

**Subject:** 478317: Koeberg TISF EIA - Availability of Draft Scoping Report for comment

Attachments: 478317\_Koeberg\_TISF\_EIA\_DSR\_Executive\_Summary.pdf

Tracking: Recipient Delivery

Masson, Scott

'Harry.white@abhoa.co.za'

'roynagan@telkomsa.net'

'smithglodene@gmail.com'

'warrencarolus@gmail.com'

'muraadt@gmail.com'

'Cpf.atlantis@gmail.com'

'Clarence.mentor@gmail.com'

'wendyrass@yahoo.co.za'

'warren.leslie@remaxpa.co.za'

'blaauwberg1@absamail.co.za'

'cliff.dorse@capetown.gov.za'

'iraubenh@mweb.co.za'

'duvall@mweb.co.za'

"john@melkbosstrand.net"

'samiekleynhans@yahoo.co.za'

'nhwpr@melkbosstrand.net'

'charlesti@daff.gov.za'

'Amanda.fritz.whyte@gmail.com'

'Tapjohnson01@gmail.com'

'brett@melkbosstrand.net'

'mark@communite.co.za'

'Ray@wilra.co.za'

'andre@gooutdoorsgear.co.za'

'Shawn73110@gmail.com'

'tableview-saps@saps.org.za'

'tableview-saps@saps.org.za'

'sector1chairman@cpftableview.co.za'

'inneractiveconsulting@gmail.com'

'wangesiyo@gmail.com'

'efmarthinus@yahoo.com'

'ahsedeman@gmail.com'

'admin@berzeliaps.wcape.school.za'

'david.willemse2@capetown.gov.za'

Delivered: 18/03/2016 11:09 AM

1

Recipient Delivery

'renier@gcinc.co.za'

'trevor.moodley@eskom.co.za'

'fickne@eskom.co.za'

'peterssa@eskom.co.za'

'osarkinasp@gmail.com'

'septema@eskom.co.za'

'sekokoi@eskom.co.za'

'oliviejd@eskom.co.za'

'michelle.herbert@advisian.com'

'sataarh@eskom.co.za'

'kelebohile.makhothe@eskom.co.za'

'LaveloR@eskom.co.za'

'phidzanl@eskom.co.za'

'Lewis.phidza@eskom.co.za'

'tayeb.jappie@eskom.co.za'

'lawrencea@eskom.co.za'

'jeannesd@eskom.co.za'

'vernonmr@eskom.co.za'

'stephen.pieterson@eskom.co.za'

'potgielj@eskom.co.za'

'sedick.davis@eskom.co.za'

'ryan.jonas@advisian.com'

### Dear Stakeholder

# NOTICE OF RELEASE OF DRAFT SCOPING REPORT: PROPOSED USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER STATION

Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of dry casks at the Koeberg Nuclear Power Station (KNPS) to accommodate used nuclear fuel from the reactors of the power station, thereby ensuring the continued operation of the KNPS. SRK Consulting (South Africa) (Pty) Ltd (SRK) has been appointed to undertake the Scoping and Environmental Impact Reporting (S&EIR – often referred to as the Environmental Impact Assessment [EIA]) process required in terms of the National Environmental Management Act 107 of 1998 (NEMA) and the EIA Regulations, 2014.

Although the EIA process has not yet formally commenced, SRK previously requested interested parties to register as stakeholders for this EIA process, at which stage you were registered as a stakeholder.

The **Draft Scoping Report** has been compiled and is now available for public review for a period of 30 days, from **18 March until 25 April 2016**. Please find attached a copy of the Executive Summary of the Draft Scoping Report, which also provides details of how you can participate in the EIA process.

Hard copies of the full report are available for viewing at the following venues:

- Koeberg Public Library, Duynefontein;
- Wesfleur Public Library, Atlantis;
- Cape Town Public Library;
- The KNPS Visitors Centre; and

# **Du Toit, Jessica**

**From:** Du Toit, Jessica

**Sent:** 18 March 2016 11:10 AM

**To:** Masson, Scott

**Subject:** 478317: Koeberg TISF EIA - Availability of Draft Scoping Report for comment

**Attachments:** 478317\_Koeberg\_TISF\_EIA\_DSR\_Executive\_Summary.pdf

Tracking: Recipient Delivery

Masson, Scott Delivered: 18/03/2016 11:10 AM

'gaynor.adair@gmail.com' 'gaynor.adair@gmail.com'

'yekeenahmed@gmail.com' 'letchmew@yahoo.com'

'melanielorenandrews@hotmail.com'

'arbaker@telkomsa.net'

'melville@sun.ac.za'

'mirigarcia1@hotmail.com'

'cynthia@danceeuphoria.co.za'

'lise.botes3@gmail.com'

'carrycatge@yahoo.co.uk'

'infobcd@iafrica.com'

'jackie.braswell@cts.org.za'

'Moonriver1@telkomsa.net'

'peterlbrowne@gmail.com'

'telesol@iafrica.com'

'renbrightlight999@gmail.com'

'Dominique87@gmail.com'

'pro@orionorganisation.co.za'

'scwaile@yahoo.com'

'jerry.dampies3@mtn.blackberry.com'

'maurizio@decinti.it'

'carin.dev@outlook.com'

'Loperla53@hotmail.com'

'clivedobsonwork@gmail.com'

'Daryl@lantic.net'

'cornia.ellis@teleflex.com'

'stevealanfarrand@gmail.com'

'alidagelant@yahoo.com'

'nora@altitudevarsity.co.za'

'ronaldgunda@gmail.com'

'garywaynehall@gmail.com'

'HNDBRE003@myuct.ac.za'

Recipient Delivery

'Alex-hotten@gmx.de'

'iiosiphakis@gmail.com'

'Jentum24@ovi.com'

'duvall@mweb.co.za'

'muna@iafrica.com'

'Peter@impact247.co.za'

'Nicklee@telkomsa.net'

'igp@orionorganisation.co.za'

'andrewde@eskom.co.za'

'andrewsdeidre@yahoo.com'

'lloydflewis@gmail.com'

'luhangapeter@gmail.com'

'Macalex.justin@telkomsa.net'

'friendsofrietvlei@worldonline.co.za'

'sizekamalusi@gmail.com'

'livesonmanguwo@gmail.com'

'maigrot@telkomsa.net'

'Zanoxolo.Makubalo@ZA.nestle.com'

Dear Stakeholder

# NOTICE OF RELEASE OF DRAFT SCOPING REPORT: PROPOSED USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER STATION

Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of dry casks at the Koeberg Nuclear Power Station (KNPS) to accommodate used nuclear fuel from the reactors of the power station, thereby ensuring the continued operation of the KNPS. SRK Consulting (South Africa) (Pty) Ltd (SRK) has been appointed to undertake the Scoping and Environmental Impact Reporting (S&EIR – often referred to as the Environmental Impact Assessment [EIA]) process required in terms of the National Environmental Management Act 107 of 1998 (NEMA) and the EIA Regulations, 2014.

Although the EIA process has not yet formally commenced, SRK previously requested interested parties to register as stakeholders for this EIA process, at which stage you were registered as a stakeholder.

The **Draft Scoping Report** has been compiled and is now available for public review for a period of 30 days, from **18 March until 25 April 2016**. Please find attached a copy of the Executive Summary of the Draft Scoping Report, which also provides details of how you can participate in the EIA process.

Hard copies of the full report are available for viewing at the following venues:

- Koeberg Public Library, Duynefontein;
- Wesfleur Public Library, Atlantis;
- Cape Town Public Library;
- · The KNPS Visitors Centre; and
- SRK's office in Rondebosch.

An electronic version of the report can also be accessed on SRK's website: http://www.srk.co.za/en/koeberg-tisf-eia.

### **Du Toit, Jessica**

From: Du Toit, Jessica

Sent: 18 March 2016 11:06 AM

To: Masson, Scott

Subject: 478317: Koeberg TISF EIA - Availability of Draft Scoping Report for comment

**Attachments:** 478317\_Koeberg\_TISF\_EIA\_DSR\_Executive\_Summary.pdf

Recipient Tracking:

Masson, Scott

'goosenmd@eskom.co.za' 'henderc@eskom.co.za'

'pauline.henkeman@eskom.co.za'

'herbermi@eskom.co.za'

'ismaile@eskom.co.za'

'marina.jenkins@eskom.co.za'

'greefg@eskom.co.za'

'princess.mthombeni@necsa.co.za'

'amelia.rennie-kroon@necsa.co.za'

'nikelwa.tengimfene@necsa.co.za'

'phenyo.nongane@necsa.co.za'

'Debbie.joshua@eskom.co.za'

'evan.kerr@eskom.co.za'

'KlineKN@eskom.co.za'

'krausem@eskom.co.za'

'Jurina.leroux@eskom.co.za'

'makgael@eskom.co.za'

'Matsabmg@eskom.co.za'

'matshidd@eskom.co.za'

'mokgwall@eskom.co.za'

'moffatr@eskom.co.za'

'cassie.naidoo@eskom.co.za'

'nelap@eskom.co.za'

'owen.peters@eskom.co.za'

'phalants@eskom.co.za'

'pienaasz@eskom.co.za'

'PruNhin@eskom.co.za'

'RadebePS@eskom.co.za'

'george.reissenzahn@eskom.co.za'

'Martin.saaymans@eskom.co.za'

'trevor.moodley@eskom.co.za'

'vuyx@hotmail.com'

'mandisi.stwayi@eskom.co.za'

Delivered: 18/03/2016 11:06 AM

Recipient Delivery

'jongi.dyabaza@eskom.co.za'

'ovisr@eskom.co.za'

'riedewaan.bakardien@eskom.co.za'

'bakardr@eskom.co.za'

'felix.matthee@eskom.co.za'

'john.jones@eskom.co.za'

'lindley.perryman@eskom.co.za'

'krugerlh@eskom.co.za'

'jonkern@eskom.co.za'

'StaffenK@eskom.co.za'

'KarstenT@eskom.co.za'

'TrollopI@eskom.co.za'

'vdwestk@eskom.co.za'

'tasneem.vawda@eskom.co.za'

'xasoss@eskom.co.za'

'tracey.cosgrove@petrosa.co.za'

'Willem.beukes@necsa.co.za'

'bloubergstrandresidents@gmail.com'

'melkbosstrand@saps.org.za'

'flabuschagne@sars.gov.za'

'managerwc@wessa.co.za'

'andy@wessa.wcape.school'

'sam@wessa.wcape.schoo'

#### Dear Stakeholder

# NOTICE OF RELEASE OF DRAFT SCOPING REPORT: PROPOSED USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER STATION

Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of dry casks at the Koeberg Nuclear Power Station (KNPS) to accommodate used nuclear fuel from the reactors of the power station, thereby ensuring the continued operation of the KNPS. SRK Consulting (South Africa) (Pty) Ltd (SRK) has been appointed to undertake the Scoping and Environmental Impact Reporting (S&EIR – often referred to as the Environmental Impact Assessment [EIA]) process required in terms of the National Environmental Management Act 107 of 1998 (NEMA) and the EIA Regulations, 2014.

Although the EIA process has not yet formally commenced, SRK previously requested interested parties to register as stakeholders for this EIA process, at which stage you were registered as a stakeholder.

The **Draft Scoping Report** has been compiled and is now available for public review for a period of 30 days, from **18 March until 25 April 2016**. Please find attached a copy of the Executive Summary of the Draft Scoping Report, which also provides details of how you can participate in the EIA process.

Hard copies of the full report are available for viewing at the following venues:

- Koeberg Public Library, Duynefontein;
- Wesfleur Public Library, Atlantis;

### **Du Toit, Jessica**

**From:** Du Toit, Jessica

**Sent:** 18 March 2016 11:04 AM

**To:** Masson, Scott

**Subject:** 478317: Koeberg TISF EIA - Availability of Draft Scoping Report for comment

**Attachments:** 478317\_Koeberg\_TISF\_EIA\_DSR\_Executive\_Summary.pdf

Tracking: Recipient Delivery

Masson, Scott Delivered: 18/03/2016 11:04 AM

'peter.harmse@westerncape.gov.za'

'bhawoodien.parker@westerncape.gov.za'

'Gottlieb.Arendse@westerncape.gov.za'

'wilna.kloppers@westerncape.gov.za'

'russell.mehl@westerncape.gov.za'

'zayed.brown@westerncape.gov.za'

'taryn.dreyer@westerncape.gov.za'

'Melanese.Schippers@westerncape.gov.za'

'alvan.gabriel@westerncape.gov.za'

'adri.lameyer@westerncape.gov.za'

'hildegarde.fast@westerncape.gov.za'

'amanda.willett@westerncape.gov.za'

'graham.paulse@westerncape.gov.za'

'colin.deiner@westerncape.gov.za'

'maurice.robinson@westerncape.gov.za'

'agatha.jacobs@westerncape.gov.za'

'cailey.bredenkamp@westerncape.gov.za'

'jan.duplessis@westerncape.gov.za'

'ck@wcncb.co.za'

'sferreir@pgwc.gov.za'

'sstrydom@pgwc.gov.za'

'Grace.Swanepoel@westerncape.gov.za'

'Bettie.leedo@capetown.gov.za'

'FDitinti@environment.gov.za'

'Neville.vanrensburg@westerncape.gov.za'

'nora.grose@capetown.gov.za'

'Cynthia.Clayton@capetown.gov.za'

'marthinusf2@gmail.com'

'Danielkastoor@gmail.com'

'Nicholaskok@gmail.com'

'kubisageraldine@gmail.com'

'Lighthburnmag@yahoo.com'

'enidmuzeli70@gmail.com'

Recipient Delivery

'Linley.light@gmail.com'

'mvrooyenl@gmail.com'

'cyril.mack@capetown.gov.za'

'Babara.Rass@capetown.gov.za'

'Lubabalo.Makeleni@capetown.gov.za'

'Justin.Basson@capetown.gov.za'

'Heather.brenner@capetown.gov.za'

'charles@sustaingroup.co.za'

'mijvv@absamail.co.za'

'magrieta.jansenvanvuuren@capetown.gov.za'

'kha.abrahams@gmail.com'

'emerentiap@elsenburg.com'

'les.borrill@eskom.co.za'

'carin.devilliers@eskom.co.za'

'EngelK@eskom.co.za'

'FeatherK@eskom.co.za'

'Francia@eskom.co.za'

'geldenl@eskom.co.za'

#### Dear Stakeholder

# NOTICE OF RELEASE OF DRAFT SCOPING REPORT: PROPOSED USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER STATION

Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of dry casks at the Koeberg Nuclear Power Station (KNPS) to accommodate used nuclear fuel from the reactors of the power station, thereby ensuring the continued operation of the KNPS. SRK Consulting (South Africa) (Pty) Ltd (SRK) has been appointed to undertake the Scoping and Environmental Impact Reporting (S&EIR – often referred to as the Environmental Impact Assessment [EIA]) process required in terms of the National Environmental Management Act 107 of 1998 (NEMA) and the EIA Regulations, 2014.

Although the EIA process has not yet formally commenced, SRK previously requested interested parties to register as stakeholders for this EIA process, at which stage you were registered as a stakeholder.

The **Draft Scoping Report** has been compiled and is now available for public review for a period of 30 days, from **18 March until 25 April 2016**. Please find attached a copy of the Executive Summary of the Draft Scoping Report, which also provides details of how you can participate in the EIA process.

Hard copies of the full report are available for viewing at the following venues:

- Koeberg Public Library, Duynefontein;
- Wesfleur Public Library, Atlantis;
- Cape Town Public Library;
- The KNPS Visitors Centre; and
- SRK's office in Rondebosch.

An electronic version of the report can also be accessed on SRK's website: http://www.srk.co.za/en/koeberg-tisf-eia.

### **Du Toit, Jessica**

From: Du Toit, Jessica

Sent: 18 March 2016 11:02 AM

To: Masson, Scott

Subject: 478317: Koeberg TISF EIA - Availability of Draft Scoping Report for comment

**Attachments:** 478317\_Koeberg\_TISF\_EIA\_DSR\_Executive\_Summary.pdf

Recipient Tracking:

Masson, Scott

Delivered: 18/03/2016 11:02 AM

'jan.norman@eskom.co.za'

'gert.greeff@eskom.co.za'

'rsmart@capenature.co.za'

'whector@environment.gov.za'

'Imokoena@environment.gov.za'

'Ian.Gildenhuys@capetown.gov.za'

'pat.titmuss@capetown.gov.za'

'Morne.Theron@capetown.gov.za'

'Lynelle.Matthys@capetown.gov.za'

'thokob@daff.gov.za'

'mashuduma@daff.gov.za'

'AnnetteS@daff.gov.za'

'Ditebogo.kgomo@energy.gov.za'

'Bessie.makgopa@energy.gov.za'

'Katse.Maphoto@energy.gov.za'

'brenda.phahlamohlaka@energy.gov.za'

'Tshekane.tshepe@energy.gov.za'

'Simphiwe.makhathini@dpe.gov.za'

'Andretta.tsebe@dpe.gov.za'

'emerentiap@elsenburg.com'

'makhuram@dot.gov.za'

'situmal@dot.gov.za'

'danielsd@dwa.gov.za'

'ajerardi@pgwc.gov.za'

'ptmkhabela@nnr.co.za'

'thill@nnr.co.za'

'rmakgae@nnr.co.za'

'vkmajola@nnr.co.za'

'gmoonsamy@nnr.co.za'

'tmogorosi@nnr.co.za'

'gnhlapho@nnr.co.za'

'vseitei@nnr.co.za'

'rramerafe@nnr.co.za'

Recipient Delivery

'ttselane@nnr.co.za'

'emile.thiele@sippmo.co.za'

'runkelc@nra.co.za'

'mgalimberti@sahra.org.za'

'emerentiap@elsenburg.com'

'wouter.kriel@westerncape.gov.za'

'ansaas.mohamed@westerncape.gov.za'

'solly.fourie@westerncape.gov.za'

'abigail.scholtz@westerncape.gov.za'

'james.dolby@capetown.gov.za'

'Raybin.Windvogel@westerncape.gov.za'

'anthony.vanwyk@westerncape.gov.za'

'Eddie.Hanekom@westerncape.gov.za'

'Lance.McBain-Charles@westerncape.gov.za'

'Eugeune.Pienaar@westerncape.gov.za'

'Shaun.Arendse@westerncape.gov.za'

'joy.leaner@westerncape.gov.za'

Dear Stakeholder

# NOTICE OF RELEASE OF DRAFT SCOPING REPORT: PROPOSED USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER STATION

Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of dry casks at the Koeberg Nuclear Power Station (KNPS) to accommodate used nuclear fuel from the reactors of the power station, thereby ensuring the continued operation of the KNPS. SRK Consulting (South Africa) (Pty) Ltd (SRK) has been appointed to undertake the Scoping and Environmental Impact Reporting (S&EIR – often referred to as the Environmental Impact Assessment [EIA]) process required in terms of the National Environmental Management Act 107 of 1998 (NEMA) and the EIA Regulations, 2014.

Although the EIA process has not yet formally commenced, SRK previously requested interested parties to register as stakeholders for this EIA process, at which stage you were registered as a stakeholder.

The **Draft Scoping Report** has been compiled and is now available for public review for a period of 30 days, from **18 March until 25 April 2016**. Please find attached a copy of the Executive Summary of the Draft Scoping Report, which also provides details of how you can participate in the EIA process.

Hard copies of the full report are available for viewing at the following venues:

- Koeberg Public Library, Duynefontein;
- Wesfleur Public Library, Atlantis;
- Cape Town Public Library;
- · The KNPS Visitors Centre; and
- SRK's office in Rondebosch.

An electronic version of the report can also be accessed on SRK's website: http://www.srk.co.za/en/koeberg-tisf-eia.

Stakeholders are invited to comment, and/or to register on the project database. Stakeholders must provide their comments together with their name, contact details (preferred method of notification, e.g. email), and an indication of any

Appendix L:
Notification Letters/Emails to Registered I&APs (Scoping Phase)



Ju50/23 ۸, Neptune St . Eiland ہ Fax: (021) 511-3278 د. G. No. 4810109613

### LOCAL SERVICES

**PEDDLERS** 

STANDARD SERVICE

**SPECIALS** 

SATURDAY SERVICE

**AFTER HOURS** 

#### NATIONAL / INTERNATIONAL

**OVERNIGHT** 

AFTER HOURS

**BUDGET CARGO** 

SATURDAY

ROAD

INTERNATIONAL

SAME DAY

SUBJECT TO STANDARD CONDITIONS OF CARRIAGE COPY AVAILABLE ON REQUEST

### www.citisprint.co.za

Tax Invoice / Waybill No.



FROM		то Д. С			
STREET ADDRESS ALPHOH SPECIFIES	ULTING	STREET ADDRES	SS P	let -	
183 MAIN ROAD		170	D 5	ect	( )
SUBURB/ĊITY (1482) ECSE SCH		SUBURB/CITY COC			
CONTACT	659 3060	CONTACT	ila N	TEL	
NO. OF DESCRIPTION/CONTENTS		DIMENSION	NS .	VOL. KG	WEIGHT
1- DOCUMEN	J				
I/WE HAVE READ, UNDERSTOOD AND AGREED TO THE CONDITIONS OF CITISPRINT CC ON THE REVERSE HEREOF, DATE	RECEIVED BY COURIE	R	RECEIVED IN GOOD ( PRINT NAME	ORDER AND CONDITI	ON
SIGN	DATE	17 76	DATE	TIME	
TICK IF INSURANCE IS REQUIRED (SPECIFY	AMOUNT) R		( MAX R5,000 )		
SPECIAL INSTRUCTIONS	ETTEL	9 K8	TURN	70	SKK
ACCOUNT TO BE DEBITED					
SENDERS REF. NO.					1-5
CASH SALE		тс	OTAL (EXCL. VAT)		
		VA	AT .	-	
HUB REF. NO.		TOTAL (INCL, VAT)			



Reg. No. 1985/000050/23

Unit 17, Rosbur Park, Neptune St Paarden Eiland Tel: (021) 511-3105 Fax: (021) 511-3278

VAT REG. No. 4810109613

### **LOCAL SERVICES**

PEDDLERS

STANDARD SERVICE

SPECIALS

SATURDAY SERVICE

AFTER HOURS

#### NATIONAL / INTERNATIONAL

OVERNIGHT

AFTER HOURS

BUDGET CARGO

SATURDAY

ROAD

INTERNATIONAL

SAME DAY

SUBJECT TO STANDARD CONDITIONS OF CARRIAGE COPY AVAILABLE ON REQUEST

### www.citisprint.co.za

Tax Invoice / Waybill No.



FROM DEPT. OF ENE	264	TO SR	K Con:	sulting	
STREET ADDRESS		STREET ADDRESS			
192 VISAGE ST	7	183	MAIR	KOAD	
115 113445 31	10.0	100	. IN III	(13)115	
	4		1		
SUBURB/CITY		SUBURB/CITY			
PRETORIA		Kon	D2 BOSCH		
CONTACT TEL		CONTACT		TEL	
NO OF DESCRIPTION/CONTENTS		DIMENSION	VS .	VOL. KG	WEIGHT
1 Docs	Ų	0 x 3	0 ×		1
I/WE HAVE READ, UNDERSTOOD AND AGREED TO THE CONDITIONS OF CITISPRINT CC ON THE REVERSE HEREOF.  DATE O O O O O O O O O O O O O O O O O O O	REGEIVED BY COURIE		PRINT NAME	ORDER AND CONDITI	Malo
SIGN	DAGE O / TIME	E	DATE 08 61 120	16 TIME 8 .	56
TICK IF INSURANCE IS REQUIRED (SPECIFY A	MOUNT) R		( MAX R5,000 )		9/.
SPECIAL INSTRUCTIONS REF. W	B CS 13	36842		R	
ACCOUNT TO BE DEBITED			1		
SENDERS REF. NO. L. W. 1275479380					
CASH SALE		то	TAL (EXCL. VAT)		
- 120		VA	ot		
HUB REF. NO.		то	TAL (INCL. VAT)		



Reg. No. 1985/000050/23

Unit 17, Rosbur Park, Neptune St Paarden Eiland Tel: (021) 511-3105 Fax: (021) 511-3278

VAT REG. No. 4810109613

### **LOCAL SERVICES**

PEDDLERS

STANDARD SERVICE

SPECIALS

SATURDAY SERVICE

AFTER HOURS

#### NATIONAL / INTERNATIONAL

OVERNIGHT

AFTER HOURS

BUDGET CARGO

SATURDAY

ROAD

INTERNATIONAL

SAME DAY

SUBJECT TO STANDARD CONDITIONS OF CARRIAGE COPY AVAILABLE ON REQUEST

## www.citisprint.co.za

Tax Invoice / Waybill No.



FROM THE SOURCESTANDERS BUILDING			10 ment of Emontal Men			
	DRESS TENDEL SEPTIMES		STREET ADDR	ESS	To:	
			ESTY	di samo	Vouse	
	KOMBEROSEN		4.70	Store	Bud	land
SUBURB/C	NONDEBOSCII		SUBURB/CITY	D		
	021-6	SG 3/Wh	14 8C	HOS PR	ELION Y	0083
CONTAC	MASS TEL		CONTACT	dor	TEL	
NO OF PARCELS	DESCRIPTION/CONTENTS		DIMENSI	SNC	VOL. KG	WEIGHT
1	DO CUMER	51				
AGREED T	E READ, UNDERSTOOD AND O THE CONDITIONS OF T CC ON THE REVERSE HEREOF.	RECEIVED BY COURIER	R	PRINT NAME	ORDER AND CONDITI	on way
	ii ii	DATE TIME	16ico	DATE	TIME 10	L'S
TICK	IF INSURANCE IS REQUIRED (SPECIFY AI	MOUNT) R		( MAX R5,000 )	CHICKLO!	mail in
SPECIALI	NSTRUCTIONS COLON	(ETTER	9 8	4 NI TO	SIMPLE	const.
ACCOUNT BE DEBITE						50 50
SENDERS REF. NO.	13787					
CASH SALE			TOTAL (EXCL, VAT)			
			/AT			
HUB REF. N	10.			FOTAL (INCL. VAT)		



Reg. No. 1985/000050/23

Unit 17, Rosbur Park, Neptune St Paarden Eiland Tel: (021) 511-3105 Fax: (021) 511-3278 VAT REG. No. 4810109613

### LOCAL SERVICES

PEDDLERS

STANDARD SERVICE

SPECIALS

SATURDAY SERVICE

**AFTER HOURS** 

### NATIONAL / INTERNATIONAL

OVERNIGHT

AFTER HOURS

BUDGET CARGO

SATURDAY

ZOAD

INTERNATIONAL

SAME DAY

SUBJECT TO STANDARD CONDITIONS OF CARRIAGE COPY AVAILABLE ON REQUEST

### www.citisprint.co.za

Tax Invoice / Waybill No.



FROM THE ADMINISTRATIVE BUILDING			To.	d Water	Circ Co	lation	
STREET A	DDRESS ALEKONI SIPKINKIS	ILIZHUG	STREET ADDRESS				
	183 MAIN ROAD		1:4	rile	The same	_n.co	
SUBURB/C	MANDEROSCH		SUBURB/CITY	37			
CONTAC		559 3068	CONTACT	uen Die	e GTEL		
NO. OF PARCELS	DESCRIPTION/CONTENTS		DIMENSIO	NS	VOL. KG	WEIGHT	
ŀ	POCMUSE!	f					
AGREED T	E READ, UNDERSTOOD AND O THE CONDITIONS OF T CC ON THE REVERSE HEREOF.	RECEIVED BY COURIEI SIGN DATE TIME	1	RECEIVED IN GOOD PRINT NAME DATE	ORDER AND CONDITI	ON	
	IF INSURANCE IS REQUIRED (SPECIFY A		7 2 75	( MAX R5,000 )	THYE		
777	NSTRUCTIONS (SECTION SECTION S	7 - 1	etun	( MAX 113,000 )	/ R -	c	
ACCOUNT BE DEBITED				-			
SENDERS REF. NO.	478317	2				- 6	
CASH SALE		TO	TAL (EXCL, VAT)		ſ		
UIID DEF N	0		VA	VT			
HUB REF. NO.		то	TAL (INCL. VAT)		12 11		



Reg. No. 1985/000050/23

Unit 17, Rosbur Park, Neptune St Paarden Eiland

Tel: (021) 511-3105 Fax: (021) 511-3278

VAT REG. No. 4810109613

### **LOCAL SERVICES**

PEDDLERS

STANDARD SERVICE

SPECIALS

SATURDAY SERVICE

**AFTER HOURS** 

### NATIONAL / INTERNATIONAL

OVERNIGHT

AFTER HOURS

BUDGET CARGO

SATURDAY

ROAD

INTERNATIONAL

SAME DAY

SUBJECT TO STANDARD CONDITIONS OF CARRIAGE COPY AVAILABLE ON REQUEST

### www.citisprint.co.za

Tax Invoice / Waybill No.



FROM Y CONSULTING (In) Le		TO ADS VATUE			
STREET ADDRESS		STREET ADDRES	is	J M L	9.
The Administrative	Kulder	1455	- good to	ish Iyon	RE LEGA
Albron Spines		1/1	Jecist	rock	
SUBURB/CITY	4	SUBURB/CITY	0	. (	6
13 Man hoe	d	Menz	Trong S	rentho	YELVIC
CONTACT 9 de LOS TEL	2165930	CONTACT	AL S	KIELL	
NO OF DESCRIPTION/CONTENTS		DIMENSION	NS	VOL. KG	WEIGHT
I/WE HAVE READ, UNDERSTOOD AND AGREED TO THE CONDITIONS OF CITISPRINT CC ON THE REVERSE HEREOF. DATE SIGN	IDITIONS OF		RECEIVED IN GOOD PRINT NAME DATE	ORDER AND CONDITI	ON
TICK IF INSURANCE IS REQUIRED (SPECIFY	AMOUNT) R		( MAX R5,000 )		
SPECIAL INSTRUCTIONS	(ETTEK	+ RS	TUED	10 RCK	
ACCOUNT TO BE DEBITED					
SENDERS REF. NO.					
CASH SALE	CASH SALE		OTAL (EXCL. VAT)		
HUB REF. NO.		-	OTAL (INCL. VAT)		



Reg. No. 1985/000050/23

Unit 17, Rosbur Park, Neptune St Paarden Eiland

Tel: (021) 511-3105 Fax: (021) 511-3278

VAT REG. No. 4810109613

### **LOCAL SERVICES**

PEDDLERS

STANDARD SERVICE

SPECIALS

SATURDAY SERVICE

AFTER HOURS

### ATIONAL / INTERNATIONAL

OVERNIGHT

AFTER HOURS

BUDGET CARGO

SATURDAY

OAD

INTERNATIONAL

SAME DAY

JBJECT TO STANDARD CONDITIONS OF CARRIAGE COPY AVAILABLE ON REQUEST

### www.citisprint.co.za

Tax Invoice / Waybill No.



FROM			тф	Modera Kastickhain				
STREET AC	DRESS DIAMINISTRATIVE BU PLBION SPRINGS	ILDING	STREET ADDRE	une br	ilen	Y		
,	183 MAIN ROAD		Me	Allos	stra	X		
SUBURB/Č	TYNDEBOSCH		SUBURB/CITY	SUBURB/CITY				
CONTACT	t is a second	559 3660	CONTACT	Libra	TE IN			
NO. OF PARCELS	DESCRIPTION/CONTENTS		DIMENSIO	NS	VOL. KG	WEIGHT		
3	POCHWEN	ζ						
AGREED T	E READ, UNDERSTOOD AND O THE CONDITIONS OF T cc ON THE REVERSE HEREOF	SIGN A	RIER	RECEIVED IN GOOD OF PRINT NAME  DATE	DRDER AND CONDITION	ON		
TICK	IF INSURANCE IS REQUIRED (SPECIFY A	AMOUNT) R		( MAX R5,000 )	and the			
SPECIAL I	NSTRUCTIONS ( )	LE77	ER: 4	KE741	N TO	SRK		
ACCOUNT TO BE DEBITED								
SENDERS REF. NO.								
CASH SALE		то	OTAL (EXCL. VAT)					
HUB REF. NO.		TC	OTAL (INCL. VAT)					



Reg. No. 1985/000050/23

Unit 17, Rosbur Park, Neptune St Paarden Eiland Tel: (021) 511-3105 Fax: (021) 511-3278 VAT REG. No. 4810109613

### LOCAL SERVICES

PEDDLERS

STANDARD SERVICE

SPECIALS

SATURDAY SERVICE

**AFTER HOURS** 

#### NATIONAL / INTERNATIONAL

OVERNIGHT

AFTER HOURS

BUDGET CARGO

SATURDAY

ROAD

INTERNATIONAL

SAME DAY

SUBJECT TO STANDARD CONDITIONS OF CARRIAGE COPY AVAILABLE ON REQUEST

### www.citisprint.co.za

Tax Invoice / Waybill No.



FROM THE ADMINISTRATIVE BUILDING			Adres Nuclear Regular				
STREET ADDR	RESS Brond Statelings	1173113	STREET ADDRES		. Road		
	3 MAIN ROAD		bu	4 relant	(In		
SUBURB/ČÍTÝ	MDEBOSCH 6914	59 3060	SUBURB/CITY				
CONTACT	MASS TEL	33,330,3	CONTACT	rda M	Kleich	ela	
NO, OF PARCELS	DESCRIPTION/CONTENTS		DIMENSION	15	VOL. KG	WEIGHT	
1	DOCUMENT			я	/		
I/WE HAVE RE AGREED TO TO CITISPRINT, CO DATE SIGN	EAD, UNDERSTOOD AND THE CONDITIONS OF CON THE REVERSE HEREOF.	RECEIVED BY COURIER SIGN , ) DATE TIME	/	RECEIVED IN GOOD OF PRINT NAME  DATE	ORDER AND CONDITI	ON	
TICK IF	INSURANCE IS REQUIRED (SPECIFY A	MOUNT) R	1	( MAX R5,000 )			
SPECIAL INST	TRUCTIONS	ele f	Action	10 Si	KR	c -	
ACCOUNT TO BE DEBITED							
SENDERS REF. NO.							
CASH SALE	CASH SALE		то	TAL (EXCL. VAT)			
HUB REF. NO.		VA					
TIOD NET. NO.		TO	TAL (INCL. VAT)				



Reg. No. 1985/000050/23 Unit 17, Rosbur Park, Neptune St Paarden Eiland Tel: (021) 511-3105 Fax: (021) 511-3278

VAT REG. No. 4810109613

### **LOCAL SERVICES**

PEDDLERS

STANDARD SERVICE

SPECIALS

SATURDAY SERVICE

AFTER HOURS

#### NATIONAL / INTERNATIONAL

OVERNIGHT

AFTER HOURS

BUDGET CARGO

SATURDAY

ROAD

INTERNATIONAL

SAME DAY

SUBJECT TO STANDARD CONDITIONS OF CARRIAGE COPY AVAILABLE ON REQUEST

### www.citisprint.co.za

Tax Invoice / Waybill No.



FROM THE ADMINISTRATIVE BY	TO KE loan Polle Library						
STREET ADDRESS		STREET ADDRE	STREET ADDRESS				
		1 111	Chede 1	Carty	d 9460		
185 MAIN ROAD		CAP	E 70.	JA 3"	J		
SUBURBICITY INTO ECHO SCH		SUBURB/CITY					
.024	67 (POS) (VIII (BEST))	1200	1				
CONTACT TEL	ocar subu	CONTACT	Libro	TEL OD			
NO, OF DESCRIPTION/CONTENTS		DIMENSIO	NS	VOL. KG	WEIGHT		
I LOCUMER	II.						
I/WE HAVE READ, UNDERSTOOD AND AGREED TO THE CONDITIONS OF CITISPRINT, OF ON THE REVERSE HEREOF DATE SIGN	RECEIVED BY COURI		RECEIVED IN GOOD CO PRINT NAME DATE	IRDER AND CONDITI	ON		
TICK IF INSURANCE IS REQUIRED (SPECIFY	D 250	1	( MAX R5,000 )				
SPECIAL INSTRUCTIONS	( dle, 8	Ketu	11 to X	K R	c		
ACCOUNT TO BE DEBITED			~				
SENDERS REF. NO.							
CASH SALE			OTAL (EXCL, VAT)				
HUB REF. NO.		TO	OTAL (INCL. VAT)				



Reg. No. 1985/000050/23

Unit 17, Rosbur Park, Neptune St Paarden Eiland

Tel: (021) 511-3105 Fax: (021) 511-3278

VAT REG. No. 4810109613

### LOCAL SERVICES

PEDDLERS

STANDARD SERVICE

SPECIALS

SATURDAY SERVICE

**AFTER HOURS** 

#### NATIONAL / INTERNATIONAL

OVERNIGHT

AFTER HOURS

BUDGET CARGO

SATURDAY

IOAD

INTERNATIONAL

SAME DAY

SUBJECT TO STANDARD CONDITIONS OF CARRIAGE COPY AVAILABLE ON REQUEST

### www.citisprint.co.za

Tax Invoice / Waybill No.



FROM  STREET ADMINISTRATIVE BUILDING		Pleintage Weston Cape					
STREET AC	DDRESS	13. 4.4 14 7 5 74	STREET ADD	RESS	or I T.C		
	ALBION SPRINGS		Programme It	as to Ja	atural A	KINS T	
	163 MAIN ROAD		3,91	Floor Role	a Nisala	ike Buld	
SUBURB/G	Д <b>Г</b> У 0 Д 3 1		SUBURB/CIT	Y CARCINDO	Outer 1 En	SHETHE	
			(	RPE TO	13,000	500	
		259 3000	1	V 275	- A		
CONTAC	T & TEL		CONTACT	dies	ethon	ceri	
NO. OF PARCELS	DESCRIPTION/CONTENTS		DIMENS	IONS	VOL. KG	WEIGHT	
1	bocumer	27					
I/WE HAVE	READ, UNDERSTOOD AND	RECEIVED BY COURI	RECEIVED IN GOOD ORDER AND CONDITION				
CITISPRIN	O THE CONDITIONS OF T.C. ON THE REVERSE HEREOF.			PRINT			
DATE S	107/2010	SIGN		NAME			
SIGN A	CODA	DATE / / /TIM	IE J J J	DATE	TIME		
TICK	IF INSURANCE IS REQUIRED (SPECIFY A	MOUNT) R	7	( MAX R5,000 )			
SPECIALI	INSTRUCTIONS SIGNI (	ette, i	Kel	in lo	Se KR		
ACCOUNT BE DEBITED							
SENDERS REF. NO.							
CASH SALE		1	TOTAL (EXCL-VAT)				
	139			VAT			
HUB REF. N	HUB REF. NO.			TOTAL (INCL. VAT)		1.5	



Reg. No. 1985/000050/23

Unit 17, Rosbur Park, Neptune St Paarden Eiland Tel: (021) 511-3105 Fax: (021) 511-3278

VAT REG. No. 4810109613

### LOCAL SERVICES

PEDDLERS

STANDARD SERVICE

SPECIALS

SATURDAY SERVICE

AFTER HOURS

#### NATIONAL / INTERNATIONAL

OVERNIGHT

AFTER HOURS

BUDGET CARGO

SATURDAY

:OAD

INTERNATIONAL

SAME DAY

SUBJECT TO STANDARD CONDITIONS OF CARRIAGE COPY AVAILABLE ON REQUEST

### www.citisprint.co.za

Tax Invoice / Waybill No.



FROM CRK Consulting (Phyllid			Roebera Vistos Contre			
STREET AD	DRESS	) )	STREET ADDRES	S	717	F 1-1
1	e Administrative	Bulding	Verbe	od Nack	actoria	Jato
Alber Epings			Hell	Loss	cod	
SUBURB/CI	TY		SUBURB/CITY			
P	23 How Ko	nd l	1 Lat	4		
CONTACT	HASSEL	U1659 3060	CONTACT	Jacker	HELONG	ai I
NO OF PARCELS	DESCRIPTION/CONTENTS	5	DIMENSION	15	VOL. KG	WEIGHT
	1 DOCUMENT					
AGREED T	READ, UNDERSTOOD AND OTHE CONDITIONS OF CONTHE REVERSE HEREOF.	RECEIVED BY COURIEF	3	RECEIVED IN GOOD C PRINT NAME	RDER AND CONDITI	ON
SIGN /	1.00	DATE TIME	1717	DATE	TIME	
TICK	IF INSURANCE IS REQUIRED (SPECIFY A	AMOUNT) R		( MAX R5,000 )		A. W.
spécial il	NSTRUCTIONS	LET79	R 9	RETUK	N.D	5 84
ACCOUNT TO BE DEBITED 2016						
SENDERS REF. NO.						
CASH SALE			TC	TAL (EXCL. VAT)		
CASILIACE			VA	AT .		
HUB REF. NO.			тс	TAL (INCL. VAT)		



Reg. No. 1985/000050/23 Unit 17, Rosbur Park, Neptune St Paarden Eiland Tel: (021) 511-3105 Fax: (021) 511-3278

VAT REG. No. 4810109613

### **LOCAL SERVICES**

PEDDLERS

STANDARD SERVICE

SPECIALS

SATURDAY SERVICE

AFTER HOURS

#### NATIONAL / INTERNATIONAL

OVERNIGHT

AFTER HOURS

BUDGET CARGO

SATURDAY

ROAD

INTERNATIONAL

SAME DAY

SUBJECT TO STANDARD CONDITIONS OF CARRIAGE COPY AVAILABLE ON REQUEST

### www.citisprint.co.za

Tax Invoice / Waybill No.



FROM THE ADMINISTRATIVE BUILDING		Thester Rube Liberry			James
STREET ADDRESS		STREET ADDRESS			
GAON MIAM E81		MI	adic		
SUBURB/CITY / LO ESCO SCI		SUBURB/CITY			
CONTACT TEL	669 3U0U	CONTACT	Librari	TEL	
NO. OF DESCRIPTION/CONTENTS		DIMENSION	15	VOL, KG	WEIGHT
1 BOCUMEN	TC				
I/WE HAVE READ, UNDERSTOOD AND AGREED TO THE CONDITIONS OF CITISPRINT cc ON THE REVERSE HEREOF.	RECEIVED BY COURIE	R My	RECEIVED IN GOOD C	ORDER AND CONDIT	ION
DATE SIGN	DATE / TIM	B7 (A	DATE	TIME	
TICK IF INSURANCE IS REQUIRED (SPECIFY	AMOUNT) R	1	( MAX R5,000 )		26
SPECIAL INSTRUCTIONS	Her & A	Lun	& SI	KR	c
ACCOUNT TO BE DEBITED					
SENDERS REF. NO.					
CASH SALE		то	TAL (EXCL, VAT)		
		VA	Т		
HUB REF. NO.		то	TAL (INCL. VAT)		



Reg. No. 1985/000050/23

Unit 17, Rosbur Park, Neptune St Paarden Eiland Tel: (021) 511-3105 Fax: (021) 511-3278 VAT REG. No. 4810109613

### LOCAL SERVICES

**PEDDLERS** 

STANDARD SERVICE

**SPECIALS** 

SATURDAY SERVICE

AFTER HOURS

#### NATIONAL / INTERNATIONAL

**OVERNIGHT** 

AFTER HOURS

**BUDGET CARGO** 

SATURDAY

ROAD

INTERNATIONAL

SAME DAY

SUBJECT TO STANDARD CONDITIONS OF CARRIAGE COPY AVAILABLE ON REQUEST

### www.citisprint.co.za

Tax Invoice / Waybill No.



FROM THE COMBUSTS AFTE BUILDING	TO City of Cape bus			
STREET ADDRESS  *LEHUM SEPTIMIS*	STREET ADDRESS			
103 MAIN RUAD	Himelon Cric Centre			
SUBURB/CITY	SUBURB/CITY			
021 650 3060	Himles Full			
CONTACT MASS TEL	CONTACT: CL TELLS			
NO. OF DESCRIPTION/CONTENTS	DIMENSIONS VOL. KG WEIGHT			
POCHUSENT				
I/WE HAVE READ, UNDERSTOOD AND AGREED TO THE CONDITIONS OF CITISPRINT CC ON THE REVERSE HEREOF. DATE SIGN DATE TIME	RECEIVED IN GOOD ORDER AND CONDITION PRINT NAME DATE TIME			
TICK IF INSURANCE IS REQUIRED (SPECIFY AMOUNT) R	( MAX R5,000 )			
SPECIAL INSTRUCTIONS  ACCOUNT TO BE DEBITED	e & ReTurn to SKK			
SENDERS REF. NO.				
CASH SALE	TOTAL (EXCL. VAT)			
HUB REF. NO.	VAT TOTAL (INCL. VAT)			
	TOTAL (HYCL, YAT)			



Reg. No. 1985/000050/23 Unit 17, Rosbur Park, Neptune St Paarden Eiland Tel: (021) 511-3105 Fax: (021) 511-3278

VAT REG. No. 4810109613

### **LOCAL SERVICES**

PEDDLERS

STANDARD SERVICE

SPECIALS

SATURDAY SERVICE

AFTER HOURS

#### NATIONAL / INTERNATIONAL

OVERNIGHT

AFTER HOURS

BUDGET CARGO

SATURDAY

dACn\_\_\_

INTERNATIONAL

SAME DAY

SUBJECT TO STANDARD CONDITIONS OF CARRIAGE COPY AVAILABLE ON REQUEST

### www.citisprint.co.za

Tax Invoice / Waybill No.



FROM	RK CONSULTING (SA) PT THE ADMINISTRATE BU	то	то				
			STREET ADDR	STREET ADDRESS			
STREET ADDRESS			STREET ADDIT	SINCE I NOVICOS			
		101	1912 Vicació hat				
	65 MAIN RUSU	Olo	Cle Rud Kinight & Viscon &				
SUBURB/CITY			SUBURB/CITY	SUBURB/CITY			
	0214	1425	METORIA 0601				
CONTACT TEL			CONTACT	CONTACT			
NO. OF PARCELS	DESCRIPTION/CONTENTS		DIMENSIO	ONS	VOL. KG	WEIGHT	
+	BOCHNEW	1			1		
I/WE HAVE READ, UNDERSTOOD AND AGREED TO THE CONDITIONS OF RECEIVED BY COURI			JRIER	RECEIVED IN GOOD ORDER AND CONDITION			
CITISPRINT cc ON THE REVERSE HEREOF.		CICN	CICN		PRINT		
DATE		Not 1	A				
SIGN DATE			TIME	DATE	TIME		
TICK IF INSURANCE IS REQUIRED (SPECIFY AMOUNT) R				( MAX R5,000 )			
SPECIAL II	NSTRUCTIONS	1277	EK 9,	RETURN	U TO	0	
ACCOUNT 1 BE DEBITED							
SENDERS REF. NO.	L785 (4 )			41			
CASH SALE	150	-	OTAL (EXCL. VAT)				
UNID DEE NO				/AT			
HUB REF. N	U.	l 1	OTAL (INCL.)				





6 July 2016 478317

Department of Environmental Affairs and Development Planning Utilitas Building 1 Dorp Street Cape Town 8000

Attention: Adri La Meyer

Dear Adri

# PROPOSED USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER STATION: SCOPING REPORT FOR PUBLIC COMMENT

Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of dry casks at the Koeberg Nuclear Power Station (KNPS) to accommodate used nuclear fuel from the reactors of the power station, thereby ensuring the continued operation of the KNPS. SRK Consulting (South Africa) (Pty) Ltd (SRK) has been appointed to undertake the Scoping and Environmental Impact Reporting (S&EIR – often referred to as the Environmental Impact Assessment [EIA]) process required in terms of the National Environmental Management Act 107 of 1998 (NEMA) and the EIA Regulations, 2014.

The Draft Scoping Report was previously released as part of the Pre-Application process. The EIA process has now formally commenced, and the Scoping Report released for public comment as from 8 July 2016.

Enclosed please find one hardcopy and five CDs of the **Scoping Report for your review**. Changes made to the document previously released for comment have been clearly indicated in the Report. Please note that the legislated 30 day comment period will end on **8 August 2016**, and we would appreciate it if you could submit any comments you may have by close of business.

Please do not hesitate to contact the undersigned should you have any queries or require additional information.

Yours faithfully,

#### SRK Consulting (South Africa) (Pty) Ltd

STR CONSULT STREET CO

#### Jessica du Toit Environmental Scientist

Partners R Armstrong, AH Bracken, MJ Braune, JM Brown, CD Dalgliesh, BM Engelsman, R Gardiner, GC Howell, WC Joughin, DA Kilian, JA Lake, BF Liber, V Maharaj, DJ Mahlangu, RRW McNeill, HAC Meintjes, MJ Morris, GP Nel, VS Reddy, PE Schmidt, PJ Shepherd, MJ Sim, VM Simposya, HFJ Theart, KM Uderstadt, AT van Zyl, MD Wanless, ML Wertz, A Wood

Directors AJ Barrett, JR Dixon, GC Howell, WC Joughin, V Maharaj, DJ Mahlangu, VS Reddy, PE Schmidt, PJ Shepherd

Associate Partners N Brien, LSE Coetser, CJ Esterhuyze, CJ Ford, E Goossens, M Hinsch, SG Jones, W Jordaan, AH Kirsten, LH Kirsten, S Kisten, I Mahomed, RD O'Brien, T Shepherd, JJ Slabbert, WI Stewart, D Visser

Consultants JAC Cowan, *PrSciNat, BSc(Hons)*, JH de Beer, *PrSci Nat, MSc*; JR Dixon, *PrEng*; T Hart, *MA, TTHD*; Dr GA Jones, *PrEng*, *PhD*, PR Labrum, *PrEng*; PN Rosewarne, *PrSciNat*; AA Smithen, *PrEng*; TR Stacey, *PrEng, DSc*; Dr OKH Steffen, *PrEng, PhD*, PJ Terbrugge, *PrSciNat, MSc* 

African Offices: + 27 (0) 21 659 3060 Cape Town + 27 (0) 31 279 1200 Durban + 27 (0) 43 748 6292 East London Johannesburg + 27 (0) 11 441 1111 + 27 (0) 53 861 5798 Kimberley + 27 (0) 33 347 5069 Pietermaritzburg Port Elizabeth + 27 (0) 41 509 4800 Pretoria + 27 (0) 12 361 9821 + 27 (0) 14 594 1280 Rustenburg + 23 (3) 24 485 0928 Lubumbashi + 243 (0) 81 999 9775

Group Offices: Africa Asia Australia Europe North America South America





The Albion Spring First Floor Administrative Building 183 Main Rd Rondebosch 7700 Postnet Suite #206 P Bag X18 Rondebosch 7701 South Africa T: +27 (0) 21 659 3060 F: +27 (0) 21 685 7105 E: capetown@srk.co.za

www.srk.co.za

6 July 2016 478317

Heritage Western Cape Department of Cultural Affairs and Sport 3rd Floor Protea Assurance Building Greenmarket Square Cape Town 8000

Attention: Andrew September

Dear Andrew

#### PROPOSED USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER STATION: SCOPING REPORT FOR PUBLIC COMMENT

Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of dry casks at the Koeberg Nuclear Power Station (KNPS) to accommodate used nuclear fuel from the reactors of the power station, thereby ensuring the continued operation of the KNPS. SRK Consulting (South Africa) (Pty) Ltd (SRK) has been appointed to undertake the Scoping and Environmental Impact Reporting (S&EIR often referred to as the Environmental Impact Assessment [EIA]) process required in terms of the National Environmental Management Act 107 of 1998 (NEMA) and the EIA Regulations, 2014.

The Draft Scoping Report was previously released as part of the Pre-Application process. The EIA process has now formally commenced, and the Scoping Report released for public comment as from 8 July 2016.

Enclosed please find a hardcopy of the Scoping Report for your review. A CD with the report is also included for easier distribution within your organisation, if required. Changes made to the document previously released for comment have been clearly indicated in the Report. Please note that the legislated 30 day comment period will end on 8 August 2016, and we would appreciate it if you could submit any comments you may have by close of business.

Please do not hesitate to contact the undersigned should you have any queries or require additional information.

Yours faithfully, **SRK Consulting** 



Jessica du Toit

**Environmental Scientist** 

Partners R Armstrong, AH Bracken, MJ Braune, JM Brown, CD Dalgliesh, BM Engelsman, R Gardiner, GC Howell, WC Joughin, DA Kilian, JA Lake, BF Liber, V Maharaj, DJ Mahlangu, RRW McNeill, HAC Meintjes, MJ Morris, GP Nel, VS Reddy, PE Schmidt, PJ Shepherd, MJ Sim, VM Simposya, HFJ Theart, KM Uderstadt, AT van Zyl, MD Wanless, ML Wertz, A Wood

Directors AJ Barrett, JR Dixon, GC Howell, WC Joughin, V Maharaj, DJ Mahlangu, VS Reddy, PE Schmidt,

Associate Partners N Brien, LSE Coetser, CJ Esterhuyze, CJ Ford, E Goossens, M Hinsch, SG Jones, W Jordaan, AH Kirsten, LH Kirsten, S Kisten, I Mahomed, RD O'Brien, T Shepherd, JJ Slabbert, WI Stewart.

Consultants JAC Cowan, PrSciNat, BSc(Hons); JH de Beer, PrSci Nat, MSc. JR Dixon, PrEng, T Hait, MA. TTHD: Dr GA Jones, PrEng, PhD. PR Labrum, PrEng; PN Rosewarne. PrSciNat, AA Smithen, PrEng; TR Stacey, PrEng, DSc; Dr OKH Steffen, PrEng, PhD, PJ Terbrugge, PrSciNat, MSc

African Offices:

HEID'I BOIST

+ 27 (0) 21 659 3060 Cage Town + 27 (0) 31 279 1200 Durban + 27 (0) 43 748 6292 East London Johannesburg + 27 (0) 11 441 1111 + 27 (0) 53 861 5798 Kimberlev + 27 (0) 33 347 5069 Pietermaritzburg Port Elizabeth Pretoria Rustenburg

+ 27 (0) 41 509 4800 + 27 (0) 12 361 9821 + 27 (0) 14 594 1280

+ 23 (3) 24 485 0928 Accra Lubumbashi + 243 (0) 81 999 9775 Group Offices Africa Asia Australia

Europe North America

**∢**CESA





6 July 2016

478317

City of Cape Town Environmental and Heritage Management: Northern Districts B & C Milnerton Civic Centre 87 Pienaar Road Milnerton 7441

**Attention: Pat Titmuss** 

Dear Pat

### PROPOSED USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER STATION: SCOPING REPORT FOR PUBLIC COMMENT

Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of dry casks at the Koeberg Nuclear Power Station (KNPS) to accommodate used nuclear fuel from the reactors of the power station, thereby ensuring the continued operation of the KNPS. SRK Consulting (South Africa) (Pty) Ltd (SRK) has been appointed to undertake the Scoping and Environmental Impact Reporting (S&EIR often referred to as the Environmental Impact Assessment [EIA]) process required in terms of the National Environmental Management Act 107 of 1998 (NEMA) and the EIA Regulations, 2014.

The Draft Scoping Report was previously released as part of the Pre-Application process. The EIA process has now formally commenced, and the Scoping Report released for public comment as from 8 July 2016.

Enclosed please find two hardcopies of the Scoping Report for your review. A CD with the report is also included for easier distribution within your organisation, if required. Changes made to the document previously released for comment have been clearly indicated in the Report. Please note that the legislated 30 day comment period will end on 8 August 2016, and we would appreciate it if you could submit any comments you may have by close of business.

Please do not hesitate to contact the undersigned should you have any queries or require additional information.

Yours faithfully,

#### SRK Consulting (South Africa) (Pty) Ltd

🐦 srk coasult

### Jessica du Toit

#### **Environmental Scientist**

Partners R Armstrong, AH Bracken, MJ Braune, JM Brown, CD Dalgliesh, BM Engelsman, R Gardiner, GC Howell, WC Joughin, DA Kilian, JA Lake, BF Liber, V Maharaj, DJ Mahlangu, RRW McNeill, HAC Meintjes, MJ Morris, GP Nel, VS Reddy, PE Schmidt, PJ Shepherd, MJ Sim, VM Simposya, HFJ Theart, KM Uderstadt, AT van Zyl, MD Wanless, ML Wertz, A Wood

Directors AJ Barrett, JR Dixon, GC Howell, WC Joughin, V Maharaj, DJ Mahlangu, VS Reddy, PE Schmidt, PJ Shepherd

Associate Partners N Brien, LSE Coetser, CJ Esterhuyze, CJ Ford, E Goossens, M Hinsch, SG Jones, W Jordaan, AH Kirsten, LH Kirsten, S Kisten, I Mahomed, RD O'Brien, T Shepherd, JJ Slabbert, WI Stewart,

Consultants JAC Cowan, *PrSciNat, BSc(Hons)*, JH de Beer, *PrSci Nat, MSc*; JR Dixon, *PrEng*; T Hart, *MA, TTHD*. Dr GA Jones, *PrEng*, *PhD*: PR Labrum, *PrEng*; PN Rosewarne, *PrSciNat*; AA Smithen, *PrEng*; TR Stacey, *PrEng*, *DSc*, Dr OKH Steffen, *PrEng*, *PhD*. PJ Terbrugge, *PrSciNat, MSc* 

African Offices: Cape Town

Durban East London Johannesburg Kimberley Pielermaritzburg

Port Elizabeth Pretoria Rustenburg

- 23 (3) 24 485 0928 Lubumbashi + 243 (0) 81 999 9775

+ 27 (0) 21 659 3060 + 27 (0) 31 279 1200

+ 27 (0) 43 748 6292 + 27 (0) 11 441 1111 + 27 (0) 53 861 5798

+ 27 (0) 33 347 5069 + 27 (0) 41 509 4800 + 27 (0) 12 361 9821 + 27 (0) 14 594 1280

**₹CESA** 

Group Offices Africa

North America

South America

Asia Australia

Europe





6 July 2016 478317

Department of Water and Sanitation 52 Voortrekker Street Bellville 7532

**Attention: Warren Dreyer** 

Dear Warren

### PROPOSED USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG **NUCLEAR POWER STATION: SCOPING REPORT FOR PUBLIC COMMENT**

Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of dry casks at the Koeberg Nuclear Power Station (KNPS) to accommodate used nuclear fuel from the reactors of the power station, thereby ensuring the continued operation of the KNPS. SRK Consulting (South Africa) (Pty) Ltd (SRK) has been appointed to undertake the Scoping and Environmental Impact Reporting (S&EIR often referred to as the Environmental Impact Assessment [EIA]) process required in terms of the National Environmental Management Act 107 of 1998 (NEMA) and the EIA Regulations, 2014.

The Draft Scoping Report was previously released as part of the Pre-Application process. The EIA process has now formally commenced, and the Scoping Report released for public comment as from 8 July 2016.

Enclosed please find a hardcopy of the Scoping Report for your review. A CD with the report is also included for easier distribution within your organisation, if required. Changes made to the document previously released for comment have been clearly indicated in the Report. Please note that the legislated 30 day comment period will end on 8 August 2016, and we would appreciate it if you could submit any comments you may have by close of business.

Please do not hesitate to contact the undersigned should you have any queries or require additional information.

Yours faithfully,

### SRK Consulting (South Africa) (Pty) Ltd

→ srk censul 475317-42545-Record 5535-5559-1415-DUJE Prising netwernes peen printed a gitally. The Au gran ment Trappers quiegra at

#### Jessica du Toit **Environmental Scientist**

Partners R Armstrong, AH Bracken, MJ Braune, JM Brown, CD Dalgliesh, BM Engelsman, R Gardiner, GC Howell, WC Joughin, DA Kilian, JA Lake, BF Liber, V Maharaj, DJ Mahlangu, RRW McNeill, HAC Meintjes, MJ Morris, GP Nel, VS Reddy, PE Schmidt, PJ Shepherd, MJ Sim, VM Simposya, HFJ Theart, KM Uderstadt, AT van Zyl, MD Wanless, ML Wertz, A Wood

Directors AJ Barrett, JR Dixon, GC Howell, WC Joughin, V Maharaj, DJ Mahlangu, VS Reddy, PE Schmidt,

Associate Partners N Brien, LSE Coetser, CJ Esterhuyze, CJ Ford, E Goossens, M Hinsch, SG Jones W Jordaan, AH Kirsten, LH Kirsten, S Kisten, I Mahomed, RD O'Brien, T Shepherd, JJ Slabbert, WI Stewart

Consultants JAC Cowan, *PrSciNat, BSc(Hons)*, JH de Beer, *PrSci Nat, MSc*; JR Dixon, *PrEng*; T Hart, *MA, TTHD*: Dr GA Jones, *PrEng*, *PhD*; PR Labrum, *PrEng*; PN Rosewarne, *PrSciNat*; AA Smithen, *PrEng*; TR Stacey, *PrEng, DSc*, Dr OKH Steffen, *PrEng*, *PhD*, PJ Terbrugge, *PrSciNat*, *MSc* 

African Offices:

+ 27 (0) 21 659 3060 Cape Town Durban + 27 (0) 31 279 1200 + 27 (0) 43 748 6292 East London Johannesburg + 27 (0) 11 441 1111 Kimberley + 27 (0) 53 861 5798 + 27 (0) 33 347 5069 Pietermaritzburg Port Elizabeth + 27 (0) 41 509 4800

+ 27 (0) 12 361 9821 Pretoria Rustenbura

+ 27 (0) 14 594 1280 + 23 (3) 24 485 0928 Accra Lubumbashi + 243 (0) 81 999 9775 Group Offices: Africa Asia Australia Europe North America

South America *<b>CESA* 





6 July 2016

478317

CapeNature Assegaaibosch Nature Reserve Jonkershoek

Attention: Manager Scientific Services - Rhett Smart

Dear Rhett

### PROPOSED USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER STATION: SCOPING REPORT FOR PUBLIC COMMENT

Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of dry casks at the Koeberg Nuclear Power Station (KNPS) to accommodate used nuclear fuel from the reactors of the power station, thereby ensuring the continued operation of the KNPS. SRK Consulting (South Africa) (Pty) Ltd (SRK) has been appointed to undertake the Scoping and Environmental Impact Reporting (S&EIR often referred to as the Environmental Impact Assessment [EIA]) process required in terms of the National Environmental Management Act 107 of 1998 (NEMA) and the EIA Regulations, 2014.

The Draft Scoping Report was previously released as part of the Pre-Application process. The EIA process has now formally commenced, and the Scoping Report released for public comment as from 8 July 2016.

Enclosed please find a CD with an electronic copy of the Scoping Report for your review. Changes made to the document previously released for comment have been clearly indicated in the Report. Please note that the legislated 30 day comment period will end on 8 August 2016, and we would appreciate it if you could submit any comments you may have by close of business.

Please do not hesitate to contact the undersigned should you have any queries or require additional information.

Yours faithfully,

### SRK Consulting (South Africa) (Pty) Ltd

SRK.Consulting - Certified Electronic Signature 476317 42545 Report 5535-5359-1418-DUUE This signature has been printed big tally. The All or has given permission to & use for this document. The details are stored in the ERK Bionatule Catabase.

Jessica du Toit **Environmental Scientist** 

Partners R Armstrong, AH Bracken, MJ Braune, JM Brown, CD Dalgliesh, BM Engelsman, R Gardiner, GC Howell, WC Joughin, DA Killan, JA Lake, BF Liber, V Maharaj, DJ Mahlangu, RRW McNeill, HAC Meintjes, MJ Morris, GP Nel, VS Reddy, PE Schmidt, PJ Shepherd, MJ Sim, VM Simposya, HFJ Theart, KM Uderstadt, AT van Zyl, MD Wanless, ML Wertz, A Wood

Directors AJ Barrett, JR Dixon, GC Howell, WC Joughin, V Maharaj, DJ Mahlangu, VS Reddy, PE Schmidt, PJ Shepherd

Associate Partners N Brien, LSE Coetser, CJ Esterhuyze, CJ Ford, E Goossens, M Hinsch, SG Jones, W Jordaan, AH Kirsten, LH Kirsten, S Kisten, I Mahomed, RD O'Brien, T Shepherd, JJ Slabbert, WI Stewart,

Consultants JAC Cowan, *PrSciNat, BSc(Hons)*; JH de Beer, *PrSci Nat, MSc*: JR Dixon, *PrEng*; T Hart, *MA, TTHD*. Dr GA Jones, *PrEng, PhD*, PR Labrum, *PrEng*; PN Rosewarne, *PrSciNat*, AA Smithen, *PrEng*; TR Stacey, *PrEng, DSc*; Dr OKH Steffen, *PrEng, PhD*, PJ Terbrugge, *PrSciNat, MSc* 

PRIVATE BAG 5014 TEL: (Group Offices: 20) African Office STELLENEZ7 (0) 31 279 1200 FAX: (0 Asia Cape Town Durban

East London Johannesburg Kimberley Pietermaritzburg Port Elizabeth Pretoria

Rustenbura Accra

Lubumbashi

+ 27 (0) 11 441 1111 + 27 (0) 53 861 5798

CAPE NATURE CONSE"

SCIENTIFIC SERV........

+ 27 (0) 33 347 5069 + 27 (0) 41 509 4800 + 27 (0) 12 361 9821 + 27 (0) 14 594 1280 + 23 (3) 24 485 0928

+ 243 (0) 81 999 9775

Europe North America South America

Australia

**CESA** 



The Administrative Building Albion Spring, 183 Main Rd Rondebosch 7700 Postnet Suite #206 P Bag X18 Rondebosch 7701 South Africa T: +27 (0) 21 659 3060

F: +27 (0) 21 685 7105 E: capetown@srk.co.za

www.srk.co.za



6 July 2016 478317

National Nuclear Regulator 17 Atlantic Road Duvnefontein Melkbosstrand 7441

Attention: Dr Peter Mkhabela

Dear Dr Mkhabela

### PROPOSED USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER STATION: SCOPING REPORT FOR PUBLIC COMMENT

Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of dry casks at the Koeberg Nuclear Power Station (KNPS) to accommodate used nuclear fuel from the reactors of the power station, thereby ensuring the continued operation of the KNPS. SRK Consulting (South Africa) (Pty) Ltd (SRK) has been appointed to undertake the Scoping and Environmental Impact Reporting (S&EIR often referred to as the Environmental Impact Assessment [EIA]) process required in terms of the National Environmental Management Act 107 of 1998 (NEMA) and the EIA Regulations, 2014.

The Draft Scoping Report was previously released as part of the Pre-Application process. The EIA process has now formally commenced, and the Scoping Report released for public comment as from 8 July 2016.

Enclosed please find a hardcopy of the Scoping Report for your review. A CD with the report is also included for easier distribution within your organisation, if required. Changes made to the document previously released for comment have been clearly indicated in the Report. Please note that the legislated 30 day comment period will end on 8 August 2016, and we would appreciate it if you could submit any comments you may have by close of business.

Please do not hesitate to contact the undersigned should you have any gueries or require additional information.

Yours faithfully,

### SRK Consulting (South Africa) (Pty) Ltd



#### Jessica du Toit

### **Environmental Scientist**

Partners R Armstrong, AH Bracken, MJ Braune, JM Brown, CD Dalgliesh, BM Engelsman, R Gardiner, GC Howell, WC Joughin, DA Kilian, JA Lake, BF Liber, V Maharaj, DJ Mahlangu, RRW McNeill, HAC Meintjes, MJ Morris, GP Nel, VS Reddy, PE Schmidt, PJ Shepherd, MJ Sim, VM Simposya, HFJ Theart, KM Uderstadt, AT van Zyl, MD Wanless, ML Wertz, A Wood

Directors AJ Barrett, JR Dixon, GC Howell, WC Joughin, V Maharaj, DJ Mahlangu, VS Reddy, PE Schmidt, PJ Shepherd

Associate Partners N Brien, LSE Coetser, CJ Esterhuvze, CJ Ford, E Goossens, M Hinsch, SG Jones W Jordan, AH Kirsten, LH Kirsten, S Kisten, I Mahomed, RD O'Brien, T Shepherd, JJ Slabbert, WI Stewart, D Visser

Consultants JAC Cowan, *PrSciNat, BSc(Hons)*, JH de Beer, *PrSci Nat, MSc*: JR Dixon, *PrEng;* T Hart, MA, *TTHD*: Dr GA Jones, *PrEng, PhD*: PR Labrum, *PrEng,* PN Rosewarne, *PrSciNat*; AA Smithen, *PrEng*; TR Stacey, *PrEng, DSc*; Dr OKH Steffen, *PrEng, PhD*; PJ Terbrugge, *PrSciNat, MSc* 

African Offices: Cape Town

Durban East London Johannesburg Kimberley Pietermaritzburg Port Flizabeth

Pretoria Rustenburg Accra

Lubumbashi

+ 27 (0) 21 659 3060 + 27 (0) 31 279 1200 + 27 (0) 43 748 6292 + 27 (0) 11 441 1111

+ 27 (0) 53 861 5798 + 27 (0) 33 347 5069

+ 27 (0) 41 509 4800 + 27 (0) 12 361 9821 + 27 (0) 14 594 1280

+ 23 (3) 24 485 0928 + 243 (0) 81 999 9775

Group Offices: Africa Asia Australia Europe North America South America

**₹CESA** 



Received by Matebalia Molatery Madebalia Molatery 17/00/2016

E: capetown@srk.co.za

6 July 2016 478317

Department of Energy 192 Visagie Street Corner Paul Kruger and Visagie Street Pretoria 0001

**Attention: Katse Maphoto** 

Dear Katse

# PROPOSED USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER STATION: SCOPING REPORT FOR PUBLIC COMMENT

Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of dry casks at the Koeberg Nuclear Power Station (KNPS) to accommodate used nuclear fuel from the reactors of the power station, thereby ensuring the continued operation of the KNPS. SRK Consulting (South Africa) (Pty) Ltd (SRK) has been appointed to undertake the Scoping and Environmental Impact Reporting (S&EIR – often referred to as the Environmental Impact Assessment [EIA]) process required in terms of the National Environmental Management Act 107 of 1998 (NEMA) and the EIA Regulations, 2014.

The Draft Scoping Report was previously released as part of the Pre-Application process. The EIA process has now formally commenced, and the Scoping Report released for public comment as from 8 July 2016.

Enclosed please find a CD with an electronic copy of the **Scoping Report for your review**. Changes made to the document previously released for comment have been clearly indicated in the Report. Please note that the legislated 30 day comment period will end on **8 August 2016**, and we would appreciate it if you could submit any comments you may have by close of business.

Please do not hesitate to contact the undersigned should you have any queries or require additional information.

Yours faithfully,

### SRK Consulting (South Africa) (Pty) Ltd

SRX Consulting + Certified Sectionic Signature

SRK CONSULTATION

275317 425-46 Report

5536-5555+1419-DUU5

This agriculum has deen concessing tally. The Administration on the agricultural contents are stored in face 34-5 sprayer Database.

#### Jessica du Toit Environmental Scientist

Partners R Armstrong, AH Bracken, MJ Braune, JM Brown, CD Dalgliesh, BM Engelsman, R Gardiner, GC Howell, WC Joughin, DA Kilian, JA Lake, BF Liber, V Maharaj, DJ Mahlangu, RRW McNeill, HAC Meintjes, MJ Morris, GP Nel, VS Reddy, PE Schmidt, PJ Shepherd, MJ Sim, VM Simposya, HFJ Theart, KM Uderstadt, AT van Zyl, MD Wanless, ML Wertz, A Wood

Directors AJ Barrett, JR Dixon, GC Howell, WC Joughin, V Maharaj, DJ Mahlangu, VS Reddy, PE Schmidt, PJ Shepherd

Associate Partners N Brien, LSE Coetser, CJ Esterhuyze, CJ Ford, E Goossens, M Hinsch, SG Jones, W Jordaan, AH Kirsten, LH Kirsten, S Kisten, I Mahomed, RD O'Brien, T Shepherd, JJ Slabbert, WI Stewart, D Visser

Consultants JAC Cowan, PrSciNat, BSc(Hons); JH de Beer, PrSci Nat, MSc; JR Dixon, PrEng; T Hart, MA, TTHD; Dr GA Jones, PrEng, PhD, PR Labrum, PrEng; PN Rosewarne, PrSciNat, AA Smithen, PrEng; TR Stacey, PrEng, DSc; Dr OKH Steffen, PrEng, PhD, PJ Terbrugge, PrSciNat, MSc

African Offices: + 27 (0) 21 659 3060 Cape Town + 27 (0) 31 279 1200 East London + 27 (0) 43 748 6292 + 27 (0) 11 441 1111 Johannesburg + 27 (0) 53 861 5798 Kimberley Pietermaritzburg + 27 (0) 33 347 5069 + 27 (0) 41 509 4800 Port Elizabeth + 27 (0) 12 361 9821 Pretoria + 27 (0) 14 594 1280 Rustenburg Accra + 23 (3) 24 485 0928 Lubumbashi + 243 (0) 81 999 9775

Group Offices:
Africa
Asia
Australia
Europe
North America
South America



The Albion Spring First Floor Administrative Building 183 Main Rd Rondebosch 7700 Postnet Suite #206 P Bag X18 Rondebosch 7701 South Africa T: +27 (0) 21 659 3060 F: +27 (0) 21 685 7105 E: capetown@srk.co.za www.srk.co.za

6 July 2016 478317

Koeberg Visitors' Centre Koeberg Nuclear Power Station Melkbosstrand 7441

Attention: The Facility Manager

Dear Madam/Sir

### PROPOSED USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER STATION: SCOPING REPORT FOR PUBLIC COMMENT

Enclosed please find a copy of the Scoping Report for the abovementioned project, which needs to be made available for public review. Could you please ensure that this document is available to any members of the public until 8 August 2016, and that the document is not removed from the Visitor's Centre during this time.

We have also included copies of the Executive Summary, which stakeholders may take with them.

We thank you for your assistance in this regard. Should you have any queries or require additional information please contact Jessica du Toit of SRK Consulting on (tel) 021 659 3060, (fax) 021 685 7105, or email: jedutoit@srk.co.za.

Yours faithfully,

SRK Consulting (South Africa) (Pty) Ltd

SRX Consulting - Certified Electronic Signature

478317/42553/Flepor1 9071-4098-3741-DUJE

This signature has been printed digitally. The A resign en peint as conforts use for this apparatent. The determine she shows in the BRKIB gherwie Gerebese

Jessica du Toit **Environmental Scientist** 

1/20 LA

Partners R Armstrong, AH Bracken, MJ Braune, JM Brown, CD Dalgliesh, BM Engelsman, R Gardiner, GC Howeli, WC Joughin, DA Killan, JA Lake, BF Liber, V Maharaj, DJ Mahlangu, RRW McNeill, HAC Meintjes, MJ Morris, GP Nel, VS Reddy, PE Schmidt, PJ Shepherd, MJ Sim, VM Simposya, HFJ Theart, KM Uderstadt, AT van Zyl, MD Wanless, ML Wertz, A Wood

Directors AJ Barrett, JR Dixon, GC Howell, WC Joughin, V Maharaj, DJ Mahlangu, VS Reddy, PE Schmidt,

Associate Partners N Brien, LSE Coetser, CJ Esterhuyze, CJ Ford, E Goossens, M Hinsch, SG Jones, W Jordaan, AH Kirsten, LH Kirsten, S Kisten, I Mahomed, RD O'Brien, T Shepherd, JJ Slabbert, WI Stewart,

Consultants JAC Cowan, *PrSciNat, BSc(Hons)*; JH de Beer, *PrSci Nat, MSc*; JR Dixon, *PrEng*; T Hart, *MA. TTHD*; Dr GA Jones, *PrEng, PhD*, PR Labrum, *PrEng*; PN Rosewarne, *PrSciNat,* AA Smithen, *PrEng*; TR Stacey, *PrEng, DSc*, Dr OKH Steffen, *PrEng, PhD*, PJ Terbrugge, *PrSciNat, MSc* 

African Offices:

Cape Town Durban East London Johannesburg Kimberley Pietermaritzburg

Port Elizabeth Pretoria Rustenburg

Lubumbashi

+ 27 (0) 41 509 4800 + 27 (0) 12 361 9821

+ 27 (0) 14 594 1280 + 23 (3) 24 485 0928 + 243 (0) 81 999 9775

+ 27 (0) 21 659 3060

+ 27 (0) 31 279 1200

+ 27 (0) 43 748 6292

+ 27 (0) 11 441 1111

+ 27 (0) 53 861 5798

+ 27 (0) 33 347 5069

Group Offices: Africa Asia Australia Europe North America South America

*<b>CESA* 



The Albion Spring First Floor Administrative Building 183 Main Rd Rondebosch 7700 Postnet Suite #206 P Bag X18 Rondebosch 7701 South Africa T: +27 (0) 21 659 3060 F: +27 (0) 21 685 7105 E: capetown@srk.co.za www.srk.co.za

6 July 2016 478317

Koeberg Public Library Duynefontein Melkbosstrand 7441

Attention: The Librarian

Dear Madam/Sir

### PROPOSED USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER STATION: SCOPING REPORT FOR PUBLIC COMMENT

Enclosed please find a copy of the Scoping Report for the abovementioned project, which needs to be made available for public review. Could you please ensure that this document is available to any members of the public until 8 August 2016, and that the document is not removed from the library during this time.

We have also included copies of the Executive Summary, which stakeholders may take with them.

We thank you for your assistance in this regard. Should you have any queries or require additional information please contact Jessica du Toit of SRK Consulting on (tel) 021 659 3060, (fax) 021 685 7105, or email: jedutoit@srk.co.za.

Yours faithfully,

SRK Consulting (South Africa) (Pty) Ltd

SR (Consulting - Cardified Electronic Signature

478317 42553 Report 9271-4293-3241-61/JE

This signature has been dinted did to . The Appointes divenge mission for a use for this occurrent. The cetal is a lestoled in the SRKS ignature Detabase.

Jessica du Toit Environmental Scientist

GLENDA DE KLEEK

7.07 16

Partners R Armstrong, AH Bracken, MJ Braune, JM Brown, CD Dalgliesh, BM Engelsman, R Gardiner, GC Howell, WC Joughin, DA Kilian, JA Lake, BF Liber, V Maharaj, DJ Mahlangu, RRW McNeill, HAC Meintjes, MJ Morris, GP Nel, VS Reddy, PE Schmidt, PJ Shepherd, MJ Sim, VM Simposya, HFJ Theart, KM Uderstadt, AT van Zyi, MD Wanless, ML Wertz, A Wood

Directors AJ Barrett, JR Dixon, GC Howell, WC Joughin, V Maharaj, DJ Mahlangu, VS Reddy, PE Schmidt, PJ Shepherd

Associate Partners: N Brien, LSE Coetser, CJ Esterhuyze, CJ Ford, E Goossens, M Hinsch, SG Jones, W Jordaan, AH Kirsten, LH Kirsten, S Kisten, I Mahomed, RD O'Brien, T Shepherd, JJ Slabbert, WI Stewart,

Consultants JAC Cowan, *PrSciNat, BSc(Hons)*, JH de Beer, *PrSci Nat, MSc*: JR Dixon, *PrEng*; T Hart, *MA, TTHD*: Dr GA Jones, *PrEng, PhD*, PR Labrum, *PrEng*; PN Rosewarne, *PrSciNat*; AA Smithen, *PrEng*; TR Stacey, *PrEng, DSc*, Dr OKH Steffen, *PrEng, PhD*, PJ Terbrugge, *PrSciNat, MSc* 

African Offices: Cape Town

Durban East London Johannesburg Kimberlev

Pletermaritzburg Port Elizabeth Pretoria Rustenburg

Lubumbashi

+ 27 (0) 31 279 1200 + 27 (0) 43 748 6292 + 27 (0) 11 441 1111 + 27 (0) 53 861 5798 + 27 (0) 33 347 5069 + 27 (0) 14 594 1280

+ 27 (0) 41 509 4800 + 27 (0) 12 361 9821

+ 23 (3) 24 485 0928

+ 243 (0) 81 999 9775

+ 27 (0) 21 659 3060

**CESA** 

Africa

Asia

Australia

Еигоре

Group Offices:

North America

South America



The Albion Spring
First Floor Administrative Building
183 Main Rd
Rondebosch 7700
Postnet Suite #206
P Bag X18 Rondebosch 7701
South Africa
T: +27 (0) 21 659 3060
F: +27 (0) 21 685 7105
E: capetown@srk.co.za

6 July 2016 478317

Wesfleur Public Library Wesfleur Circle Atlantis 7349

Attention: The Librarian

Dear Madam/Sir



# PROPOSED USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER STATION: SCOPING REPORT FOR PUBLIC COMMENT

Enclosed please find a copy of the Scoping Report for the abovementioned project, which needs to be made available for public review. Could you please ensure that this document is available to any members of the public until **8 August 2016**, and that the document is not removed from the library during this time.

We have also included copies of the Executive Summary, which stakeholders may take with them.

We thank you for your assistance in this regard. Should you have any queries or require additional information please contact Jessica du Toit of SRK Consulting on (tel) 021 659 3060, (fax) 021 685 7105, or email: jedutoit@srk.co.za.

Yours faithfully,

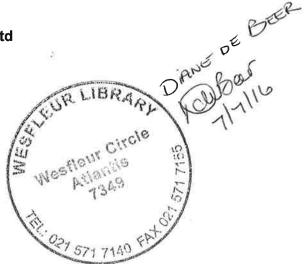
SRK Consulting (South Africa) (Pty) Ltd

SRK Consulting - Certified Electronic Signature

478317 42553 Report 9271-4293-3741-00 JF

This signeture has been printed digitally. The Apprints given permission for is use for this document. The details siestored in the BRK Signeture Octabase.

Jessica du Toit Environmental Scientist



Partners R Armstrong, AH Bracken, MJ Braune, JM Brown, CD Dalgliesh, BM Engelsman, R Gardiner, GC Howell, WC Joughin, DA Kilian, JA Lake, BF Liber, V Maharaj, DJ Mahlangu, RRW McNeill, HAC Meintjes, MJ Morris, GP Nei, VS Reddy, PE Schmidt, PJ Shepherd, MJ Sim, VM Simposya, HFJ Theart, KM Uderstadt, AT van Zyl, MD Wanless, ML Wertz, A Wood

Directors AJ Barrett, JR Dixon, GC Howell, WC Joughin, V Maharaj, DJ Mahlangu, VS Reddy, PE Schmidl, PJ Shepherd

Associate Partners N Brien, LSE Coetser, CJ Esterhuyze, CJ Ford, E Goossens, M Hinsch, SG Jones, W Jordaan, AH Kirsten, LH Kirsten, S Kisten, I Mahomed, RD O'Brien, T Shepherd, JJ Slabbert, WI Stewart, D. Visser.

Consultants JAC Cowan, *PrSciNat, BSc(Hons)*; JH de Beer, *PrSci Nat, MSc*: JR Dixon, *PrEng*; T Hart, *MA. TTHD*: Dr GA Jones, *PrEng*, *PhD*: PR Labrum, *PrEng*; PN Rosewarne, *PrSciNat*; AA Smithen, *PrEng*; TR Stacey, *PrEng, DSc*, Dr OKH Steffen, *PrEng, PhD*; PJ Terbrugge, *PrSciNat, MSc* 

African Offices:

Cape Town
Durban
East London
Johannesburg
Kimberley

Kimberley
Pietermaritzburg
Port Elizabeth
Pretoria

Rustenburg Accra Lubumbashi + 27 (0) 21 659 3060 + 27 (0) 31 279 1200 + 27 (0) 43 748 6292

+ 27 (0) 43 748 6292 + 27 (0) 11 441 1111 + 27 (0) 53 861 5798 + 27 (0) 33 347 5069

+ 27 (0) 33 347 5069 + 27 (0) 41 509 4800 + 27 (0) 12 361 9821 + 27 (0) 14 594 1280

+ 23 (3) 24 485 0928 + 243 (0) 81 999 9775 Group Offices: Africa Asia Australia Europe North America South America

**₹CESA** 



The Albion Spring First Floor Administrative Building 183 Main Rd Rondebosch 7700 Postnet Suite #206 P Bag X18 Rondebosch 7701 South Africa T: +27 (0) 21 659 3060 F: +27 (0) 21 685 7105 E: capetown@srk.co.za

www.srk.co.za

6 July 2016 478317

Koeberg Visitors' Centre Koeberg Nuclear Power Station Melkbosstrand 7441

Attention: The Facility Manager

Dear Madam/Sir

### PROPOSED USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER STATION: SCOPING REPORT FOR PUBLIC COMMENT

Enclosed please find a copy of the Scoping Report for the abovementioned project, which needs to be made available for public review. Could you please ensure that this document is available to any members of the public until 8 August 2016, and that the document is not removed from the Visitor's Centre during this time.

We have also included copies of the Executive Summary, which stakeholders may take with them.

We thank you for your assistance in this regard. Should you have any queries or require additional information please contact Jessica du Toit of SRK Consulting on (tel) 021 659 3060, (fax) 021 685 7105, or email: jedutoit@srk.co.za.

Yours faithfully,

SRK Consulting (South Africa) (Pty) Ltd

SRK Consulting - Certified Electronic Signature 478317 42553 Riedorn 9271-4298-3241-DUUE This signature has been printed problemy. The 🐼 intes on len de mission forts

use to misipopulation. The serie is elegated in the SRX Suprietule Catalogue

Jessica du Toit **Environmental Scientist** 

Partners R Armstrong, AH Bracken, MJ Braune, JM Brown, CD Dalgliesh, BM Engelsman, R Gardiner, GC Howell, WC Joughin, DA Kilian, JA Lake, BF Liber, V Maharaj, DJ Mahlangu, RRW McNeill, HAC Meintjes, MJ Morris, GP Nel, VS Reddy, PE Schmidt, PJ Shepherd, MJ Sim, VM Simposya, HFJ Theart, KM Uderstadt, AT van Zyl, MD Wanless, ML Wertz, A Wood

Directors AJ Barrett, JR Dixon, GC Howell, WC Joughin, V Maharaj, DJ Mahlangu, VS Reddy, PE Schmidt,

Associate Partners N Brien, LSE Coetser, CJ Esterhuyze, CJ Ford, E Goossens, M Hinsch, SG Jones, W Jordaan, AH Kirsten, LH Kirsten, S Kisten, I Mahomed, RD O'Brien, T Shepherd, JJ Slabbert, WI Stewart,

Consultants JAC Cowan, PrSciNat, BSc(Hons); JH de Beer, PrSci Nat, MSc; JR Dixon, PrEng; T Hart, MA, TTHD; Dr GA Jones, PrEng, PhD, PR Labrum, PrEng; PN Rosewarne, PrSciNat, AA Smithen, PrEng; TR Stacey, PrEng, DSc; Dr OKH Steffen, PrEng, PhD, PJ Terbrugge, PrSciNat, MSc

African Offices: Cape Town Durban

East London Johannesburg Kimberley Pietermaritzburg Port Elizabeth

Pretoria Rustenburg Accra

Lubumbashi

+ 27 (0) 31 279 1200 + 27 (0) 43 748 6292 + 27 (0) 11 441 1111 + 27 (0) 53 861 5798 + 27 (0) 33 347 5069 + 27 (0) 41 509 4800 + 27 (0) 12 361 9821 + 27 (0) 14 594 1280

+ 27 (0) 21 659 3060

+ 23 (3) 24 485 0928

+ 243 (0) 81 999 9775

Africa Australia Europe North America South America

Group Offices:

**CESA** 



6 July 2016 478317

Cape Town Public Library Cnr Parade and Darling Street Cape Town 8001

Attention: The Librarian

Dear Madam/Sir

The Albion Spring First Floor Administrative Building 183 Main Rd Rondebosch 7700 Postnet Suite #206 P Bag X18 Rondebosch 7701 South Africa T: +27 (0) 21 659 3060 F: +27 (0) 21 685 7105 E: capetown@srk.co.za



### PROPOSED USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG **NUCLEAR POWER STATION: SCOPING REPORT FOR PUBLIC COMMENT**

Enclosed please find a copy of the Scoping Report for the abovementioned project, which needs to be made available for public review. Could you please ensure that this document is available to any members of the public until 8 August 2016, and that the document is not removed from the library during this time.

We have also included copies of the Executive Summary, which stakeholders may take with them.

We thank you for your assistance in this regard. Should you have any queries or require additional information please contact Jessica du Toit of SRK Consulting on (tel) 021 659 3060, (fax) 021 685 7105, or email: jedutoit@srk.co.za.

Yours faithfully,

SRK Consulting (South Africa) (Pty) Ltd

SRK Consulting - Certified Electionic Signatu 475817 42552 Report 9271-4292-3241-DULE This signature has been printed digitally. The Auronnesig vanigamy as lon to a use for this document. The details bie stoled in the ERX Bignature Database.

Jessica du Toit **Environmental Scientist** 

Partners R Armstrong, AH Bracken, MJ Braune, JM Brown, CD Dalgliesh, BM Engelsman, R Gardiner, GC Howell, WC Joughin, DA Kilian, JA Lake, BF Liber, V Maharaj, DJ Mahlangu, RRW McNeill, HAC Meintjes, MJ Morris, GP Nel, VS Reddy, PE Schmidt, PJ Shepherd, MJ Sim, VM Simposya, HFJ Theart, KM Uderstadt, AT van Zyl, MD Wanless, ML Wertz, A Wood

Directors AJ Barrett, JR Dixon, GC Howell, WC Joughin, V Maharaj, DJ Mahlangu, VS Reddy, PE Schmidt,

Associate Partners N Brien, LSE Coetser, CJ Esterhuyze, CJ Ford, E Goossens, M Hinsch, SG Jones W Jordaan, AH Kirsten, LH Kirsten, S Kisten, I Mahomed, RD O'Brien, T Shepherd, JJ Slabbert, WI Stewart,

Consultants JAC Cowan, PrSciNat, BSc(Hons), JH de Beer, PrSci Nat, MSc, JR Dixon, PrEng; T Hart, MA, TTHD: Dr GA Jones, *PrEng, PhD, PR Labrum, PrEng, PN Rosewarne, PrSciNat, AA Smithen, PrEng, TR Stacey, PrEng, DSc, Dr OKH Steffen, PrEng, PhD, PJ Terbrugge, PrSciNat, MSc*  African Offices:

Accra

+ 27 (0) 21 659 3060 Cape Town Durban + 27 (0) 31 279 1200 + 27 (0) 43 748 6292 East London + 27 (0) 11 441 1111 Johannesburg Kimberley + 27 (0) 53 861 5798 Pietermaritzburg

+ 27 (0) 33 347 5069 + 27 (0) 41 509 4800 Port Elizabeth Pretoria + 27 (0) 12 361 9821 Rustenburg + 27 (0) 14 594 1280

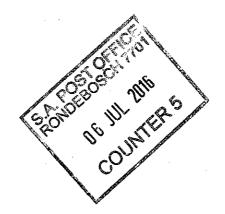
+ 23 (3) 24 485 0928 Lubumbashi + 243 (0) 81 999 9775 Group Offices: Africa Asia Australia Еигоре North America South America



N. Foster 10 Watsonia Cresent Big Bay Cape Town 7441

Martin Krause Private Bag X10 Kernkrag 7440

AM Neethling Unit 206 84 on Beach Beach Road Melkbosstrand 7441





The Albion Spring
First Floor Administrative Building
183 Main Rd
Rondebosch 7700
Postnet Suite #206
P Bag X18 Rondebosch 7701
South Africa
T: +27 (0) 21 659 3060
F: +27 (0) 21 685 7105
E: capetown@srk.co.za

www.srk.co.za

**9** 

8 July 2016 478317

Dear Stakeholder

# NOTICE OF RELEASE OF SCOPING REPORT: PROPOSED USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER STATION

Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of dry casks at Koeberg Nuclear Power Station (KNPS) to accommodate used nuclear fuel from the reactors of the power station, thereby ensuring the continued operation of KNPS. SRK Consulting (South Africa) (Pty) Ltd (SRK) has been appointed to undertake the Scoping and Environmental Impact Reporting (S&EIR – often referred to as the Environmental Impact Assessment [EIA]) process required in terms of the National Environmental Management Act 107 of 1998 (NEMA) and the EIA Regulations, 2014.

SRK previously requested interested parties to register as stakeholders for this EIA process, and subsequently released a copy of the Draft Scoping Report to all registered stakeholders for comment, before the formal commencement of the EIA process.

The **Scoping Report** has been amended in response to the comments received during this comment period, and the EIA process has formally commenced with the submission of the Application Form to the Department of Environmental Affairs. The Scoping Report, in which changes to the previous version are clearly indicated, is now available for public review for a period of 30 days, from **8 July until 8 August 2016**. Enclosed please find a copy of the Executive Summary of the Scoping Report, which also provides details of how you can participate in the EIA process as well as SRK's contact details for the submission of comments.

Hard copies of the full report are available for viewing at the following venues:

- Koeberg Public Library, Duynefontein;
- Wesfleur Public Library, Atlantis;
- Cape Town Public Library;
- Koeberg Visitors' Centre; and
- SRK's office in Rondebosch.

An electronic version of the report can also be accessed on SRK's website www.srk.co.za (via the 'Library' and 'Public Documents' links).

A **Public Open Day** will be held at the Koeberg Visitors' Centre from 15:00 until 18:30 on Thursday, 21 July 2016 at which stakeholders can discuss the project with relevant members of the Project Team. Stakeholders are invited to attend the Open Day anytime between the above times, and are requested to **confirm their intention to attend the Open Day with the contact person below**. Proof of identity will be required for access to the KNPS site.

Partners R Armstrong, AH Bracken, MJ Braune, JM Brown, CD Dalgliesh, BM Engelsman, R Gardiner, GC Howell, WC Joughin, DA Killan, JA Lake, BF Liber, V Maharaj, DJ Mahlangu, RRW McNeill, HAC Meintjes, MJ Morris, GP Nel, VS Reddy, PE Schmidt, PJ Shepherd, MJ Sim, VM Simposya, HFJ Theart, KM Uderstadt, AT van Zyl, MD Wantess, ML Wertz, A Wood

Directors AJ Barrett, JR Dixon, GC Howell, WC Joughin, V Maharaj, DJ Mahlangu, VS Reddy, PE Schmidt, PJ Shepherd

Associate Partners N Brien, LSE Coetser, CJ Esterhuyze, CJ Ford, E Goossens, M Hinsch, SG Jones, W Jordaan, AH Kirsten, LH Kirsten, S Kisten, i Mahomed, RD O'Brien, T Shepherd, JJ Slabbert, WI Stewart, D Visser

Consultants JAC Cowan, PrSciNat, BSc(Horns); JH de Beer, PrSci Nat, MSc; JR Dixon, PrEng; T Hart, MA, TTHD; Dr GA Jones, PrEng, PhD, PR Labrum, PrEng, PR Rosewarne, PrSciNat, AA Smithen, PrEng; TR Stacey, PrEng, DSc; Dr OKH Steffen, PrEng, PhD; PJ Terbrugge, PrSciNat, MS

 Cape Town
 + 27 (0) 21 659 3080

 Durban
 + 27 (0) 31 279 1200

 East London
 + 27 (0) 43 748 6292

 Johannesburg
 + 27 (0) 11 441 1111

 Kimberley
 + 27 (0) 53 881 5798

 Pietermaritzburg
 + 27 (0) 33 347 5069

African Offices:

Lubumbashi

Port Elizabeth + 27 (0) 41 509 4800
Pretoria + 27 (0) 12 361 9821
Rustenburg + 27 (0) 14 594 1280
Accra + 23 (3) 24 485 0928

+ 243 (0) 81 999 9775

Group Offices: Africa Asia Australia Europe North America South America

**₩CESA** 

### Masson, Scott

From: Du Toit, Jessica

Sent: 07 July, 2016 4:53 PM

**To:** Jones, Sharon

**Subject:** 478317: Koeberg TISF EIA - Availability of Scoping Report for comment

**Attachments:** 478317\_Koeberg TISF EIA\_SR Executive Summary\_July 2016.pdf

Tracking: Recipient Delivery

Jones, Sharon Delivered: 07-Jul-16 4:53 PM

'Me lanese. Schippers@western cape. gov. za'

'muneeb.baderoon@westerncape.gov.za'

'alvan.gabriel@westerncape.gov.za'

'adri.lameyer@westerncape.gov.za'

'hildegarde.fast@westerncape.gov.za'

'amanda.willett@westerncape.gov.za'

'graham.paulse@westerncape.gov.za'

'hog.lg@westerncape.gov.za'

'amanda.willett@westerncape.gov.za'

'colin.deiner@westerncape.gov.za'

'maurice.robinson@westerncape.gov.za'

'agatha.jacobs@westerncape.gov.za'

'cailey.bredenkamp@westerncape.gov.za'

'jan.duplessis@westerncape.gov.za'

'ck@wcncb.co.za'

'sferreir@pgwc.gov.za'

'sstrydom@pgwc.gov.za'

'Grace.Swanepoel@westerncape.gov.za'

'Bettie.leedo@capetown.gov.za'

'FDitinti@environment.gov.za'

'alvin.cope@westerncape.gov.za'

'Neville.vanrensburg@westerncape.gov.za'

'nora.grose@capetown.gov.za'

'Cynthia.Clayton@capetown.gov.za'

'Danielkastoor@gmail.com'

'Nicholaskok@gmail.com'

'kubisageraldine@gmail.com'

'enidmuzeli70@gmail.com'

'Linley.light@gmail.com'

'cyril.mack@capetown.gov.za'

'Babara.Rass@capetown.gov.za'

'Lubabalo.Makeleni@capetown.gov.za'

'Justin.Basson@capetown.gov.za'

'Heather.brenner@capetown.gov.za'

'kha.abrahams@gmail.com'

'emerentiap@elsenburg.com'

Recipient Delivery

'les.borrill@eskom.co.za'

'EngelK@eskom.co.za'

'FeatherK@eskom.co.za'

'Francia@eskom.co.za'

'geldenl@eskom.co.za'

'goosenmd@eskom.co.za'

'henderc@eskom.co.za'

'herbermi@eskom.co.za'

'ismaile@eskom.co.za'

'marina.jenkins@eskom.co.za'

'greeffg@eskom.co.za'

'princess.mthombeni@necsa.co.za'

'amelia.rennie-kroon@necsa.co.za'

'nikelwa.tengimfene@necsa.co.za'

Dear Stakeholder

# NOTICE OF RELEASE OF SCOPING REPORT: PROPOSED TRANSIENT INTERIM STORAGE FACILITY FOR THE STORAGE OF USED NUCLEAR FUEL AT KOEBERG NUCLEAR POWER STATION

Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of dry casks at the Koeberg Nuclear Power Station (KNPS) to accommodate used nuclear fuel from the reactors of the power station, thereby ensuring the continued operation of the KNPS. SRK Consulting (South Africa) (Pty) Ltd (SRK) has been appointed to undertake the Scoping and Environmental Impact Reporting (S&EIR – often referred to as the Environmental Impact Assessment [EIA]) process required in terms of the National Environmental Management Act 107 of 1998 (NEMA) and the EIA Regulations, 2014.

SRK previously requested interested parties to register as stakeholders for this EIA process, and subsequently released the Draft Scoping Report to all registered stakeholders for comment, before the formal commencement of the EIA process.

The **Scoping Report** has been amended in response to the comments received during this comment period, and the EIA process has formally commenced with the submission of the Application Form to the Department of Environmental Affairs. The Scoping Report, in which changes to the previous version are clearly indicated, is now available for public review for a period of 30 days, from **8 July until 8 August 2016**. Please find attached a copy of the Executive Summary of the Scoping Report, which also provides details of how you can participate in the EIA process.

Hard copies of the full report are available for viewing at the following venues (from 8 July 2016):

- Koeberg Public Library, Duynefontein;
- Wesfleur Public Library, Atlantis;
- · Cape Town Public Library;
- · The Koeberg Visitors Centre; and
- SRK's office in Rondebosch.

An electronic version of the report can also be accessed on SRK's website: <a href="http://www.srk.co.za/en/koeberg-tisf-eia">http://www.srk.co.za/en/koeberg-tisf-eia</a>.

Stakeholders are invited to comment, and/or to register on the project database. Stakeholders must provide their comments together with their name, contact details (preferred method of notification, e.g. email), and an indication of any direct business, financial, personal or other interest which they have in the application, to Jessica du Toit at SRK Consulting: Tel: 021 659 3060; Fax: 021 685 7105; or email: jedutoit@srk.co.za.

A **Public Open Day** will be held at the Koeberg Visitors' Centre from 15:00 until 18:30 on Thursday, 21 July 2016 at which stakeholders can discuss the project with relevant members of the Project Team. Stakeholders are invited to

attend the Open Day anytime between the above times, and are requested to **confirm their intention to attend the Open Day with the contact person below**. Proof of identity will be required for access to the KNPS site.

Jessica du Toit BSc (ConsEcol), MPhil (Env Mgmt)

**Environmental Consultant** 



SRK Consulting (South Africa) Pty Ltd

The Administrative Building, Albion Spring, 183 Main Road, Rondebosch, 7700

Postnet Suite # 206, Private Bag X18, Rondebosch, 7701

**Tel:** +27-(0)21-659-3060; **Fax**: +27-(0)21-685-7105 **Mobile**: +27-(0)76-133-9776; **Direct**: +27-(0)21-659-3083

Email: jedutoit@srk.co.za

#### www.srk.co.za

This transmission is intended for the sole use of the addressee, and may contain information that by its privileged and confidential nature is exempt from disclosure under applicable law. You are hereby notified that any dissemination, distribution or duplication of this transmission by someone other than the intended recipient or its designated agent is strictly prohibited. If you have received this transmission in error, please notify the sender immediately by replying to this transmission, or by collect call to the above phone number.

Please consider the environment before printing this e-mail.

### Masson, Scott

From: Du Toit, Jessica

Sent: 07 July, 2016 4:51 PM

**To:** Jones, Sharon

**Subject:** 478317: Koeberg TISF EIA - Availability of Scoping Report for comment

**Attachments:** 478317\_Koeberg TISF EIA\_SR Executive Summary\_July 2016.pdf

Tracking: Recipient Delivery

Jones, Sharon Delivered: 07-Jul-16 4:51 PM

'jan.norman@eskom.co.za'
'gert.greeff@eskom.co.za'
'rsmart@capenature.co.za'

'whector@environment.gov.za'
'lmokoena@environment.gov.za'
'smambane@environment.gov.za'

'Ian.Gildenhuys@capetown.gov.za'
'pat.titmuss@capetown.gov.za'
'Morne.Theron@capetown.gov.za'
'Lynelle.Matthys@capetown.gov.za'

'thokob@daff.gov.za'

'mashuduma@daff.gov.za' 'AnnetteS@daff.gov.za'

'Bessie.makgopa@energy.gov.za' 'Katse.Maphoto@energy.gov.za'

'brenda.phahlamohlaka@energy.gov.za'

'Simphiwe.makhathini@dpe.gov.za'

'Andretta.tsebe@dpe.gov.za'

'emerentiap@elsenburg.com'

'danielsd@dwa.gov.za'

'ptmkhabela@nnr.co.za'

'thill@nnr.co.za'

'rmakgae@nnr.co.za'

'vkmajola@nnr.co.za'

'gmoonsamy@nnr.co.za'

'tmogorosi@nnr.co.za'

'vseitei@nnr.co.za'

'rramerafe@nnr.co.za'

'emile.thiele@sippmo.co.za'

'runkelc@nra.co.za'

'emerentiap@elsenburg.com'

'wouter.kriel@westerncape.gov.za'

'ansaas.mohamed@westerncape.gov.za'

Masson, Scott

'solly.fourie@westerncape.gov.za'

'abigail.scholtz@westerncape.gov.za'

Delivered: 07-Jul-16 4:51 PM

Recipient Delivery

'Raybin.Windvogel@westerncape.gov.za'

'anthony.vanwyk@westerncape.gov.za'

'Eddie.Hanekom@westerncape.gov.za'

'Lance.McBain-Charles@westerncape.gov.za'

'Eugeune.Pienaar@westerncape.gov.za'

'Shaun.Arendse@westerncape.gov.za'

'joy.leaner@westerncape.gov.za'

'peter.harmse@westerncape.gov.za'

'bhawoodien.parker@westerncape.gov.za'

'Gottlieb.Arendse@westerncape.gov.za'

'wilna.kloppers@westerncape.gov.za'

'russell.mehl@westerncape.gov.za'

'zayed.brown@westerncape.gov.za'

'taryn.dreyer@westerncape.gov.za'

Dear Stakeholder

### NOTICE OF RELEASE OF SCOPING REPORT: PROPOSED TRANSIENT INTERIM STORAGE FACILITY FOR THE STORAGE OF USED NUCLEAR FUEL AT KOEBERG NUCLEAR POWER STATION

Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of dry casks at the Koeberg Nuclear Power Station (KNPS) to accommodate used nuclear fuel from the reactors of the power station, thereby ensuring the continued operation of the KNPS. SRK Consulting (South Africa) (Pty) Ltd (SRK) has been appointed to undertake the Scoping and Environmental Impact Reporting (S&EIR – often referred to as the Environmental Impact Assessment [EIA]) process required in terms of the National Environmental Management Act 107 of 1998 (NEMA) and the EIA Regulations, 2014.

SRK previously requested interested parties to register as stakeholders for this EIA process, and subsequently released the Draft Scoping Report to all registered stakeholders for comment, before the formal commencement of the EIA process.

The **Scoping Report** has been amended in response to the comments received during this comment period, and the EIA process has formally commenced with the submission of the Application Form to the Department of Environmental Affairs. The Scoping Report, in which changes to the previous version are clearly indicated, is now available for public review for a period of 30 days, from **8 July until 8 August 2016**. Please find attached a copy of the Executive Summary of the Scoping Report, which also provides details of how you can participate in the EIA process.

Hard copies of the full report are available for viewing at the following venues (from 8 July 2016):

- Koeberg Public Library, Duynefontein;
- Wesfleur Public Library, Atlantis;
- · Cape Town Public Library;
- The Koeberg Visitors Centre; and
- SRK's office in Rondebosch.

An electronic version of the report can also be accessed on SRK's website: <a href="http://www.srk.co.za/en/koeberg-tisf-eia">http://www.srk.co.za/en/koeberg-tisf-eia</a>.

Stakeholders are invited to comment, and/or to register on the project database. Stakeholders must provide their comments together with their name, contact details (preferred method of notification, e.g. email), and an indication of any direct business, financial, personal or other interest which they have in the application, to Jessica du Toit at SRK Consulting: Tel: 021 659 3060; Fax: 021 685 7105; or email: jedutoit@srk.co.za.

A **Public Open Day** will be held at the Koeberg Visitors' Centre from 15:00 until 18:30 on Thursday, 21 July 2016 at which stakeholders can discuss the project with relevant members of the Project Team. Stakeholders are invited to

attend the Open Day anytime between the above times, and are requested to **confirm their intention to attend the Open Day with the contact person below**. Proof of identity will be required for access to the KNPS site.

Jessica du Toit BSc (ConsEcol), MPhil (Env Mgmt)

**Environmental Consultant** 



SRK Consulting (South Africa) Pty Ltd

The Administrative Building, Albion Spring, 183 Main Road, Rondebosch, 7700

Postnet Suite # 206, Private Bag X18, Rondebosch, 7701

**Tel:** +27-(0)21-659-3060; **Fax**: +27-(0)21-685-7105 **Mobile**: +27-(0)76-133-9776; **Direct**: +27-(0)21-659-3083

Email: jedutoit@srk.co.za

#### www.srk.co.za

This transmission is intended for the sole use of the addressee, and may contain information that by its privileged and confidential nature is exempt from disclosure under applicable law. You are hereby notified that any dissemination, distribution or duplication of this transmission by someone other than the intended recipient or its designated agent is strictly prohibited. If you have received this transmission in error, please notify the sender immediately by replying to this transmission, or by collect call to the above phone number.

Please consider the environment before printing this e-mail.

#### Masson, Scott

From: Du Toit, Jessica

Sent: 07 July, 2016 5:02 PM

**To:** Jones, Sharon

**Subject:** 478317: Koeberg TISF EIA - Availability of Scoping Report for comment

**Attachments:** 478317\_Koeberg TISF EIA\_SR Executive Summary\_July 2016.pdf

Tracking: Recipient Delivery

Jones, Sharon Delivered: 07-Jul-16 5:02 PM

'amanda.fritz.whyte@gmail.com'
'info@melkbosprivate.co.za'
'iiosiphakis@gmail.com'
'mikecmthebike@gmail.com'
'FIS-sydney@mweb.co.za'
'rvdriet@telkomsa.net'
'helen.bamford@inl.co.za'
'graham@nimblemouse.co.za'
'grahamarbuckle@gmail.com'

'ryan@sefsa.co.za'

'ankandjohn@gmail.com'

Dear Stakeholder

### NOTICE OF RELEASE OF SCOPING REPORT: PROPOSED TRANSIENT INTERIM STORAGE FACILITY FOR THE STORAGE OF USED NUCLEAR FUEL AT KOEBERG NUCLEAR POWER STATION

Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of dry casks at the Koeberg Nuclear Power Station (KNPS) to accommodate used nuclear fuel from the reactors of the power station, thereby ensuring the continued operation of the KNPS. SRK Consulting (South Africa) (Pty) Ltd (SRK) has been appointed to undertake the Scoping and Environmental Impact Reporting (S&EIR — often referred to as the Environmental Impact Assessment [EIA]) process required in terms of the National Environmental Management Act 107 of 1998 (NEMA) and the EIA Regulations, 2014.

SRK previously requested interested parties to register as stakeholders for this EIA process, and subsequently released the Draft Scoping Report to all registered stakeholders for comment, before the formal commencement of the EIA process.

The **Scoping Report** has been amended in response to the comments received during this comment period, and the EIA process has formally commenced with the submission of the Application Form to the Department of Environmental Affairs. The Scoping Report, in which changes to the previous version are clearly indicated, is now available for public review for a period of 30 days, from **8 July until 8 August 2016**. Please find attached a copy of the Executive Summary of the Scoping Report, which also provides details of how you can participate in the EIA process.

Hard copies of the full report are available for viewing at the following venues (from 8 July 2016):

- Koeberg Public Library, Duynefontein;
- Wesfleur Public Library, Atlantis;
- Cape Town Public Library;
- The Koeberg Visitors Centre; and
- SRK's office in Rondebosch.

An electronic version of the report can also be accessed on SRK's website: <a href="http://www.srk.co.za/en/koeberg-tisf-eia">http://www.srk.co.za/en/koeberg-tisf-eia</a>.

Stakeholders are invited to comment, and/or to register on the project database. Stakeholders must provide their comments together with their name, contact details (preferred method of notification, e.g. email), and an indication of

any direct business, financial, personal or other interest which they have in the application, to Jessica du Toit at SRK Consulting: Tel: 021 659 3060; Fax: 021 685 7105; or email: jedutoit@srk.co.za.

A **Public Open Day** will be held at the Koeberg Visitors' Centre from 15:00 until 18:30 on Thursday, 21 July 2016 at which stakeholders can discuss the project with relevant members of the Project Team. Stakeholders are invited to attend the Open Day anytime between the above times, and are requested to **confirm their intention to attend the Open Day with the contact person below**. Proof of identity will be required for access to the KNPS site.

Jessica du Toit BSc (ConsEcol), MPhil (Env Mgmt) Environmental Consultant



SRK Consulting (South Africa) Pty Ltd The Administrative Building, Albion Spring, 183 Main Road, Rondebosch, 7700 Postnet Suite # 206, Private Bag X18, Rondebosch, 7701

**Tel:** +27-(0)21-659-3060; **Fax**: +27-(0)21-685-7105 **Mobile**: +27-(0)76-133-9776; **Direct**: +27-(0)21-659-3083

Email: jedutoit@srk.co.za

#### www.srk.co.za

This transmission is intended for the sole use of the addressee, and may contain information that by its privileged and confidential nature is exempt from disclosure under applicable law. You are hereby notified that any dissemination, distribution or duplication of this transmission by someone other than the intended recipient or its designated agent is strictly prohibited. If you have received this transmission in error, please notify the sender immediately by replying to this transmission, or by collect call to the above phone number.

A Please consider the environment before printing this e-mail.

### Masson, Scott

From: Du Toit, Jessica
Sent: 07 July, 2016 5:01 PM

**To:** Jones, Sharon

**Subject:** 478317: Koeberg TISF EIA - Availability of Scoping Report for comment

**Attachments:** 478317\_Koeberg TISF EIA\_SR Executive Summary\_July 2016.pdf

Tracking: Recipient Delivery

Jones, Sharon Delivered: 07-Jul-16 5:01 PM

'wimpie.christa@absamail.co.za'

'Danoli1@vodamail.co.za' 'elbe.opperman@gmail.com' 'Opperman.fg@gmail.com'

'pannaye@netactive.co.za'

'Daryl@lantic.net'

'Jose.Pereira@lesedins.co.za'
'audreyp@melkbosprivate.co.za'

'sav@coachsav.co.za'
'Piloso2007@yahoo.com'

'Nicky.pombo@gmail.com'

'dave@brainstorm.co.za'

'energy@birdlife.org.za'
'dale.wright@birdlife.org.za'

'renier@gcinc.co.za'

'anrichards@telkomsa.net'

'u.rothen@mweb.co.za'

'saaymans1@yahoo.com'

'kazana@telkomsa.net'

'psicc@iafrica.com'

'Bill.Marysleggs@gmail.com'

'belindatravelsusa@gmail.com'

'detective.speed@gmail.com'

'dntomas@hotmail.com'

'clementrafm@yahoo.co.za'

'mike.thurgood@imaginet.co.za'

'triplejjj@theweb.co.za'

'tertiuswatney@gmail.com'

'chriswetter@telkomsa.net'

'davedon@telkomsa.net'

'Ray@wilra.co.za'

'brian@sadomain.co.za'

'tugw@iafrica.com'

'admin@saxonseass.wcape.school.za'

'admin@atlantissec.wcape.school.za'

'langenhovenh@vodamail.co.za'

Recipient Delivery

'powderedpoppy@gmail.com'

'admin@inkwenkwezi.wcape.school.za'

'admin@schoonshs.wcape.school.za'

'patrickb@cbcstjohns.co.za'

'stephen\_lefeuvre@parklands.co.za'

'reception@tvh.co.za'

'admin@sinenjongo.wcape.school.za'

'headmaster@milnertonhigh.co.za'

'bassa.bibi@yahoo.com'

'vrps@mweb.co.za'

'acvvkoeberg@afrihost.co.za'

'arodgers@westcoastcollege.co.za'

'Nicklee@telkomsa.net'

'davidfig@iafrica.com'

'ben.blom@necsa.co.za'

Dear Stakeholder

### NOTICE OF RELEASE OF SCOPING REPORT: PROPOSED TRANSIENT INTERIM STORAGE FACILITY FOR THE STORAGE OF USED NUCLEAR FUEL AT KOEBERG NUCLEAR POWER STATION

Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of dry casks at the Koeberg Nuclear Power Station (KNPS) to accommodate used nuclear fuel from the reactors of the power station, thereby ensuring the continued operation of the KNPS. SRK Consulting (South Africa) (Pty) Ltd (SRK) has been appointed to undertake the Scoping and Environmental Impact Reporting (S&EIR – often referred to as the Environmental Impact Assessment [EIA]) process required in terms of the National Environmental Management Act 107 of 1998 (NEMA) and the EIA Regulations, 2014.

SRK previously requested interested parties to register as stakeholders for this EIA process, and subsequently released the Draft Scoping Report to all registered stakeholders for comment, before the formal commencement of the EIA process.

The **Scoping Report** has been amended in response to the comments received during this comment period, and the EIA process has formally commenced with the submission of the Application Form to the Department of Environmental Affairs. The Scoping Report, in which changes to the previous version are clearly indicated, is now available for public review for a period of 30 days, from **8 July until 8 August 2016**. Please find attached a copy of the Executive Summary of the Scoping Report, which also provides details of how you can participate in the EIA process.

Hard copies of the full report are available for viewing at the following venues (from 8 July 2016):

- Koeberg Public Library, Duynefontein;
- Wesfleur Public Library, Atlantis;
- Cape Town Public Library;
- The Koeberg Visitors Centre; and
- SRK's office in Rondebosch.

An electronic version of the report can also be accessed on SRK's website: http://www.srk.co.za/en/koeberg-tisf-eia.

Stakeholders are invited to comment, and/or to register on the project database. Stakeholders must provide their comments together with their name, contact details (preferred method of notification, e.g. email), and an indication of any direct business, financial, personal or other interest which they have in the application, to Jessica du Toit at SRK Consulting: Tel: 021 659 3060; Fax: 021 685 7105; or email: jedutoit@srk.co.za.

A **Public Open Day** will be held at the Koeberg Visitors' Centre from 15:00 until 18:30 on Thursday, 21 July 2016 at which stakeholders can discuss the project with relevant members of the Project Team. Stakeholders are invited to

attend the Open Day anytime between the above times, and are requested to **confirm their intention to attend the Open Day with the contact person below**. Proof of identity will be required for access to the KNPS site.

Jessica du Toit BSc (ConsEcol), MPhil (Env Mgmt)

**Environmental Consultant** 



SRK Consulting (South Africa) Pty Ltd

The Administrative Building, Albion Spring, 183 Main Road, Rondebosch, 7700

Postnet Suite # 206, Private Bag X18, Rondebosch, 7701

**Tel:** +27-(0)21-659-3060; **Fax**: +27-(0)21-685-7105 **Mobile**: +27-(0)76-133-9776; **Direct**: +27-(0)21-659-3083

Email: jedutoit@srk.co.za

#### www.srk.co.za

This transmission is intended for the sole use of the addressee, and may contain information that by its privileged and confidential nature is exempt from disclosure under applicable law. You are hereby notified that any dissemination, distribution or duplication of this transmission by someone other than the intended recipient or its designated agent is strictly prohibited. If you have received this transmission in error, please notify the sender immediately by replying to this transmission, or by collect call to the above phone number.

Please consider the environment before printing this e-mail.

### Masson, Scott

From: Du Toit, Jessica
Sent: 07 July, 2016 5:00 PM

**To:** Jones, Sharon

**Subject:** 478317: Koeberg TISF EIA - Availability of Scoping Report for comment

**Attachments:** 478317\_Koeberg TISF EIA\_SR Executive Summary\_July 2016.pdf

Tracking: Recipient Delivery

Jones, Sharon Delivered: 07-Jul-16 5:00 PM

'melville@sun.ac.za'

'melanielorenandrews@hotmail.com'

'mirigarcia1@hotmail.com'

'cynthia@danceeuphoria.co.za'

'lise.botes3@gmail.com'

'carrycatge@yahoo.co.uk'

'infobcd@iafrica.com'

'jackie.braswell@cts.org.za'

'Moonriver1@telkomsa.net'

'peterlbrowne@gmail.com'

'telesol@iafrica.com'

'renbrightlight999@gmail.com'

'Dominique87@gmail.com'

'pro@orionorganisation.co.za'

'scwaile@yahoo.com'

'maurizio@decinti.it'

'carin.dev@outlook.com'

'clivedobsonwork@gmail.com'

'Daryl@lantic.net'

'cornia.ellis@teleflex.com'

's teve alan farrand @gmail.com'

'alidagelant@yahoo.com'

'ronaldgunda@gmail.com'

'garywaynehall@gmail.com'

'HNDBRE003@myuct.ac.za'

'Alex-hotten@gmx.de'

'iiosiphakis@gmail.com'

'duvall@mweb.co.za'

'muna@iafrica.com'

'Peter@impact247.co.za'

'Nicklee@telkomsa.net'

'igp@orionorganisation.co.za'

'andrewde@eskom.co.za'

'andrewsdeidre@yahoo.com'

'lloydflewis@gmail.com'

'luhangapeter@gmail.com'

Recipient Delivery

'Macalex.justin@telkomsa.net'

'friendsofrietvlei@worldonline.co.za'

'sizekamalusi@gmail.com'

'livesonmanguwo@gmail.com'

'maigrot@telkomsa.net'

'Zanoxolo.Makubalo@ZA.nestle.com'

'john@gcinc.co.za'

'robsyl@unilynx.co.za'

'ferdinand.x.mettler@gsk.com'

'carola247@gmail.com'

'carola@leangreen.co.za'

'yolande@edenonthebaymall.co.za'

'grant@mygas.co.za'

'yunekamtya@yahoo.com'

'mvunelwa@telkomsa.net'

'tembile.nyoka@gmail.com'

#### Dear Stakeholder

### NOTICE OF RELEASE OF SCOPING REPORT: PROPOSED TRANSIENT INTERIM STORAGE FACILITY FOR THE STORAGE OF USED NUCLEAR FUEL AT KOEBERG NUCLEAR POWER STATION

Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of dry casks at the Koeberg Nuclear Power Station (KNPS) to accommodate used nuclear fuel from the reactors of the power station, thereby ensuring the continued operation of the KNPS. SRK Consulting (South Africa) (Pty) Ltd (SRK) has been appointed to undertake the Scoping and Environmental Impact Reporting (S&EIR — often referred to as the Environmental Impact Assessment [EIA]) process required in terms of the National Environmental Management Act 107 of 1998 (NEMA) and the EIA Regulations, 2014.

SRK previously requested interested parties to register as stakeholders for this EIA process, and subsequently released the Draft Scoping Report to all registered stakeholders for comment, before the formal commencement of the EIA process.

The **Scoping Report** has been amended in response to the comments received during this comment period, and the EIA process has formally commenced with the submission of the Application Form to the Department of Environmental Affairs. The Scoping Report, in which changes to the previous version are clearly indicated, is now available for public review for a period of 30 days, from **8 July until 8 August 2016**. Please find attached a copy of the Executive Summary of the Scoping Report, which also provides details of how you can participate in the EIA process.

Hard copies of the full report are available for viewing at the following venues (from 8 July 2016):

- Koeberg Public Library, Duynefontein;
- Wesfleur Public Library, Atlantis;
- Cape Town Public Library;
- The Koeberg Visitors Centre; and
- SRK's office in Rondebosch.

An electronic version of the report can also be accessed on SRK's website: http://www.srk.co.za/en/koeberg-tisf-eia.

Stakeholders are invited to comment, and/or to register on the project database. Stakeholders must provide their comments together with their name, contact details (preferred method of notification, e.g. email), and an indication of any direct business, financial, personal or other interest which they have in the application, to Jessica du Toit at SRK Consulting: Tel: 021 659 3060; Fax: 021 685 7105; or email: jedutoit@srk.co.za.

A **Public Open Day** will be held at the Koeberg Visitors' Centre from 15:00 until 18:30 on Thursday, 21 July 2016 at which stakeholders can discuss the project with relevant members of the Project Team. Stakeholders are invited to attend the Open Day anytime between the above times, and are requested to **confirm their intention to attend the Open Day with the contact person below**. Proof of identity will be required for access to the KNPS site.

Jessica du Toit BSc (ConsEcol), MPhil (Env Mgmt) Environmental Consultant



SRK Consulting (South Africa) Pty Ltd

The Administrative Building, Albion Spring, 183 Main Road, Rondebosch, 7700

Postnet Suite # 206, Private Bag X18, Rondebosch, 7701

**Tel:** +27-(0)21-659-3060; **Fax**: +27-(0)21-685-7105 **Mobile**: +27-(0)76-133-9776; **Direct**: +27-(0)21-659-3083

Email: jedutoit@srk.co.za

#### www.srk.co.za

This transmission is intended for the sole use of the addressee, and may contain information that by its privileged and confidential nature is exempt from disclosure under applicable law. You are hereby notified that any dissemination, distribution or duplication of this transmission by someone other than the intended recipient or its designated agent is strictly prohibited. If you have received this transmission in error, please notify the sender immediately by replying to this transmission, or by collect call to the above phone number.

Please consider the environment before printing this e-mail.

### Masson, Scott

**Attachments:** 

From: Du Toit, Jessica
Sent: 07 July, 2016 4:59 PM

**To:** Jones, Sharon

**Subject:** 478317: Koeberg TISF EIA - Availability of Scoping Report for comment

478317\_Koeberg TISF EIA\_SR Executive Summary\_July 2016.pdf

Tracking: Recipient Delivery

Jones, Sharon Delivered: 07-Jul-16 4:59 PM

'Cpf.atlantis@gmail.com'

'Clarence.mentor@gmail.com' 'warren.leslie@remaxpa.co.za' 'cliff.dorse@capetown.gov.za'

'iraubenh@mweb.co.za'

'duvall@mweb.co.za'

'samiekleynhans@yahoo.co.za'

'Amanda.fritz.whyte@gmail.com'

'Tapjohnson01@gmail.com' 'mark@communite.co.za'

'Ray@wilra.co.za'

'andre@gooutdoorsgear.co.za'

'Shawn73110@gmail.com'

'tableview-saps@saps.org.za'

'tableview-saps@saps.org.za'

'sector1chairman@cpftableview.co.za'

'inneractiveconsulting@gmail.com'

'wangesiyo@gmail.com'

'efmarthinus@yahoo.com'

'ahsedeman@gmail.com'

'admin@berzeliaps.wcape.school.za'

'david.willemse2@capetown.gov.za'

'renier@gcinc.co.za'

'trevor.moodley@eskom.co.za'

'fickne@eskom.co.za'

'peterssa@eskom.co.za'

'osarkinasp@gmail.com'

'septema@eskom.co.za'

'sekokoi@eskom.co.za'

'oliviejd@eskom.co.za'

'michelle.herbert@advisian.com'

'sataarh@eskom.co.za'

'kelebohile.makhothe@eskom.co.za'

'LaveloR@eskom.co.za'

'phidzanl@eskom.co.za'

'Lewis.phidza@eskom.co.za'

Recipient Delivery

'tayeb.jappie@eskom.co.za'

'lawrencea@eskom.co.za'

'jeannesd@eskom.co.za'

'vernonmr@eskom.co.za'

'stephen.pieterson@eskom.co.za'

'potgielj@eskom.co.za'

'sedick.davis@eskom.co.za'

'ryan.jonas@advisian.com'

'gaynor.adair@gmail.com'

'gaynor.adair@gmail.com'

'yekeenahmed@gmail.com'

'letchmew@yahoo.com'

Dear Stakeholder

### NOTICE OF RELEASE OF SCOPING REPORT: PROPOSED TRANSIENT INTERIM STORAGE FACILITY FOR THE STORAGE OF USED NUCLEAR FUEL AT KOEBERG NUCLEAR POWER STATION

Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of dry casks at the Koeberg Nuclear Power Station (KNPS) to accommodate used nuclear fuel from the reactors of the power station, thereby ensuring the continued operation of the KNPS. SRK Consulting (South Africa) (Pty) Ltd (SRK) has been appointed to undertake the Scoping and Environmental Impact Reporting (S&EIR – often referred to as the Environmental Impact Assessment [EIA]) process required in terms of the National Environmental Management Act 107 of 1998 (NEMA) and the EIA Regulations, 2014.

SRK previously requested interested parties to register as stakeholders for this EIA process, and subsequently released the Draft Scoping Report to all registered stakeholders for comment, before the formal commencement of the EIA process.

The **Scoping Report** has been amended in response to the comments received during this comment period, and the EIA process has formally commenced with the submission of the Application Form to the Department of Environmental Affairs. The Scoping Report, in which changes to the previous version are clearly indicated, is now available for public review for a period of 30 days, from **8 July until 8 August 2016**. Please find attached a copy of the Executive Summary of the Scoping Report, which also provides details of how you can participate in the EIA process.

Hard copies of the full report are available for viewing at the following venues (from 8 July 2016):

- Koeberg Public Library, Duynefontein;
- Wesfleur Public Library, Atlantis;
- Cape Town Public Library;
- The Koeberg Visitors Centre; and
- SRK's office in Rondebosch.

An electronic version of the report can also be accessed on SRK's website: <a href="http://www.srk.co.za/en/koeberg-tisf-eia">http://www.srk.co.za/en/koeberg-tisf-eia</a>.

Stakeholders are invited to comment, and/or to register on the project database. Stakeholders must provide their comments together with their name, contact details (preferred method of notification, e.g. email), and an indication of any direct business, financial, personal or other interest which they have in the application, to Jessica du Toit at SRK Consulting: Tel: 021 659 3060; Fax: 021 685 7105; or email: jedutoit@srk.co.za.

A **Public Open Day** will be held at the Koeberg Visitors' Centre from 15:00 until 18:30 on Thursday, 21 July 2016 at which stakeholders can discuss the project with relevant members of the Project Team. Stakeholders are invited to attend the Open Day anytime between the above times, and are requested to **confirm their intention to attend the Open Day with the contact person below**. Proof of identity will be required for access to the KNPS site.

Jessica du Toit BSc (ConsEcol), MPhil (Env Mgmt)

#### **Environmental Consultant**



SRK Consulting (South Africa) Pty Ltd

The Administrative Building, Albion Spring, 183 Main Road, Rondebosch, 7700

Postnet Suite # 206, Private Bag X18, Rondebosch, 7701

**Tel:** +27-(0)21-659-3060; **Fax**: +27-(0)21-685-7105

**Mobile**: + 27-(0)76-133-9776; **Direct**: +27-(0)21-659-3083

Email: jedutoit@srk.co.za

#### www.srk.co.za

This transmission is intended for the sole use of the addressee, and may contain information that by its privileged and confidential nature is exempt from disclosure under applicable law. You are hereby notified that any dissemination, distribution or duplication of this transmission by someone other than the intended recipient or its designated agent is strictly prohibited. If you have received this transmission in error, please notify the sender immediately by replying to this transmission, or by collect call to the above phone number.

Please consider the environment before printing this e-mail.

### Masson, Scott

From: Du Toit, Jessica

Sent: 07 July, 2016 4:56 PM

**To:** Jones, Sharon

**Subject:** 478317: Koeberg TISF EIA - Availability of Scoping Report for comment

**Attachments:** 478317\_Koeberg TISF EIA\_SR Executive Summary\_July 2016.pdf

Tracking:	Recipient	Delivery	Read
-----------	-----------	----------	------

Jones, Sharon Delivered: 07-Jul-16 4:56 PM Read: 08-Jul-16 6:48 AM

'phenyo.nongane@necsa.co.za'
'Debbie.joshua@eskom.co.za'

'evan.kerr@eskom.co.za'

'KlineKN@eskom.co.za'

'krausem@eskom.co.za'

'Jurina.leroux@eskom.co.za'

'makgael@eskom.co.za'

'Matsabmg@eskom.co.za'

'matshidd@eskom.co.za'

'mokgwall@eskom.co.za'

'moffatr@eskom.co.za'

'cassie.naidoo@eskom.co.za'

'nelap@eskom.co.za'

'owen.peters@eskom.co.za'

'pienaasz@eskom.co.za'

'PruNhin@eskom.co.za'

'RadebePS@eskom.co.za'

'george.reissenzahn@eskom.co.za'

'Martin.saaymans@eskom.co.za'

'trevor.moodley@eskom.co.za'

'vuyx@hotmail.com'

'mandisi.stwayi@eskom.co.za'

'jongi.dyabaza@eskom.co.za'

'ovisr@eskom.co.za'

'riedewaan.bakardien@eskom.co.za

'bakardr@eskom.co.za'

'felix.matthee@eskom.co.za'

'john.jones@eskom.co.za'

'lindley.perryman@eskom.co.za'

'krugerlh@eskom.co.za'

'jonkern@eskom.co.za'

'StaffenK@eskom.co.za'

'KarstenT@eskom.co.za'

'TrollopI@eskom.co.za'

'xasoss@eskom.co.za'

'tracey.cosgrove@petrosa.co.za'

Recipient Delivery Read

'Willem.beukes@necsa.co.za'

'bloubergstrandresidents@gmail.co

'melkbosstrand@saps.org.za'

'flabuschagne@sars.gov.za'

'managerwc@wessa.co.za'

'Harry.white@abhoa.co.za'

'roynagan@telkomsa.net'

'smithglodene@gmail.com'

'warrencarolus@gmail.com'

Dear Stakeholder

### NOTICE OF RELEASE OF SCOPING REPORT: PROPOSED TRANSIENT INTERIM STORAGE FACILITY FOR THE STORAGE OF USED NUCLEAR FUEL AT KOEBERG NUCLEAR POWER STATION

Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of dry casks at the Koeberg Nuclear Power Station (KNPS) to accommodate used nuclear fuel from the reactors of the power station, thereby ensuring the continued operation of the KNPS. SRK Consulting (South Africa) (Pty) Ltd (SRK) has been appointed to undertake the Scoping and Environmental Impact Reporting (S&EIR — often referred to as the Environmental Impact Assessment [EIA]) process required in terms of the National Environmental Management Act 107 of 1998 (NEMA) and the EIA Regulations, 2014.

SRK previously requested interested parties to register as stakeholders for this EIA process, and subsequently released the Draft Scoping Report to all registered stakeholders for comment, before the formal commencement of the EIA process.

The **Scoping Report** has been amended in response to the comments received during this comment period, and the EIA process has formally commenced with the submission of the Application Form to the Department of Environmental Affairs. The Scoping Report, in which changes to the previous version are clearly indicated, is now available for public review for a period of 30 days, from **8 July until 8 August 2016**. Please find attached a copy of the Executive Summary of the Scoping Report, which also provides details of how you can participate in the EIA process.

Hard copies of the full report are available for viewing at the following venues (from 8 July 2016):

- Koeberg Public Library, Duynefontein;
- Wesfleur Public Library, Atlantis;
- Cape Town Public Library;
- The Koeberg Visitors Centre; and
- SRK's office in Rondebosch.

An electronic version of the report can also be accessed on SRK's website: <a href="http://www.srk.co.za/en/koeberg-tisf-eia">http://www.srk.co.za/en/koeberg-tisf-eia</a>.

Stakeholders are invited to comment, and/or to register on the project database. Stakeholders must provide their comments together with their name, contact details (preferred method of notification, e.g. email), and an indication of any direct business, financial, personal or other interest which they have in the application, to Jessica du Toit at SRK Consulting: Tel: 021 659 3060; Fax: 021 685 7105; or email: <a href="mailto:jedutoit@srk.co.za">jedutoit@srk.co.za</a>.

A **Public Open Day** will be held at the Koeberg Visitors' Centre from 15:00 until 18:30 on Thursday, 21 July 2016 at which stakeholders can discuss the project with relevant members of the Project Team. Stakeholders are invited to attend the Open Day anytime between the above times, and are requested to **confirm their intention to attend the Open Day with the contact person below**. Proof of identity will be required for access to the KNPS site.

Jessica du Toit BSc (ConsEcol), MPhil (Env Mgmt) Environmental Consultant



SRK Consulting (South Africa) Pty Ltd

The Administrative Building, Albion Spring, 183 Main Road, Rondebosch, 7700

Postnet Suite # 206, Private Bag X18, Rondebosch, 7701

**Tel:** +27-(0)21-659-3060; **Fax**: +27-(0)21-685-7105

Mobile: +27-(0)76-133-9776; Direct: +27-(0)21-659-3083

Email: jedutoit@srk.co.za

#### www.srk.co.za

This transmission is intended for the sole use of the addressee, and may contain information that by its privileged and confidential nature is exempt from disclosure under applicable law. You are hereby notified that any dissemination, distribution or duplication of this transmission by someone other than the intended recipient or its designated agent is strictly prohibited. If you have received this transmission in error, please notify the sender immediately by replying to this transmission, or by collect call to the above phone number.

Please consider the environment before printing this e-mail.

### Appendix M: Advertisements placed during Scoping Phase

### KNYSNA BOSS 'MISCONDUCT'

# DA probes alleged racism

**GRANT EASTON** 

municipality.

Mike Hampton said Wolmarans

had effectively been "demoted"

by the DA, for the above

and other controversies during

her tenure in charge of the

### **Quinton Mtyala**

THE DA-run Knysna Municipality is keeping tight-lipped over a decision at a special council meeting to investigate the town's municipal manager, Grant Easton, over allegations of serious misconduct.

Knysna's outgoing mayor, Georlene Wolmarans, said the specific complaint against Easton related to allegations of racism made against him "by a member of the public".

In a statement, the municipality indicated it would seek an outside investigator to probe the claims against Easton.

"In order not to prejudice the outcome of the investigation, the nature of the allegations against the municipal manager cannot be made public at this time.

"The council also decided that in order to protect the

interests of all the parties involved, including the municipal manager, to ask the municipal manager to respond in writing within seven days as to why he should not be suspended for precautionary reasons while the investigation is ongoing."

Easton grabbed the headlines last year when he told Knysna's town council that R579 000 would be required to redo a public participation process for the town's integrated spatial development framework (ISDF).

This despite the fact that money had been budgeted for this purpose in the initial tender for the ISDF.

It was controversially awarded to the Knysna's biggest developer, Chris Mulder, and his wife Pat was placed in charge of the public participation process.

Knysna community activist

Speaker Eleanor Bouw-Spies is the DA's mayoral candidate for the town.

Her husband, Rowan Spies, a former ANC member and controversial businessman is a DA candidate for the Eden District Municipality.

Controversy surrounds Spies over his dealings in Bitou Municipality (Plettenberg Bay), where he was fingered in an investigation over a kickback for a tender awarded to his company by auditing firm Mazars, although he was never criminally charged.

"All the people who seemed to support the ISDF were removed from the candidates' list or moved so far down that they can't be re-elected.

"The DA is cleaning up and refusing to take responsibility." said Hampton.

The DA's manager for its In her place, current eastern region, Jaco Londt said the party had noted the developments in Knysna and that the issue with Easton was being dealt with in terms of labour laws.

The party would only respond to the allegations once the investigation has been concluded, he said.

close to A source Wolmarans, who joined the DA when it absorbed the Independent Democrats, said Bouw-Spies had for a long time been groomed to take over the mayoral chain.

"Some of the DA guys in the area targeted her because she challenged them.

"The decisions on the ISDF were taken by Mayco and at the end of the day it's all of them (DA councillors) who should bear responsibility," said the

> quinton.mtyala@inl.co.za @mtyala

### Malema: Zuma going to jail

### **Molaole Montsho**

RUSTENBURG: EFF leader Julius Malema promised supporters in Rustenburg yesterday that President Jacob Zuma would be arrested and put in jail.

"Zuma is going to prison. We are going to arrest and put him in jail, and take Nkandla and turn it into a college. There is nothing that stops us from taking Nkandla.'

He said the only thing that prevented Zuma from being locked up was that he was a sitting state president.

"When we said Zuma is going to pay back the Nkandla money, people thought we were playing. We said the Guptas must leave the country, they have now left. Zuma is going to jail," he said to the applause of the crowd.

A large crowd of EFF supporters and members had turned up to listen to Malema at the Rustenburg taxi rank. The city was Malema's last stop on his campaign trail in

North West. He spent three days in the province in a bid to drum up support for the EFF before the August 3 local government elections.

Malema appealed to party supporters not to burn schools or municipal buildings during

"Do not burn schools; do not destroy infrastructure. After you've torched this building, the mayor still remains the mayor, the council is not removed, and you will have burnt clinics and schools." Party members, dressed

in signature red T-shirts and

berets, ululated and waved hands when Malema arrived at the sports ground flanked by provincial chairperson Betty Diale and party spokesperson Mbuyiseni Ndlozi. Malema is set to wrap up

his three-day campaign in North West at communities in Marikana, Letlhabile and

"We are taking this municipality. We want to give you houses. Our municipality



**JULIUS MALEMA** 

will work independently with its own budget.

"We are going to build houses without the provincial government. Municipalities have the right to provide for its people. If they stop us, we are going to take them to court."

He added that the EFF was intent on fighting corruption. "We are fighting corruption, not because we hate Supra Mahumapelo (North West premier), we are fighting corruption because corruption steals from you."



SAFETY FIRST: Minister in the Presidency Jeff Radebe has stressed the importance of the youth practising safe sex to minimise the chances of contracting HIV/Aids. He addressed students at a Youth Dialogue on HIV and Aids at the Hilton Hotel in Durban yesterday.

### Use protection to prevent sexual diseases – Radebe

### **African News Agency**

DURBAN: Quoting Ray Phiri's song "One condom, one round; no condom, no sex", Minister in the Presidency Jeff Radebe told young people to protect themselves and their partners from sexual dis-

Speaking at the Hilton Hotel yesterday during a youth dialogue prior to the International Aids Conference in Durban later this month, Radebe said his key message was that prevention was better than cure

"If you are sexually active, make sure that you protect yourself and your partner.'

Radebe said that a social profile of young people done by Statistics SA indicated that the number of youth (15 to 34 years) in the



country grew from 18.5 million to 19.6 million between 2009 and 2014. Youth now constituted around 39% of SA's total population, he

The same study highlighted a range of problems facing young people, including quality of education, inadequate access to skills and training opportunities, high unemployment rate, vulnerability to violence and crime, as well susceptibility to communicable diseases like HIV/Aids and TB.

The report also found that

43.2% of young men die from external causes like violent crime or car accidents, while infectious diseases were most likely to cause the death of young women.

"All of us need to do more to reduce the number of youth dying from infectious and parasitic diseases such as tuberculosis (TB), influenza and pneumonia, as well as from external causes of morbidity and mortality.

He said the 21st Annual International Aids Conference was an opportunity to "take stock of the progress the world is making in improving access to prevention, treatment and eliminating the stigma associated with HIV and Aids".

The conference will see about 20 000 people from 180 countries, including scientists, researchers,

### 43.2% of young men die from external causes like violent crime

academics, government and civil society leaders, converge at the International Convention Centre from July 18-22.

Radebe said SA would showcase its "major successes and new interventions" in the fight against HIV/Aids and tuberculosis at the conference.

"SA has the largest ARV programme in the world, with 3.4 million people on treatment. In 2015/16 alone, a total of 12.2 million tests were conducted."

He said that empirical evidence from the South African Medical Research Council (MRC) showed that mother-to-child transmission of HIV had decreased consistently from 8.5% in 2008 to 1.5% in 2015.

"As a result of these successful interventions, more lives of babies and young children are being saved daily. SA's infant mortality rate has decreased significantly, from 56 per 1000 in 2009 to 39 per 1000 in 2014. The technical and scientific knowledge that will be exchanged during the conference will further buttress our efforts to overcome HIV and Aids.'

Radebe said it was up to the youth to take a bold lead in finding solutions to the problems they face, including the scourge of

### R1.5m for protector's state capture probe

### **African News Agency**

THE National Treasury has committed additional funding to Public Protector Thuli Madonsela for her probe into allegations of state capture, it emerged yesterday.

"Treasury made a commitment that we will receive R1.5 million for this purpose," said Madonsela's spokesperson, Oupa Segalwe.

Earlier this year, Madonsela made repeated calls for funding of R3m after the DA requested her to investigate "state capture", as well as whether President Jacob Zuma had breached the Executive Ethics Code after allegations that the wealthy Gupta family were influencing government decisions.

"We will receive half of the money. We understand that we are not the only state entity that needs funding and we are grateful for the little we are given," said Segalwe.

The money, said Segalwe, could not come directly from

### 'Request for more funding in line with a new approach'

the Treasury as it would be an "anomaly", but via the Justice Department.

While unusual, Segalwe said the request for additional funding from the Treasury was in line with a new approach being adopted by the public protector.

"Following our strategic planning process earlier this year, we decided that when we receive requests to undertake massive investigations that would be undertaken by a commission of inquiry, we will approach government for funding on a caseby-case basis.

"The public protector announced long before she was approached to investigate this matter that she was going to

take this approach. The resources will help us insource critical expertise, including forensics, which we do not have internally." Segalwe said the investigation

had not yet started in earnest. While the proper processes are being followed before the allocation can be made, he said: "The agreement is that we should use some of our money

while we await the transfer." In addition to the request from the DA, the public protector also received a complaint from the Dominican order, which asked her to probe all government contracts, as well as mining licences awarded to companies linked to

the Gupta family. The two complaints were brought after Deputy Finance Minister Mcebisi Jonas said in March the controversial family offered him the position of finance minister last year.

Zuma fired then finance minister Nhlanhla Nene shortly after the alleged secret offer, causing an upheaval in financial

### **srk** consulting

STAKEHOLDER ENGAGEMENT PROCESS Environmental Impact Assessment (EIA) for the Proposed Used Fuel Transient Interim Storage Facility at Koeberg Nuclear Power Station SRK Project No: 478317

Notice is hereby given of a stakeholder engagement process in terms of the National Environmenta

Project description: Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of used nuclear fuel from the reactors for the operational life of Koeberg Nuclear Power Station (KNPS), thereby ensuring the continued operation of KNPS.

Location: the proposed TISF will be constructed on vacant land within the KNPS Security Protected Area.

Application for Environmental Authorisation (EA) to undertake the following activities:

 Listing Notice 1: (27) clearance of indigenous vegetation: Listing Notice 2: (3) development for nuclear activities; and

 Listing Notice 3: (12) clearance of indigenous vegetation. In addition to EA, a separate authorisation for nuclear safety licensing will also be required from the

The **Scoping Report** is available at: Koeberg Public Library; Wesfleur Public Library; Cape Town Public Library; Koeberg Visitors Centre; SRK's office in Rondebosch; and <a href="https://www.srk.co.za">www.srk.co.za</a> (via the 'Library' and 'Public Documents' links).

from stakeholders must include their name, contact details (specifying the preferred method of notification, e.g. e-mail) and an indication of any direct business, financial, personal, or other interest which they have in the application, to the contact person below, by 8 August 2016. Note that only registered stakeholders will be notified of future meetings and opportunities to provide comment or A Public Open Day, where the project will be discussed, will be held at the Koeberg Visitors Centre

Stakeholders are invited to submit comments and/or register on the project database. Submissions

from 15:00 until 18:30 on Thursday, 21 July 2016. Stakeholders are invited to attend the Open Day anytime between the above times, and are requested to confirm their intention to attend the Open Day with the contact person below. Proof of identity will be required for access to the KNPS site.

To submit comments, register, or request information, please contact: Jessica du Toit of SRK Consulting at jedutoit@srk.co.za; Postnet Suite #206, Private Bag X18, Rondebosch, 7701; Fax: 021 685 7105: Tel: 021 659 3060

# Ontinental 3 TYRE PRICES ARE QUOTED PER UNIT TYRE PRICES INCLUDE VAT & FITTING BUT EXCLUDE BALANCING & ALIGNMENT UNLESS OTHERWISE STATED

### FREE NITROGEN FILL

WHEN YOU BUY ANY 4 OR MORE **CONTINENTAL ECOCONTACT TYRES** 

175/65 TR 14 R 7

185/60 HR 14 **R 799** CONTINENTAL ECOCONTACT CP

### FREE NITROGEN FILL & **BALANCING**

WHEN YOU BUY ANY 4 OR MORE 15" - 17" **CONTINENTAL CROSSCONTACT,** PREMIUMCONTACT OR SPORTCONTACT TYRES

195/55 HR 15 R 1095

205/55 VR 16 R109

### FREE NITROGEN FILL & **PUNCTURE REPAIR KIT**

WHEN YOU BUY ANY 4 OR MORE **CONTINENTAL WORLDCONTACT 4X4 TYRES** 

205/70 SR 15 R 1 3 5 0 CONTINENTAL WORLD CONTACT 4x4

205/80 SR 16 R 1595

### FREE NITROGEN FILL & **DASH CAM**

WHEN YOU BUY ANY 4 OR MORE **CONTINENTAL 18" OR LARGER TYRES** 

225/40 YR 18 R189

255/35 YR 19 R

TERMS & CONDITIONS APPLY · CONTIMANIA PROMOTION ENDS 06 AUGUST 2016 · WHILE STOCKS LAST · FLEET CARDS WELCOME. NOTE: OUTSIDE OF SA IS BANK DEPENDENT · PRICES ARE FOR CASH OR CREDIT CARD PURCHASES UNLESS OTHERWISE STATED





041 368-9200 021 852-5200

**GET IT ON CREDIT. ENQUIRE** 

**IN-STORE OR APPLY ONLINE.** 

054 331-3381 023 347-0217

VISIT WWW.TWT.TO TO LOCATE A STORE NEAR YOU





## Whistle against crime

ATHINA MAY

The City of Cape Town and the Table View School Forum (TVSF) are giving schoolchildren whistles to protect themselves from criminals preying on them at MyCiTi stations.

The project was launched in Table View on Tuesday June 14 and helps youth "make a noise" when they feel unsafe.

The 11 800 whistles were distributed among representatives of 16 schools by mayoral committeee member for transport, Brett Herron, and councillors Joy McCarthy and Heather Brenner.

"The TVSF represents a significant portion of our daily passengers and the fact that some passengers may not feel entirely safe on their way to and from MyCiTi bus stops or stations resulted in the whistle project," said Mr Her-

"In addition, all of the whistles have the contact number on the back (0800 65 64 63) of the Transport Information Centre (TIC). The number is a reminder of who to contact when you plan your journey or for

updates on public transport services. The TIC is not an emergency centre," said Mr Herron.

TVSF chairman Brad Espin said Table View was the first area to receive the whistles and schools would educate pupils on how and when to use them.

"In a team effort between teachers and the Transport for Cape Town members, we came up with the whistle project. We are the first area where the project was rolled out. Whistles were also distributed in Atlantis on Youth Day, because of the issues with safety faced there," he said.

■ 11 800 whistles, were distributed among the representatives of 16 schools in the community by mayoral committeee member for transport, Brett Herron, and councillors Joy McCarthy and Heather Brenner on Tuesday

### What's On

#### Help for addiction

There is free help for alcohol and drug addiction on Wednesdays, at 7.45pm, at St Matthew's Church, Janssens Avenue, Table View. Call Andrew at 021 556 0150.

### **srk** consulting



### STAKEHOLDER ENGAGEMENT PROCESS

Environmental Impact Assessment (EIA) for the Proposed Used Fuel Transient Interim Storage Facility at Koeberg Nuclear Power Station SRK Project No: 478317

Notice is hereby given of a stakeholder engagement process in terms of the National Environmental Management Act 107 of 1998 and the Environmental Impact Assessment (EIA) Regulations, 2014.

<u>Project description:</u> Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of used nuclear fuel from the reactors for the operational life of Koeberg Nuclear Power Station (KNPS), thereby ensuring the continued operation of KNPS.

Location: the proposed TISF will be constructed on vacant land within the KNPS Security Protected Area.

Application for Environmental Authorisation (EA) to undertake the following activities: Listing Notice 1: (27) clearance of indigenous vegetation;

- Listing Notice 2: (3) development for nuclear activities; and Listing Notice 3: (12) clearance of indigenous vegetation.

In addition to EA, a separate authorisation for nuclear safety licensing will also be required from the National Nuclear Regulator.

#### Opportunity to participate:

The Scoping Report is available at: Koeberg Public Library; Wesfleur Public Library; Cape Town Public Library; Koeberg Visitors Centre; SRK's office in Rondebosch; and www.srk.co.za (via the 'Library' and 'Public Documents' links).

Stakeholders are invited to submit comments and/or register on the project database. Submissions from stakeholders must include their name, contact details (specifying the preferred method of notification, e.g. e-mail) and an indication of any direct business, financial, personal, or other interest which they have in the application, to the contact person below, by **8 August 2016**. Note that <u>only registered</u> stakeholders will be notified of future meetings and opportunities to provide comment on

A Public Open Day, where the project will be discussed, will be held at the Koeberg Visitors Centre from 15:00 until 18:30 on Thursday, 21 July 2016. Stakeholders are invited to attend the Open Day anytime between the above times, and are requested to **confirm their intention to attend the Open** Day with the contact person below. Proof of identity will be required for access to the KNPS site

To submit comments, register, or request information, please contact: Jessica du Toit of SRK Consulting at jedutoit@srk.co.za; Postnet Suite #206, Private Bag X18, Rondebosch, 7701; Fax: 021 685 7105; Tel: 021 659 3060.

**BUTCHERY** 

# NATURALLY DELICIOUS FRUIT













Granadilla Punnets

3forR25



Avocados

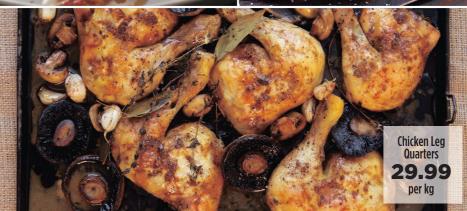
3forR25



3forR25



3forR25



# Crowdfunding lets fans choose



**LOUISA STEYL** @lousteyl

wo music fans have started a new project which they hope might revolutionise the South African live music industry.

Inspired by an American crowdfunding campaign, Sea Point's Richard Theunissen and Stuart Walsh from Parklands recently launched their website Inbound Sound.

In a nutshell – the website gives music fans the opportunity to request the artists they want to see live in their city.

"Stuart and I are big fans of the Foo Fighters," Richard explains. "We got wind of a concert that was crowdfunded in America two years ago and that was before it was announced that they would be coming to South Africa."

At that stage, crowd funding was still a relatively new concept, and although it's grown generally on a global scale, Richard points out that it's still "relatively new" in SA.

"People are a little sceptical. Generally the first question they ask is: 'Why do we need to give our money away first?' It's understandable.'

Richard explains that he and Stuart see their role in the industry as educators on the benefits of crowdfunding while empowering fans to 'make concerts happen". He says many music fans seem to be frustrated with not being able to see their favourite acts

Inbound Sound allows fans to request a concert by any artists, across genres, whether they are local or international, commercial or lesser-known.

Once a concert has been requested, Richard and Stuart, working with industry insiders, calculate how much would need to be raised to set the concert up and the show is opened to pledges from other fans who may also want to see the show.

Fans who pledge a contribution to the concert have essentially already bought their tickets and once enough funds have been raised, Richard and Stuart will work with promotors to bring the act to local shores. "We are basically just providing the platform."

Should they not be able to raise the funds needed, fans will be able to get a full refund, making sure they don't pay for a

Richard Theunissen

show they won't see. "The feedback

we've received [so far] has been phenomenal, and that's very encouraging - we're on to something that people want."

While many of the shows already requested on the website are for international acts, Richard says: "We're big on local music." In fact,

they're hoping their first "success story" will be staging a show for a local act. "The local music scene, both mainstream and niche, is massive, and we want to tap into that."

Users need to log in on the site before making pledges and Richard assures that shows won't be left on a site indefinitely. If a proposed concert hasn't gained momentum after a few months, they'll take the show off and refund the users who have pledged. Users can also request a refund at any point, should their personal financial situation changes. For more information about Inbound Sound, to request a concert, or to see which concerts are open for pledges, visit www.inboundsound.co.za.

### Interim plan for refuse collection

The City of Cape Town has temporarily taken over contracted refuse collection services in various areas including Parklands, Sunningdale, Blouberg, Melkbosstrand, Atlantis, Mamre, Pella and Duynefontein.

According to a statement, as of Friday 1 July the City is providing solid waste collection services directly to parts of the Helderberg, northern suburbs, far south, and Hout Bay for an interim period.

These areas are normally serviced by City appointed contractors for both wet waste (wheelie bins) and suburbs which are part of the Think Twice Recycling Programme.

In various areas across Cape Town, the City's Solid Waste Management Department contracts out

its collection services. The tenders which have been in place for the past three years terminated on Thursday 30 June. The services concerned are the wheelie bin collection service and the recycling service to Think Twice communities.

"Despite detailed planning by the City for a smooth handover by the successful bidders on Friday 1 July, unforeseen challenges have delayed the awarding of the new contracts in four of the areas. Procurement in two areas was successfully concluded and the service providers have commenced work from 1 July 2016 in Khayelitsha, south of Spine Road, and Brown's Farm, Philippi."

Over the last week, the department has been working hard to put in place a contingency plan to en-

sure that customers are provided with a quality service directly from the City as of Friday 1 July.

The four areas will be serviced by the City on the same days as they are normally serviced and the City will strive to ensure that the only difference residents will notice is the change in collection vehicles.

The City would like to ask residents for their patience and understanding as there might be a variation in the times that they are accustomed to having their bins collected on those days. Additionally, the City understands that residents often get to know staff working on the beat in their area and that they come to feel like community members, and it is likely that there will be a change to these familiar faces.'



### **OPENBARE DEELNAMEPROSES**

Omgewingsimpakbepalingsproses (OIB) vir die Voorgestelde Tussentydse Oorgang-bergingsfasiliteit vir Gebruikte Brandstof by Koeberg Kernkragsentrale SRK Projek No: 478317

U word hiermee in kennis gestel van die openbare deelnameproses in terme van die Wet op Nasionale Omgewingsbestuur, 1998, en die Omgewingsimpakbepalings (OIB) Regulasies van 2014.

Beskrywing van projek: Eskom beoog om 'n Tussentydse Oorgang-bergingfasiliteit (TOBF) te bou om gebruikte brandstof uit die reaktors, tydelik - vir die duur van die kragsentrale se bedryfsleeftyd - by Koeberg Kernkragsentrale (KKKS) te berg om die voortgesette bedryf van KKKS te verseker.

Liquing: die voorgestelde TOBF sal op vakante grond binne die KKKS sekuriteit beskermde gebied gebou word.

- Aansoek vir Omgewingsgoedkeuring vir die volgende gelyste aktiwiteite: Lystingskennisgewing 1 (27) klaring van inheemse plantegroei;
- Lystingskennisgewing 2 (3) ontwikkeling vir kern aktiwiteite; en
- Lystingskennisgewing 3 (12) klaring van inheemse plantegroei.

Bykomend tot die Omgewingsgoedkeuring, word daar lisensiëring van die Nasionale Kernreguleerder ook vereis.

Geleentheid om deel te neem aan die Openbare Deelnameproses:

Die Omvangbepalingsverslag is beskikbaar by: Koeberg Openbare Biblioteek; Wesfleur Openbare Biblioteek; Kaapstad Openbare Biblioteek; Koeberg Besoekerssentrum; die SRK kantoor in Rondebosch; en <a href="www.srk.co.za">www.srk.co.za</a> (via die 'Library'en 'Public Documents' skakels)

Belanghebbers is genooi om voorleggings te maak en/of te registreer op die projek databasis. Indien u as 'n belanghebber registreer, verstrek asseblief u naam, kontakbesonderhede (sluit in die voorkeurmetode vir kennisgewing, bv. e-pos) en 'n aanduiding van enige direkte belang - hetsy sake, finansieel, persoonlik of ander - in die aansoek. Voorleggings moet voor of op 8 Augustus 2016 aan die kontakpersoon hieronder gestuur word. Wees bewus dat slegs geregistreerde belanghebbers in kennis gestel sal word van verdere vergaderings en geleenthede om voorleggings te maak op relevante

'n **Opedag** om die voorgestelde projek te bespreek sal tussen 15:00 en 18:30 op Donderdag, 21 Julie 2016, by die Koeberg Besoekerssentrum plaasvind. Belanghebbers is genooi om tussen enige van die bogenoemde tye die Opedag by te woon en u word gevra om u voorneme om die Opedag by te woon aan die kontakpersoon hieronder te bevestig. Bewys van identiteit word vereis vir toegang tot die KKKS gebied.

Om kommentaar te lewer, registreer, of inligting te vra, kontak gerus: Jessica du Toit van SRK Consulting by jedutoit@srk.co.za; Postnet Suite #206, Privaatsak X18, Rondebosch, 7701; Faks: 021 685 7105; Tel: 021 659 3060.



### STAKEHOLDER ENGAGEMENT PROCESS

Environmental Impact Assessment (EIA) for the Proposed Used Fuel Transient Interim Storage Facility at Koeberg Nuclear Power Station

SRK Project No: 478317

Notice is hereby given of a stakeholder engagement process in terms of the National Environmental Management  $Act\,107\,of\,1998\,and\,the\,Environmental\,Impact\,Assessment\,(EIA)\,Regulations, 2014.$ 

Project description: Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of used nuclear fuel from the reactors for the operational life of Koeberg Nuclear Power Station (KNPS), thereby ensuring the continued operation of KNPS.

Location: the proposed TISF will be constructed on vacant land within the KNPS Security Protected Area.

Application for Environmental Authorisation (EA) to undertake the following activities:

- Listing Notice 1: (27) clearance of indigenous vegetation: Listing Notice 2: (3) development for nuclear activities; and
- Listing Notice 3: (12) clearance of indigenous vegetation.

In addition to EA, a separate authorisation for nuclear safety licensing will also be required from the National Nuclear Regulator.

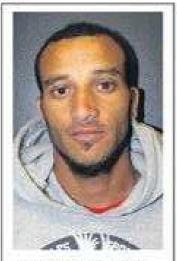
### Opportunity to participate:

he **Scoping Report** is available at: Koeberg Public Library; Wesfleur Public Library; Cape Town Public Library; Koeberg Visitors Centre; SRK's office in Rondebosch; and www.srk.co.za (via the 'Library' and 'Public Documents' links)

Stakeholders are invited to submit comments and/or register on the project database. Submissions from stakeholders must include their name, contact details (specifying the preferred method of notification, e.g. e-mail) and an indication of any direct business, financial, personal, or other interest which they have in the application, to the contact person below, by 8 August 2016. Note that only registered stakeholders will be notified of future meetings and opportunities to provide

A Public Open Day, where the project will be discussed, will be held at the Koeberg Visitors Centre from 15:00 until 18:30 on Thursday, 21 July 2016. Stakeholders are invited to attend the Open Day anytime between the above times, and are requested to confirm their intention to attend the Open Day with the contact person below. Proof of identity will be required for access to the KNPS site

<u>To submit comments, register, or request information, please contact:</u> Jessica du Toit of SRK Consulting at jedutoit@srk.co.za; Postnet Suite #206, Private Bag X18, Rondebosch, 7701; Fax: 021 685 7105; Tel: 021 659 3060.



Funklier Moose (30) is gle gestock.

### Steeds geen verdagtes na moord op man

MUSEHY EGGESTS

Die lyk van 'n 33-janige man is Dooder-dag 90 Junie in 'n sog stak veld in Accordate gerind.

policiem opydnoerder. Volumen konst. Henry die Rand, het Faskhir Moons se ma Bonderdagoggand na hand been goin seek andat by tak the varige and by the hojo opporting het

nie Die toe dat er op haar som se lyk us De vold in Falmer haan elipskom bet

Moore, wat volgers die politie ver-moedelijk 'n lid van 'n bendegroep in. ce chedel ic tergrain. Velgeno do Randoni la naskedor no-

decoelding pedoes word, many by het bevestig dat the man cowart (3 keer ge-

Wellington in maligraphy on analyses are seen wil bly, was Moosea to residence in the skietikosi van 'n opposent-bendelid wat in 2012 plantgevand het. Hy is sold gleoniangs positief verbind met 'non-der stak wat verbind her met klagte gubouttano ebos solvenes sep heer anny

Die bron beweer ook dat Moora op is ander piels versions in en av lish in die veld gestast in Die beweringe ken nie deur die Arlantis-politie bewering

Biogunad is one to verband seet die van val in heefend geberen niet. Die Affantes policie ondernoek inklag van

# Weskus 021 572 7914

### SIELKUNDIGE Counseling Psychologist

Janel van Vliet

### B-skof vang dwelmhandelaars

Politicelede van die Atlantis-politie se B-skof het verskeie suksesse gehad in

'n Vroce (it) is Bunderday 18 Junio omstreets 12 00 in Castallimiteast in beginning geneem podot die politie mondrum in hoor

bus greind bet Volges kapt Caril Dicks, woordvoer-der van die Atlantis polisie, het lede gerenzeer op inligting deur die gemeenskap.

Lade het comiddellik opgevolg en 100 heel en 100 halve mandras-lablette, assois 16 bankser (blein peldrakking) was begrawe in 'n woning in die agterplass.

The virus is congelled up bloggle test ver-band howmet die bandel in dweime en vernkvin wood entrabases in die bod

■'to Madawiene man (20) to Doubles day 16 Junio controlly 15 30 in Withand in hego-na grosso vir handel in dweine.

Volgens Die ku une gelünselle besig met rooting gestroller ber hillte 'n verdingte per-neen gewaar. Die man het glo-lie poliziele-de opgement en in 'n woning gehandloop. Die lede het hom agterna geart en op die dwelmoutseknen, mot gegeen von en teverspiret. Een man wet in the waning was, in is austraio orneun, onsor is tweede ver-

Dusc is being geld up Stillotrovities. Then prices inhields an in onbegonide hosreciberé daga.



Lode van die polisie se Biskel was verantwoordelik vir die vaskeer en inhegte you verdocter

### City to spend R20 million on upgrading Pella Road

Emerapeet for Cape Town (TUP), the Cuty of Cape Town's humayest settlerity, has com-menced with the upgrade-of Petis Road, the un-by scorer mure to Pelin at Adamtic

This project, raised at approximately 200 million, extrain the vadening of Palis Road be-tween the intersections with Mance Road (RDM) and Dove Street in Pells at well at the installation of streetlights along the road

"Pella Road is no traportent route and perved to a link between Polla and Atlantic," said the City's Mayer of Commuttee Member: Transport for Cape Town, City Brett Berron, "Aport from land recidents in provide rehister, the road is also used by the MVCITs have that acrowle a so betwice for those occumuting between Pollin and Atlantic and appeared to other parts. of Cape Town: Even though the project may course some indonvenience over the next few second, the residents from Atlantic and Pella

will prestly benefit from the investment in the local good infrastructure."

Senidenta and read open must please note that now lane of Felia Road will be closed to traffic of all times while the project is engoing ■ a chop- go cycletta waz pest uz place from yes-

eday seeming at \$7.00. with stag-go system will be in place along will Road between the intersections with

Magus Road (RSN) and Dove Street in Pello Otherstop-godystem will be implies 24 hours in day, on weekends and on public bolidays:

 one lane will be open to traffic at all times. however, road unert are adviced to please make provinces for longer to a citing times due

to the implementation of the stop-provident egrefarence will be given to the MyCrTchus-se, traveling stong Pells Road

 the readworks will commence at the inter. partico of Pella Boarl and Manny Road (Rift4) and will goodsally progress towards Dove Street in Pelia

 the project will take about a right asseifar to complete it all goes according to plan

Pella Road is in a poor condition with schoire, deformation, and make damage. Perholes will follow some If the City does not undertake the urgent rehabilitation work. The work will be underloken one have at a time.

Given the stop gosystem residents will have to make provision for delayo that may extend

their travelling times by about 20 minutes. Apartinan the streetlights, TCT will also in tital) male formers plong Pella Road

"Statement operations with a many law transportation and Other species our durings that the informati Cape done make rat does to our roads," said Herrors, "As such, we will now install mole barriers along both sides of the read to prevent them from digging

sek consulting



DECISIONAL OF CLASSIFICATION S. SPECIFICATION AND ADDRESS.

Receiveding their project flushes being on to Turnietycho Congregiong ingoverned (1999) to box for providing translator of discherition, spirally - or dischering de imagenesiale in the depth of the Codern Kerntenguerities (1990) to being un dis voortgeoorts bezophish (1990) to streether.

Bykonend ist die Omgevingsgoedkeuring, word deur Revolkting van die Nasionale

dition that between any 4th Operbare Statismoproteir.

replace Improveding wheelife on the Continue Continue Statismos. Healthing

(Balaimot, Congelina Operbare Statismot, Konfeeg Semalarmonologies, des on in Permission is a warrouth count wis de Libray for Thelia Constraint

exploitings in general one consinguings in most sould be registered as the proper dates. Incline in an 'n behindreldere registere verticele metallief or neutral softmanishelmed (total in the informationality on betterplaying, in region) on 'n deliting one array desirationality. Index softm framework growths of arriver in the world intelligency tends visit of my II degrades 2018 on the homological matter posture with filters from an intelligency and properly and believe the formal and world any vertices respectively; an protectivate on consinguings in route on

n. Opening con de viscopostales propér la temprete est tumos 15:00 est 18:00 est Constanting, 21 Julie 2006, les els réponents Resources secretions de descript de la tempretation in general des Autonomies entre la langualment de partie d'application de la visit partie de la commente de la Capacita plus terrape aux de fautables que un solution de la constant de

Atlantis

Address 10 Chelengton Eurice street Address Bodescold www.schelendescolgrey.co.co Draft left (Leber) de leptop op de

### OR PROFESSIONALS IN THE PROPERTY A

#### FOR SALE

2 Bedroom House for Sale in Avondele R250 000

2 Bedroom Youne for Sale 8280 000

# SAKON SEA

### URBENT SALE! URBENT SALE! URBENT SALE! URBENT SALE!

House for Sale in Protes Facts RSS0 865

LUZANNE LOVE - 076 166 9589

We have potential qualifying buyers looking for houses to buy in Atlantis, Mamre & Pella



### i's slabantu

Isolabantu is a Xhosa/ English monthly community newspaper. At Isolabantu we practic e ethical journalism, and strive to ensure the free exchange of information that is accurate, fair and thorough.

We support the open and civil exchange of views, even views we find repugnant.

Managing Editor Peter Luhanga

editor@isolabantunews.co.za

021 424 2114 084 229 6399

Warren Jeremy Rourke Sub-editor 021 424 2114

Design and Layout Somtoo Mekowulu 021 422 0412

Publlisher IRIS MEDIA SA Pty. LTD

Physical Address 85 St Georges Mall Nedbank Building, CBD Cape Town, 8000 Publisher IRSI Media SA Pty Ltd

DISCLAIMER

The views and opinions of all contributors, writers and all columnists are not necessarily that of the publishers, editor or employees. While we take every reasonable precaution to deal with only ethical advertisers, neither Isolabantu news nor its publishers, editor or employees are responsible for any loss, harm or damage arising out of or contributed by as a result of any transaction entered into pursuant to any advertisement, advertorial or classified advertisement appearing in this publication.

Isolabantu reserves the right to vary, alter or omit any advertisement and will not be held liable for any failure to publish.

Isolabantu subscribes to the South African Press Code that prescribes news that is truthful accurate, fair and bal-

If we don't live up to the 011 484 3612/8 or fax 011 484 3619









#### **TVET MONTH**

he Ministry of Higher Education and Training has declared the month of August as the "TVET College Month". This has become an annual event. The purpose of TVET College Month, hosted between 1- 30 August 2016, is to introduce the college programmes and career pathways to the community.

We would like to give young people from our communities the opportunity to acquire information about career paths and programmes offered in colleges and also to test their aptitude, interests and skills.

The official theme for the TVET College and assessment month is: "Celebrating Technical and Vocational Education and Training with College Communities". Our programme includes hosting a Career Guidance Day at campus, an Exhibition showcasing the programmes offered on campus to the local community, conducting placement and assessment tests, engaging Life Orientation teachers and community organisations. Our Sector Education and Training Authorities (SETAs) such as the Wholesale and Retail Sector Education and Training Authority (W&RSETA) will also be in attendance to assist with providing career guidance.

Over the month of August a range of activities are planned where guests will be able to get a look and feel of a college environment.

We look forward to seeing you at one of our campuses.

Kindly contact Mr M Meyer on 022 482 1143 for further enquiries, or email: mmeyer@westcoastcollege.co.za.







### **UMEMO: DU NOON CAREER & ENTREPRENEUR YOUTH EXPO LWESINE 8 Septemba 2016**

Isolabantu News, ngentsebenziswano kunye ne Seda Western Cape kunye ne Impact Unlimited Media & Communication, ichulumancile ukubamba NOON okokugala I DU **CAREER AND ENTREPRENEUR EXPO.** 

Ukuba wenza ibanga lesibhozo (Grade 10) okanye ele thoba, ungusomashishini osakhasayo, okanye unelakho ishishini elincinane eDunoon nase Joe Slovo Park eMilnerton, kubalulekile ukuba uze kule 2016 Career & Entrepreneurship Expo.

(Seda) lisebe lika Department of Small Business Development elisekelwe ukuncedisana nemibono karhulumente ekuncedeni amashishini asakhasayo; ukwenza indibano zosomashishini abasakhasayo; kwaye ludibanise onke amashishini akhasayo ancwendwe ngurhulumente ngemali yokuqala.









### **INVITATION TO PARTICPATE: DU NOON CAREER & ENTREPRENEUR YOUTH EXPO THURSDAY 8 SEPTEMBER 2016**

Isolabantu News, in collaboration with Seda Western Cape and Impact Unlimited Media & Communication, is proud to be hosting the first ever **DU NOON CAREER AND ENTREPRENEUR EXPO.** 

If you're in grade 10 or 11, a budding entrepreneur or small business owner in Dunoon and Joeslovo Park in Milnerton, then you should attend the 2016 Career & Entrepreneurship

(Seda) is an agency of the Department of Small Business Development mandated to implement government's small business strategy; design and implement a standard and common national delivery network for small enterprise development; and integrate government-funded small enterprise support agencies across all tiers of government.







### INKQUBO YONXULUMANO NOLUNTU OLUCHAPHAZELEKAYO Uvavanyo Lokuchaphazeleka Kwendalo (EIA) lwesakhiwo esicetywayo sokugcina amalahle asetyenzisiweyo eNyukliya kwiSitishi sombane weNyukliya saseKoeberg

SRK Project No: 478317

Esi sisaziso ngenkqubo yonxulumano noluntu oluchaphazelekayo, ngokugunyaziswe nguMthetho we107 kaZwelonke Wokuphathwa Kwendalo Nokusingqongileyo wonyaka ka 1998 (National Environmental Management Act 107 of 1998) kwakunye neMigaqo yonyaka ka 2014 yoVavanyo Lokuchaphazeleka Kwendalo

Inkcazelo ngeliphulo: UEskom uceba ukwakha Isakhiwo Sethutyana Sokugcina amalahle (TISF) asetyenzisiweyo enyukliya aphuma kwii-reactor. Esi sakhiwo sicetywayo siyakuthi sisetyenziswe ukugcina la malahle side sifikelele ekupheleni kokusebenza kwaso isitishi senyukliya saseKoeberg. Ukwakhiwa kwesi sakhiwo kuza kuthi kuncede ukuba siqhubekeke sisebenza esi sitishi sombane wenyukliya.

Indawo yesakhiwo: esi sakhiwo sicetywayo siyakuthi sakhiwe kwisiza esingakhiwanga esikwaphakathi kumhlaba wesitishi senyukliya saseKoeberg

### Isicelo seMvume Yezendalo Nokusingqongileyo (Environmental Authorization - EA) yokuthabatha ezi zicwangciso zilandelayo:

- Isicelo 1: (27) ukususwa kwezityalo zendalo:
- Isicelo 2: (3) ukwenziwa kwemisebenzi enxulumene nenyukliya; kwakunye
- Isicelo 3: (12) ukususwa kwezityalo zendalo

Nxalenye nesicelo seEA, imvume izakucelwa naKubalawuli beNyukliya kuZwelonke (NNR).

### Ithuba lokuzibandakanya:

UXwebhu Oluqulethe linkcukacha luyafumaneka kula mathala eencwadi alandelayo - Ithala lencwadi laseKoeberg, ithala le ncwadi laseWesfleur, ithala le ncwadi laseKapa; ukanti likwa fumaneka nakwezindawo zilandelayo – Koeberg Vistors Centre, kwi ofisi zenkampani yakwaSRK eziseRondebosch, kwakunye nakwi website yakwaSRK ethi www.srk.co.za (uye kwiphepha elithe 'Library' ne 'Public Documents').

Uluntu oluchaphazelekayo luyacelwa ukuba lufake izimvo zalo okanye lubhalise kuLuhlu LweNkcukacha zeliphulo (project database). Izimvo ezisuka kuluntu oluchaphazelekayo kufuneka ziquke igama lomntu, inkcukacha zokuqhakamshelana nomntu lowo (xela ukuba ukhetha ukwaziswa njani na, umzekelo - email) kwaye uxele ukuba ngaba uneshishini elichaphazelekayo kusini na kweli phulo, okanye uchaphazeleka wena isiqu sakho, kwaye xela nayiphi na enye indlela ochaphazeleka ngayo kwesi sicelo. Izimvo zoluntu oluchaphazelekayo kufuneka zithunyelwe kuJessica du Toit, iinkcukacha zakhe zibhaliwe ngezantsi, kwaye kufuneka zifike kuye ngomhla we 8 kuAugust 2016. Qaphela ukuba ngabantu ababhalisileyo bodwa abayakuthi baziswe ngeentlanganiso ezilandelayo kwakunye namanye amathuba okufaka

Ukufaka izimvo, ukubhalisa okanye ukucela iinkcukacha ezithe vetshe! Nceda uqhakamshelane no: Jessica du Toit waseSRK Consulting ku - jedutoit@srk.co.za; Postnet Suite #206, Private Bag X18, Rondebosch, 7701; Fax: 021 685 7105; Tel: 021 659 3060.

**JULY 2016 IMPACT NEWS** 

### Signs of the times...





DECISIONS, DECISIONS: With only days away from the 2016 local elections in South Africa, political parties has been vigourously campaign, making use of every streetpole or wall they can find to lure last minute doubtfuls to vote for them. The 2016 municipal elections is considered one of the most highly contested election since the dawn of democracy. Visit www. election.org.za for information or call 0800 11 8000.

### Straatpraat met **Roxxanne Pretorius**

Miljoene kiesers gaan op 3 Augustus hul kruisies trek in die opkomende munisipale verkiesings. ROXXANNE PRETORIUS het 'n paar plaaslike inwoners op straat genader om te hoor wat hulle opinies is en vir wie hulle gaan

#### **GERALDINE LUITERS**

Ek gaan nie vir een van die kandidate stem Party van hulle stuur nou hulle lede



van hul partye na 'n mens se huis toe vir stemme, maar sodra die verkeising verby is, hoor mens niks verder nie. Dit is eenvoudig nie die moeite werd om vir hulle te stem nie

#### JONATHAN MEYER

Ek gaan stem vir die DA se kandidaat omdat ek al die jare vir die DA stem. In die nasionale die plaaslike verkiesings, ek sal altyd 'n lojale DA lid bly



#### **KEITH ARENDSE**

Ek weet wie meeste van die kandidate is en ek gaan stem vir die DA, want die DA

is altyd daar



#### **BIANCA KELDIN**

Sover het ek nog geen idee vir wie ek daai kruisie gaan maak nie. Ek is bewus van almal die kandidate wat deel is van

die verkeising maar nie een hulle beindruk my juis nie. Hulle kom in elk geval nie hulle beloftes na nie.



#### NOT SURE WHO TO CHOOSE FOR WHEN YOU DECIDE TO ADVERTISE YOUR PRODUCT OR SERVICE?

VOTE IMPACT NEWS AND SEE RESULTS!!



### My big voting dillemma: The good, the bad or the not-so-familiar?

UTHMAAN SOLOMONS

eciding which ward Councilor to vote for is so difficult these days, isn't it? Do you vote for the Good Party who has Bad Candidate or do you vote for the Bad Party who has a Good Candidate. Or do you just decide to go against the stream and vote for the party you've never heard of before with the candidate that you don't know from a bar of soap?

They all come with lovely manifesto's which stipulates how they will address corruption, create jobs, provide housing, and speed up service delivery to mention just a few of the many empty promises we've heard before. The scary part though - and history has shown us - is that today's so-called leaders does not want to be held accountable when they have failed us. Hand out soup. Visit your school. Hell, they'll even wash your car and clean your kitchen if you don't stop them. Basically they will do everything during the build-up to elections when the public's eyes are on them. But after the votes have been casted, these so-called leaders are nowhere to be seen

I don't know much about these candidates we see on the posters, but had personal encounters with both the ANC and DA ward councilor candidates in my ward. Unlike Barbara Rass, the DA ward councilor who ignored and 'unfriended' me on Facebook when I ask similar questions, Allister Lightburn comes and motivates why he is the best person for the job. And that is one of the qualities I admire about Lightburn. His young, politics has changed so much and the days where we as young people will just sit back to allow ourselves to be spoonfed by the dinosaurs in politics such as Rass are long-gone. Lightburn responds to text messages via WhatsApp and engagewith the public on social media platforms, which shows he is accessible and reachable. Rass does not even take my calls and does not respond to emails. Is Lightburn a great leader? Yes there absolute no question about that! So he ticks all the right boxes for me. But he's just one person, who has been put forward to stand as ward councilor for a bigger organisation. A party who lost so many prominent members such as Lekota, Malema etc. to mention just a few, because they are unhappy with the way the ANC does things. Then there is Nkandla, the scandals at the Post Office, the current situation at the SABC and SAA, and so many other blatant wrongs spearheaded by the ruling party.

My predicament is this: How do I vote for the party I believe in, but has a councilor such as Rass who does not really care about the interest of the community. She who goes to extreme measures to keep youth out of politics, and keeps pushing her own agenda as seen with the implementation of the MyCiTi Bus service in Atlantis. On the other hand, how do I vote for Lightburn who despite his track record and good qualities, is a representative of the ANC - an organisation whose leaders are known for violating the constitution?

I know what my gut is telling me to do, but my mind says something totally different. The reality is that you can only choose to put one of them into power - not both. So as voters we might not have access to the ward council board meetings.

We may not be able to physically make the much needed changes on our own. But we've got the one thing every politician wants at this hour. The one thing that gives all of us the upper-hand. Our vote. Use it





#### **OPENBARE DEELNAMEPROSES**

Omgewingsimpakbepalingsproses (OIB) vir die Voorgestelde Tussentydse Oorgang-bergingsfasiliteit vir Gebruikte Brandstof by Koeberg Kernkragsentrale

SRK Projek No: 478317

Beskrywing van projek: Eskom beoog om 'n Tussentydse Oorgang bergingfasiliteit (TOBF) te bou om gebruikte brandstof uit die reaktors, tydelik – vir die duur van die kragsentrale se bedryfsleeftyd – by Koeberg Kemkragsentrale (KKKS) te berg om die voortgesette bedryf van KKKS te verseker.

Ligging: die voorgestelde TOBF sal op vakante grond binne die KKKS sekuriteitbeskermde gebied gebou word.

Aansoek vir Omgewingsgoedkeuring vir die volgende gelyste aktiwiteite:

Lystingskennisgewing 1 (27) klaring van inheemse plantegroei;

Lystingskennisgewing 2 (3) ontwikkeling vir kern aktiwiteite; en

Lystingskennisgewing 3 (12) klaring van inheemse plantegroei.

Bykomend tot die Omgewingsgoedkeuring, word daar lisensiëring van die Nasionale Kern-

Geleentheid om deel te neem aan die Openbare Deelnameproses:

Die Omvangbepalingsverslag is beskibaar by: Koeberg Openbare Biblioteek; Wesfleur Openbare Biblioteek; Kaapstad Openbare Biblioteek; Koeberg Besoekerssentrum; die SRK kantoor in Rondebosch; en www.srk.co.za (via die 'Library' en 'Public Documents' skakels).

Belanghebbers is genooi om voorleggings te maak en/of te registreer op die projek databasis. Indien u as 'n belanghebber registreer, verstrek asseblief u naam, kontak-besondehede (sluit in die voorkeurmetode vir kennisgewing, bv. e-pos) en 'n aanduiding van enige direkte belang – hetsy sake, finansieel, persoonlik of ander – in die aansoek. Voorleggings moet voor of op 8 Augustus 2016 aan die kontakpersoon hieronder gestuur word. Wees bewus dat slegs gerengistreerde belanghebbers in kennis gestel sal word van verdere vergaderings en geleenthede om voorleggings te maak op relevante dokumentasie.

'n Opedag om die voorgestelde projek te bespreek sal tussen 15:00 en 18:30 op Donderdag. 21 Julie 2016, by die Koeberg Besoekerssentrum plaasvind. Belanghebbers is genooi om tussen enige van die bogenoemde tye die Opedag by te woon en u word gevra om u voorneme om die Opedag by te woon aan die kontakpersoon hieronder te bevestig. Bewys van identiteit word vereis vir toegang tot die KKKS gebied.

Om kommentaar te lewer, registreer, of inligting te vra, kontak gerus: Jessica du Toit var SRK Consulting by deutlori@srk.co.za; Postnet Suite #206, Privaatsak X18, Rondebosch,7701 Faks: 021 685 7105; Tel: 021 659 3060

STIMULATE **OUR LOCAL ECONOMY** 

- SUPPORT LOCAL BUSINESSES.

IMPACT **NEWS** DOES!! **TO DISCUSS OUR LOWER** RATES **FOR** 

LOCAL SMME's. **CALL PETER** 

ON 021 5722 054 OR

082 4393 023 **TODAY** 



Friday, 8 July 2016

### Status of the units

Unit 1: 99.40% - 969MW Risk rating: yellow Sent out: 929MW

Sent out: 930MW Unit 2: 99.22% - 970MW Risk rating: green

Total sent out: 1859MW Seawater temperature: 13°C

**Duty work controller** 

**Duty ALARA SRPA** 

Kgalapje Letsiki - tel. 5065

Poen Ellis - tel. 4400



#### Diary check

Please be informed that permission has been granted for a union meeting of all members of the National Union of Metalworkers of South Africa (NUMSA) from 12:15 until 13:15 today, 8 July 2016, in Room 24, FFD Centre. Supervisors are requested to release the respective union members for this meeting where reasonably possible.

#### Please note

The National Nuclear Regulator (NNR) has requested a three-day workshop that will be held in the Korc Auditorium on 20, 21and 22 July 2016, to discuss the New Regulations and Regulatory Guides. The new regulations and regulatory guides will need to be incorporated into our business once they have been formally promulgated/ published. Please indicate your attendance with Luzanne Jozephs by 13 July 2016. Note that seating is limited to approximately 20 Eskom persons per session. The KORC Auditorium will be unavailable on the workshop days.

#### Lost and found

Lost: a Logitech slide presenter was lost somewhere between the ACP 2 car park and the KORC Auditorium. If found please contact Gary Thomson at tel. 6129.



### **Nuclear Safety** Daily Operating Experience (OE)

On this date in 1995, core flow degraded at Hope Creek when the residual heat removal pump was stopped for testing. Water level was too low to promote natural circulation, and boiling occurred. Steam was released to the drywell. The shift supervisor was distracted by unrelated activities and unable to devote sufficient attention to observing crew performance.

Lessons learnt: establish controls to ensure that the expectations of management are met during infrequently performed tests or evolutions that could significantly degrade the plant's margin of safety.

**INPO** 



### **Stakeholder Engagement Process**

**Environmental Impact Assessment (EIA) for the Proposed Used Fuel Transient Interim Storage Facility at Koeberg Nuclear Power Station** 

SRK Project No: 478317

Notice is hereby given of a stakeholder engagement process in terms of the National Environmental Management Act 107 of 1998 and the Environmental Impact Assessment (EIA) Regulations, 2014.

**<u>Project description:</u>** Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of used nuclear fuel from the reactors for the operational life of Koeberg Nuclear Power Station (KNPS), thereby ensuring the continued operation of KNPS.

Location: the proposed TISF will be constructed on vacant land within the KNPS Security Protected Area.

#### Application for Environmental Authorisation (EA) to undertake the following activities:

- Listing Notice 1: (27) clearance of indigenous vegetation;
- Listing Notice 2: (3) development for nuclear activities; and
- Listing Notice 3: (12) clearance of indigenous vegetation.

In addition to EA, a separate authorisation for nuclear safety licensing will also be required from the National Nuclear Regulator.

#### **Opportunity to participate:**

The Scoping Report is available at: Koeberg Public Library; Wesfleur Public Library; Cape Town Public Library; Koeberg Visitors Centre; SRK's office in Rondebosch; and www.srk.co.za (via the 'Library' and 'Public Documents' links). Stakeholders are invited to submit comments and/or register on the project database. Submissions from stakeholders must include their name, contact details (specifying the preferred method of notification, e.g. e-mail) and an indication of any direct business, financial, personal, or other interest which they have in the application, to the contact person below, by 8 August 2016. Note that only registered stakeholders will be notified of future meetings and opportunities to provide comment on relevant documentation.

A Public Open Day, where the project will be discussed, will be held at the Koeberg Visitors Centre from 15:00 until 18:30 on Thursday, 21 July 2016. Stakeholders are invited to attend the Open Day anytime between the above times, and are requested to confirm their intention to attend the Open Day with the contact person below. Proof of identity will be required for access to the KNPS site.

To submit comments, register, or request information, please contact: Jessica du Toit of SRK Consulting at jedutoit@srk.co.za; Postnet Suite #206, Private Bag X18, Rondebosch, 7701; Fax: 021 685 7105; Tel: 021 659 3060.



### Appendix N: Site Notices placed during Scoping Phase

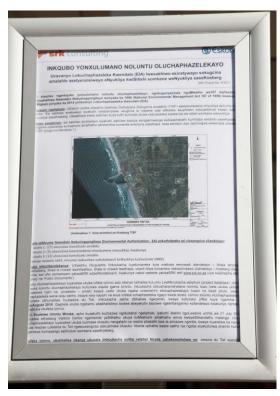


**Placement of Site Notices at R27 Entrance to KNPS** 



Placement of Site Notices at Otto du Plessis Entrance to KNPS







**Placement of Site Notices at Entrance to ACP2** 



Placement of Site Notices at OK Mini-mart in Duynefontein





### INKQUBO YONXULUMANO NOLUNTU OLUCHAPHAZELEKAYO

Uvavanyo Lokuchaphazeleka Kwendalo (EIA) lwesakhiwo esicetywayo sokugcina amalahle asetyenzisiweyo eNyukliya kwiSitishi sombane weNyukliya saseKoeberg

SRK Project No: 478317

Esi sisaziso ngenkqubo yonxulumano noluntu oluchaphazelekayo, ngokugunyaziswe nguMthetho we107 kaZwelonke Wokuphathwa Kwendalo Nokusingqongileyo wonyaka ka 1998 (National Environmental Management Act 107 of 1998) kwakunye neMigaqo yonyaka ka 2014 yoVavanyo Lokuchaphazeleka Kwendalo (EIA).

<u>Inkcazelo ngeliphulo</u>: UEskom uceba ukwakha Isakhiwo Sethutyana Sokugcina amalahle (TISF) asetyenzisiweyo enyukliya aphuma kwireactor. Esi sakhiwo sicetywayo siyakuthi sisetyenziswe ukugcina la malahle side sifikelele ekupheleni kokusebenza kwaso isitishi senyukliya saseKoeberg. Ukwakhiwa kwesi sakhiwo kuza kuthi kuncede ukuba siqhubekeke sisebenza esi sitishi sombane wenyukliya.

<u>Indawo yesakhiwo</u>: esi sakhiwo sicetywayo siyakuthi sakhiwe kwisiza esingakhiwanga esikwaphakathi kumhlaba wesitishi saseKoeberg, kumgama oqikelelwa kumashumi amathathu ekhilomitha kumantla entshona yaseKapa. Iziza ezimbini ziye zachongwa ukwenzela ukwakha le-TISF (jonga kumfanekiso 1).



Umfanekiso 1: Iziza ezimbini ze-Koeberg TISF

### Isicelo seMvume Yezendalo Nokusingqongileyo (Environmental Authorization - EA) yokuthabatha ezi zicwangciso zilandelayo:

- Isicelo 1: (27) ukususwa kwezityalo zendalo;
- Isicelo 2: (3) ukwenziwa kwemisebenzi enxulumene nenyukliya; kwakunye
- Isicelo 3: (12) ukususwa kwezityalo zendalo

Nxalenye nesicelo seEA, imvume izakucelwa naKubalawuli beNyukliya kuZwelonke (NNR).

<u>Ithuba lokuzibandakanya</u>: UXwebhu Oluqulethe linkcukacha luyafumaneka kula mathala eencwadi alandelayo – Ithala lencwadi laseKoeberg, ithala le ncwadi laseWesfleur, ithala le ncwadi laseKapa; ukanti likwa fumaneka nakwezindawo zilandelayo – Koeberg Vistors Centre, kwi ofisi zenkampani yakwaSRK eziseRondebosch, kwakunye nakwi website yakwaSRK ethi <u>www.srk.co.za</u> (uye kwiphepha elithe 'Library' ne 'Public Documents').

Uluntu oluchaphazelekayo luyacelwa ukuba lufake izimvo zalo okanye lubhalise kuLuhlu LweNkcukacha zeliphulo (project database). Izimvo ezisuka kuluntu oluchaphazelekayo kufuneka ziquke igama lomntu, inkcukacha zokuqhakamshelana nomntu lowo (xela ukuba ukhetha ukwaziswa njani na, umzekelo – email) kwaye uxele ukuba ngaba uneshishini elichaphazelekayo kusini na kweli phulo, okanye uchaphazeleka wena isiqu sakho, kwaye xela nayiphi na enye indlela ochaphazeleka ngayo kwesi sicelo. Izimvo zoluntu oluchaphazelekayo kufuneka zithunyelwe kuJessica du Toit, iinkcukacha zakhe zibhaliwe ngezantsi, kwaye kufuneka zifike kuye ngomhla we **8 kuAugust 2016**. Qaphela ukuba ngabantu ababhalisileyo bodwa abayakuthi baziswe ngeentlanganiso ezilandelayo kwakunye namanye amathuba okufaka izimvo.

Imini **Evulelwe Umntu Wonke**, apho kuzakuthi kuchazwe ngokubanzi ngeliphulo, iyakuthi ibekho ngoLwesine umhla we 21 July 2016, ibanjelwa eKoeberg Visitors Centre ngentsimbi yeSithathu ukuya kuMashumi amathathu emva kweyeSithandathu malanga. Uluntu oluchaphazelekayo luyacelwa ukuba luzimase olusuku nangaliphi na ixesha phakathi kwa la achazwe ngentla, kwaye luyacelwa ka nanjalo ukuba lwazise uJessica du Toit ngesicwangciso sokuzimasa olusuku. Nceda uphathe isazisi sakho nje ngoba sizakufunwa phambi kokuba ungeniswe kumasango esikhululo sombane saseKoeberg.

<u>Ukufaka izimvo, ukubhalisa okanye ukucela iinkcukacha ezithe vetshe! Nceda uqhakamshelane no</u>: Jessica du Toit waseSRK Consulting ku – <u>jedutoit@srk.co.za</u>; Postnet Suite #206, Private Bag X18, Rondebosch, 7701; Fax: 021 685 7105; Tel: 021 659 3060.





### STAKEHOLDER ENGAGEMENT PROCESS

# **Environmental Impact Assessment (EIA) for the Proposed Used Fuel Transient Interim Storage Facility at Koeberg Nuclear Power Station**

SRK Project No: 478317

Notice is hereby given of a stakeholder engagement process in terms of the National Environmental Management Act 107 of 1998 and the Environmental Impact Assessment (EIA) Regulations, 2014.

<u>Project description:</u> Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of dry casks at Koeberg Nuclear Power Station (KNPS) to accommodate used nuclear fuel from the reactors for the operational life of the power station.

<u>Location</u>: The proposed TISF will be constructed on vacant land within the KNPS Security Protected Area, approximately 30km northwest of Cape Town. Various site locations were considered for the TISF, and the two most viable locations have been identified (refer to Figure 1).



Figure 1: Location alternatives considered for the Koeberg TISF

### Application for Environmental Authorisation (EA) to undertake the following activities:

- Listing Notice 1: (27) clearance of indigenous vegetation;
- Listing Notice 2: (3) development for nuclear activities; and
- Listing Notice 3: (12) clearance of indigenous vegetation.

In addition to EA, a separate authorisation for nuclear safety licensing will also be required from the National Nuclear Regulator.

<u>Opportunity to participate:</u> The Scoping Report is available at: Koeberg Public Library, Duynefontein; Wesfleur Public Library, Atlantis; Cape Town Public Library; Koeberg Visitors Centre; SRK's office in Rondebosch; and www.srk.co.za (via the 'Library' and 'Public Documents' links).

Stakeholders are invited to submit comments and/or register on the project database. Submissions from stakeholders must include their name, contact details (specifying the preferred method of notification, e.g. e-mail), and an indication of any direct business, financial, personal, or other interest which they have in the application, to the contact person below, by **8 August 2016**. Note that <u>only registered</u> stakeholders will be notified of future meetings and opportunities to provide comment on relevant documentation.

A **Public Open Day**, where the project will be discussed, will be held at the Koeberg Visitors Centre from 15:00 until 18:30 on Thursday, 21 July 2016. Stakeholders are invited to attend the Open Day anytime between the above times, and are requested to **confirm their intention to attend the Open Day with the contact person below**. Proof of identity will be required for access to the KNPS site.

<u>To submit comments, register, or request further information please contact:</u> Jessica du Toit of SRK Consulting at <u>jedutoit@srk.co.za</u>; Postnet Suite #206, Private Bag X18, Rondebosch, 7701; Fax: 021 685 7105; Tel: 021 659 3060.





### **OPENBARE DEELNAMEPROSES**

# Omgewingsimpakbepalingsproses (OIB) vir die Voorgestelde Tussentydse Oorgang-bergingsfasiliteit vir Gebruikte Brandstof by Koeberg Kernkragsentrale

SRK Projek No: 478317

U word hiermee in kennis gestel van die openbare deelnameproses in terme van die Wet op Nasionale Omgewingsbestuur, 1998, en die Omgewingsimpakbepalings (OIB) Regulasies van 2014:

<u>Beskrywing van Projek:</u> Eskom beoog om 'n Tussentydse Oorgang-bergingfasiliteit (TOBF) te bou om droë vate, wat gebruikte brandstof uit die reaktors bevat, tydelik – vir die duur van die kragsentrale se bedryfsleeftyd – by die Koeberg Kernkragsentrale (KKKS) te berg om die voortgesette bedryf van KKKS te verseker.

<u>Ligging</u>: Die voorgestelde TOBF sal op vakante grond binne die KKKS Sekuriteit Beskermde Gebied gebou word, ongeveer 30km noordwes van Kaapstad. Verskeie liggings was oorweeg vir die TOBF, en die twee mees werkbare liggings is geïdentifiseer (veryws na Figuur 1).



Figuur 1: Die alternatiewe liggings wat oorweeg was vir die Koeberg TOBF

### Aansoek vir Omgewingsgoedkeuring vir die volgende gelyste aktiwiteite:

- Lystingskennisgewing 1 (27) klaring van inheemse plantegroei;
- Lystingskennisgewing 2 (3) ontwikkeling vir kern aktiwiteite; en
- Lystingskennisgewing 3 (12) klaring van inheemse plantegroei.

Bykomend tot die Omgewingsgoedkeuring, word daar lisensiëring van die Nasionale Kernreguleerder ook vereis.

<u>Geleentheid om deel te neem aan die Openbare Deelnameproses:</u> Die <u>Omvangbepalingsverslag</u> is beskikbaar by: Koeberg Openbare Biblioteek, Duynefontein; Wesfleur Openbare Biblioteek, Atlantis; Kaapstad Openbare Biblioteek; Koeberg Besoekerssentrum; die SRK kantoor in Rondebosch; en www.srk.co.za (via die '*Library*' en '*Public Documents*' skakels).

Belanghebbers is genooi om voorleggings te maak en/of te registreer op die projek databasis. Indien u as 'n belanghebber registreer, verstrek asseblief u naam, kontakbesonderhede (sluit in die voorkeurmetode vir kennisgewing, bv. e-pos) en 'n aanduiding van enige direkte belang – hetsy sake, finansieel, persoonlik of ander – in die aansoek. Voorleggings moet voor of op **8 Augustus 2016** aan die kontakpersoon hieronder gestuur word. Wees bewus dat <u>slegs geregistreerde</u> belanghebbers in kennis gestel sal word van verdere vergarderings en geleenthede om voorleggings te maak op relevante dokumentasie.

'n **Opedag** om die voorgestelde projek te bespreek sal tussen 15:00 en 18:30 op Donderdag, 21 Julie 2016, by die Koeberg Besoekerssentrum plaasvind. Belanghebbers is genooi om tussen enige van die bogenoemde tye die Opedag by te woon en u word gevra om u voorneme om die Opedag by te woon aan die kontakpersoon hieronder te bevestig. Bewys van identiteit word vereis vir toegang tot die KKKS gebied.

Om kommentaar te lewer, registreer, of verdere inligting te vra, kontak gerus: Jessica du Toit van SRK Consulting by jedutoit@srk.co.za; Postnet Suite #206, Privaatsak X18, Rondebosch, 7701; Faks: 021 685 7105, Tel: 021 659 3060.

Appendix O: Notes from Scoping Phase Focus Group Meeting



The Administrative Building Albion Spring, 183 Main Rd Rondebosch 7700 Postnet Suite 206 P Bag X18 Rondebosch 7701

South Africa T: +27 (0) 21 659 3060 F: +27 (0) 21 685 7105

E: capetown@srk.co.za www.srk.co.za



### Environmental Impact Assessment for proposed Eskom Koeberg Transient Interim Storage Facility (TISF)

### **Minutes of Scoping Phase Authorities Focus Group Meeting**

Held: DEA&DP Offices, Utilitas Building, 1 Dorp Street, Cape Town on 27 July 2016

			מנ וטווטט.
Attendees:	Sifiso Nhleko	SN	National Nuclear Regulator (NNR)
	Adri la Meyer	AM	Department of Environmental Affairs and Development Planning (DEA&DP)
	Melanese Schippers	MS	DEA&DP: Development Management (Region 1)
	Thorston Aab	TA	DEA&DP: Waste Management
	David Chapman	DC	City of Cape Town (CoCT): City Health
	lan Gildenhuys	IG	CoCT: City Health
	Morné Theron	MT	CoCT: Environmental Resources Management
	Haaroen Sataar	HS	Eskom
	Lüka Potgieter	LP	Eskom
	Tayeb Jappie	TJ	Eskom

Stephen Pieterson SP Eskom
Alan Lawrence AL Eskom
Michelle Herbert MH Eskom
Deon Jeannes DJ Eskom
Bulelwa Ngwenya BN Eskom

Chris Dalgliesh CD SRK Consulting
Sharon Jones SJ SRK Consulting
Jessica du Toit JD SRK Consulting

Apologies: Pieter Mkhabela PM NNR

Randall Lavelot RL Eskom

Pat Titmuss PT CoCT

Bettie Leedo BL CoCT

Eugene Pienaar EP DEA&DP

Andrew September AS Heritage Western Cape (HWC)

Guy Thomas GT HWC

Ryan Jonas RJ Eskom

SRK Consulting Page 2

### 1 Safety Induction

1.1 Adri la Meyer (AM) gave a short safety induction, explaining the evacuation procedure for the Utilitas Building.

#### 2 Welcome and Introductions

2.1 Chris Dalgliesh (CD) welcomed everyone to the Authorities' Focus Group Meeting and thanked them for attending. All meeting attendees introduced themselves.

### 3 Purpose of the Meeting

- 3.1 CD explained that the purpose of the meeting is to present the Scoping Report (SR) for the proposed Koeberg Transient Interim Storage Facility (TISF) project to the authorities, discuss the key stakeholder concerns raised to date, to present the Plan of Study for the Environmental Impact Assessment (EIA) and to facilitate authority comments on the SR within the legislated timeframes.
- 3.2 Sharon Jones (SJ) noted that the difference between the current meeting and the previous authorities' focus group meeting in January 2016 is that the SR has now been released and the formal EIA process has commenced.

### 4 Project Motivation and Background

- 4.1 Tayeb Jappie (TJ) provided background to the project, including a brief motivation for the proposed development of the TISF. TJ explained that the Spent Fuel Pools (SFPs) at Koeberg Nuclear Power Station (KNPS) are reaching capacity, which will lead to early shutdown of the plant if a solution is not found. Eskom has decided to move spent fuel from the SFPs to dry storage casks in order to create space in the SPFs, and establish a TISF to accommodate the temporary storage of used fuel on site.
- 4.2 TJ also discussed the Centralised Interim Storage Facility (CISF), which is a proposed central storage facility for nuclear used fuel and waste. The establishment of the CISF will be the responsibility of the National Radioactive Waste Disposal Institute, and the CISF is only likely to be in operation after 2025. Upon decommissioning of KNPS, dry storage casks will be relocated from the TISF to the CISF.

### 5 Project Description

- 5.1 TJ described the layout plan of the TISF site, including the two most viable alternative locations for the TISF. Site Alternative 1 is adjacent to the existing Cask Storage Building (CSB) and is Eskom's preferred alternative for a number of reasons, including its location next to the CSB, accessibility to the existing haul roads, and that it will be less visually intrusive from the R27 than Alternative 2.
- TJ explained the components of the TISF, which include concrete pad(s) within a site footprint area of approximately 12 800m² (capable of storing up to 160 dry casks), an auxiliary building housing ancillary equipment, and a secure perimeter fence with controlled access. Storage of used fuel will be in either metal or concrete casks, or concrete assemblies. Existing haul roads will be used to transfer the used fuel from the SFPs to the TISF. The construction of the TISF is proposed to commence in 2018, and will take approximately 12 months.

#### 6 Status of EIA Process

SJ explained that the pre-application phase of the EIA process has been completed, and noted the activities undertaken to date, which included two public comment periods, following the release of a Background Information Document (BID) and the Draft SR, respectively. SJ noted that the Environmental Authorisation (EA) Application Form was submitted to the Department of Environmental Affairs (DEA) on the 8<sup>th</sup> of July 2016 and that the SR (incorporating comments previously raised by stakeholders) has been released for a public commenting period of 30 days.

# 7 Scoping Report

7.1 SJ explained the Listed Activities triggered by the TISF project in terms of the National Environmental Management Act 107 of 1998 (NEMA) 2014 EIA Regulations. SJ also noted that the TISF project will require an application process in terms of the National Nuclear Regulator Act 47 of 1999 (NNR). Sifiso Nhleko (SN) noted that public participation is not a mandatory part of the NNR licencing process, and that should the NNR chose to undertake public participation, it will take the format of a public hearing instead of public participation as stipulated in NEMA. SJ explained that Heritage Western Cape have confirmed that no further studies are required, the Department of Water and Sanitation have confirmed that a Water Use Licence is not required. SJ further indicated that the National Waste Act does not apply to used nuclear fuel, which was confirmed by Thorston Aab (TA) from DEA&DP Waste Management Department.

- 7.2 SJ discussed the site alternatives considered for the TISF project, noting that Eskom initially identified six potential sites, however, only the two most viable sites were selected for assessment in the EIA. SJ explained that Alternative 1 is Eskom's preferred alternative because it is adjacent to the existing radiological zone (a low level waste facility), the site is ecologically more disturbed than Alternative 2, and less extensive haul road upgrades are required for transportation of casks to and from the TISF.
- 7.3 SJ described the affected environment within both the TISF footprint areas, noting that natural vegetation as well as any heritage resources have previously been disturbed on both site alternatives, during the construction of the KNPS, although some natural vegetation has reestablished on site. No surface water features occur close to either of the site alternatives, although KNPS is situated on the Strandveld Aquifer, and a geohydrological investigation will be undertaken to determine whether the TISF will have an impact on the aquifer. Both site alternatives are situated within the existing KNPS Security Protected Area.
- 7.4 SJ explained the stakeholder engagement process undertaken to date, noting that a BID was released for comment during the pre-application phase, and that the draft SR was also released for a 30 day public commenting period prior to the submission of the EA Application Form. SJ noted that two public open days have been held. Provision has also been made for focus group meetings during the scoping phase, however, only an authorities' focus group meeting has been deemed necessary thus far.
- 7.5 CD noted that Eskom's approach to public participation has been thorough and extensive, and that Eskom has exceeded compliance with public participation guidelines.
- 7.6 SJ discussed the key issues identified by stakeholders to date, namely:
  - Need for the TISF versus a CISF;
  - Duration of "temporary" storage could the TISF become permanent?;
  - Potential that the TISF will be used for storage of waste from other nuclear power stations;
  - Options to reprocess or recycle used fuel;
  - Proximity to the coastline;
  - Soil and groundwater contamination;
  - Loss of sensitive vegetation and habitats;
  - Risks and impacts of radiation exposure to surrounding communities:
  - Safety aspects associated with the TISF;
  - Visual impacts of new infrastructure;
  - Cumulative impacts of various projects; and
  - Regulatory requirements.

7.7 SJ presented the plan of study for the EIA, noting that the following specialist studies have been commissioned to inform the EIA:

- Terrestrial Ecology Impact Assessment (Scientific Aquatic Services);
- Heritage Impact Assessment (ACO);
- Groundwater Impact Assessment (SRK Consulting);
- Visual Impact Assessment (SRK Consulting);
- Socio-Economic Assessment (SRK Consulting);
- Review of the Radiological Assessment (SciRad); and
- Health Impact Assessment (Infotox).
- AM noted that although DEA&DP consider "in house" specialists to be independent, the national Department of Environmental Affairs (DEA) do not always take the same view. SJ confirmed that a pre-application meeting was held with the DEA and the NNR on 20 November 2015. The proposed specialist studies, as well as specialists appointed to undertake the studies were presented at this meeting. No concerns were raised by DEA regarding SRK undertaking three of the specialist studies.
- 7.9 SJ presented the standard Terms of Reference (ToR) for the specialists studies, which includes the identification and assessment of impacts associated with all phases of the TISF project as well as cumulative impacts. SRK provides specialist with a standard impact rating methodology, which will be used to determine the significance of impacts before and after mitigation. SJ presented a map of projects/EIA processes currently underway in the vicinity of the KNPS, which will be considered in the assessment of cumulative impacts.

### 8 General

8.1 A number of issues and concerns were raised. These issues and concerns were discussed and responded to at the meeting, and are summarised in Table 1 below.

**Table 1: Issues and Concerns** 

#	Issue / Concern	Authority	Response provided by the Project Applicant / Environmental Assessment Practitioner (EAP)
Inte	ended Lifespan of the TISF		
1.	Why build the TISF if the CISF is to be built? Could the TISF potentially become permanent, until the end of Koeberg's operating life?	Thorsten Aab	The CISF is a crucial component of the government's nuclear programme, and the government intends to build the CISF by 2025. However, if the construction of the CISF is delayed, the TISF will have the capacity to accommodate used fuel for the duration of the operating life of KNPS. The TISF will be licenced with the NNR as part of the existing KNPS licence, therefore it will be decommissioned with the KNPS.
The	e CISF		
2.	Why build the TISF? Why not go straight to the CISF?	Thorsten Aab	Eskom does not have the assurance at this point that the CISF will be established by 2025, and the SPFs are reaching capacity. If neither the TISF nor the CISF is established then KNPS will have to shut down.
3.	If KNPS has been operating since 1984, and with the plans to build additional nuclear reactors in South Africa, why has the CISF not been established yet?	Thorsten Aab	The SPFs were sufficient when KNPS was built, based on power output, method of operation, and the assumption that the KNPS would shut down in 2025. However, in response to power outages, the power output and method of operation of the KNPS was changed, leading to a higher amount of used fuel being generated. KNPS has decided to establish the TISF in order to store used fuel until the establishment of the CISF. The new nuclear reactors will have their own SFPs to cater for storage for a certain number of years.  The establishment of the CISF is the responsibility of the National Waste Institute, and a number of logistical delays have been experienced in establishing this Institute.

	Consulting		Page
Pro	ject Description	ı	
4.	In terms of storage of used fuel in the TISF, how long is temporary?	Thorsten Aab	In terms of the nuclear lifecycle, temporary is not measured in terms of months, but in years. Temporary refers to a period of 10 years.
5.	What procedure will be followed if a cask must be moved or removed from the TISF?	Thorsten Aab	This question was not responded to in the meeting and will be addressed in the comments and responses summary.
6.	Why isn't used nuclear fuel reprocessed?	Thorsten Aab	Reprocessing technology is extremely expensive, and South Africa's nuclear generators are not licenced to operate on used fuel.
7.	Why can't used fuel be stored at Vaalputs?	Thorsten Aab	Vaalputs is not authorised to receive high level waste, and may not be suitable for long-term, deep underground geological disposal.
8.	There is an ongoing EIA for the new reactors (Nuclear 1 project). Will the TISF store used fuel from these new reactors as well?	lan Gildenhuys	The TISF will only store used fuel generated at the existing KNPS site. Any new facility would need to make allowance for the temporary storage of used fuel produced by the facility until the establishment of the CISF.  For new nuclear reactors, the SPFs only have capacity to store used fuel for 10 years. It is however anticipated that the new nuclear facility would or may only be established around 2025, approximately the same time that the CISF is due to be established.
9.	How long has KNPS been storing used fuel? Is all used fuel currently stored in the SPFs?	Thorsten Aab	KNPS has been in operation since 1984. The SFPs at the KPNS site are able to store 3 000 used fuel assemblies. In the mid-1990s the spent fuel pools were re-racked (densified) to provide additional storage capacity. During this process some of the used fuel was moved to the dry storage casks.
10.	Is the KNPS running at maximum capacity?	Thorsten Aab	KNPS can increase its capacity by 10%, which will require additional studies and licencing.
11.	Is used fuel solid or liquid? Can used fuel leak?	Thorsten Aab	Used fuel consists of small cylinders which are stacked in rods to form fuel assemblies. The rods are checked for leaks before loading.
12.	How hot are the storage casks storing used fuel after 10 years? Won't the heat generated from the storage casks affect the environment?	Thorsten Aab	The heat generated by the casks is minimal and is dissipated naturally without having an effect on the environment.
13.		Thorsten Aab	A tsunami destroyed the emergency generators cooling the reactors, causing a reactor to overheat.
14.	Will the specialist studies be peer reviewed?	lan Gildenhuys	No, however, the radiological assessment, which was commissioned by Eskom not SRK, will be independently reviewed.
15.	Will the monitoring requirements specified by specialists be included in the Environmental Management Programme (EMPr)? Will detail on the radiation monitoring network surrounding the KNPS be included?	lan Gildenhuys	Yes, a separate section containing monitoring requirements will be included in the EMPr submitted with the EIA. The existing radiation monitoring programmes can be expanded to include the TISF project. Additional information in this regard will be provided in the EIA Report.

# 9 Way Forward

9.1 SJ noted the key dates going forward. The SR is available for a 30 day public comment period until 8 August 2016. A Comments and Response Summary will be compiled and submitted with the Final SR to be submitted to DEA by 22 August 2016.

9.2 Given the tight timeframes associated with EIA processes undertaken in terms of the EIA Regulations 2014, SRK appealed to the authorities to submit their comments within the legislated timeframes i.e. by 8 August 2016.

8 August 2016

Date:

Meeting closed at 11.30 am Notes taken by: Jessica du Toit

SRK Consulting - Certified Electronic Signature

478317/42595/Minutes
5796-6690-7912-JONS
This signature has been printed digitally. The Authorhas given permission for is use for this document. The details are stored in the SRK Signature Database

Signed by:

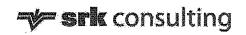
**Sharon Jones** 

# Koeberg Transient Interim Storage Facility - Scoping Report Focus Group Meeting – 10h00 - 12h00, 27 July 2016, DEA&DP Groundfloor Boardroom ATTENDANCE REGISTER

# **→ srk** consulting

NAME	CAPACITY / ORGANISATION (if any)	EMAIL	PHONE / FAX
Chan Dalaliech	EIA Director / SRK	coalglieshassk.co.3a	Tel/Cell 083 635 8769
Chro Dalgliesh	City side Cost	3003	Fax
TANER TONE	PROTECT DESCION / 55 KAM	tail in Daska as	Tel/Cell 084 5/4 2354
TAYES JAPPIE	PRESECT DRECTOR / ESKOM	tayeb. jappie 2 eskom.co.zu	Fax
	Prenginee/	Dis Office (17)	Tel/Cell 082 418 4448
STEPHEN PLETERSEN	l .	Pieters@Eskom. (0.20	Fax
L L	Design Engineer	burenca@ estom. co. 20	Tel/Cell 082 580 4404
Alan Couvrence	Eskom		Fax
. 0		1 (10)	Tel/Cell 08/2700/29
lan Gildenhugs	City of CT - City Health	lan Gildenhug @ Capitow 1. gov. To	Fax
· · · · · · · · · · · · · · · · · · ·	Dept. of Environmental Affairs		
Thorston Aab	+ Development Planning DEA+DP:	Thorston. Dabe Westerneage gav. zn.	Fax
		Advi. Lameyer @	Tel/Gelf (02) 483 2887  Fax (02) 483 4185
Adri La Meyer	Development Facilitation	western coupe. gov. 29	Fax (02) 4834185
	DEAZOP: Dev.	Mcarcse. Schopes @	Tel/Cell 0214838349
Mclarese Schopes	Maragement	Westerncape.goviza.	Fax
			Tel/Cell 076 133 9776
Jesnica du Tort	SEK Consulting	jeduteit Gsrk. co. za	Fax
	· •	<b>,</b>	Tel/Cell 651 6593060
Shar In	SRK PigarMorager	Some este co.za	Fax
,			Tel/Cell 0832354575
Linka Polgieler	Edon fraget Morager	Potgie LTO eshon. co. 29	Fax
1 · · · · · · · · · · · · · · · · · · ·		•	Tel/Cell
Hoaroen Sakai	Estran troped Manage	satealha estem 60.2	Fax
			Tel/Cell 0(76747/45
SIFISO NHUERO	NNR	snhleko@nnr.co.29	Fax

# Koeberg Transient Interim Storage Facility - Scoping Report Focus Group Meeting – 10h00 - 12h00, 27 July 2016, DEA&DP Groundfloor Boardroom ATTENDANCE REGISTER



NAME	CAPACITY / ORGANISATION (if any)	EMAIL	PHONE / FAX
4			Tel/Cell (024) 912 3209
Michelle Herbert	Eskom	michelle.herbert@advisian.con	Fax 086 509 5755
2			Tel/Cell 0718979729
Dear Jeannes	Eskon	Jeannesd@eskom.co.za	Fax
0			Tel/Cell 0733802340
Buldina Namenja	tskom	ngwenybl@eskon. co.za	Fax
Bulelma Ngwenga Morné THERON David Chapman	Eston City of CAPA Town ENUIRONMENTA RESOURCE Manager 1000	ngwenyble eston. CO.Za morne, then a copetour.	Tel/Cell (021) 4466 060)
MORNE THERON	ENUIRONMENTA RESONALE Manogli	gov.já	Fax
·	COCT	·	Tel/Cell 021 444 56 44
David Chapman	Health	Daid. Chypman@Capetony.gom &	Fax
1		,	Tel/Cell
			Fax
			Tel/Cell
			Fax
			Tel/Cell
			Fax
			Tel/Cell
			Fax
			Tel/Cell
			Fax
		·	Tel/Cell
		·	Fax
			Tel/Cell
			Fax .
			Tel/Cell
			Fax

SRK Consulting: 478317: Koeberg TISF <i>Final</i> Scoping R	epor

Appendix P:
Written Comments from Stakeholders during Pre-Application
Phase

# ENVIRONMENTAL IMPACT ASSESSMENT PROCESS FOR THE PROPOSED USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER STATION

SRK PROJECT NO: 478317

# STAKEHOLDER REGISTRATION AND COMMENT FORM

Please complete and submit this form by hand, post, fax or email to: SRK Consulting

Jessica du Toit

The Administrative Building, Albion Springs, 183 Main Road, Rondebosch, 7700
Postnet Suite #206, Private Bag X18, Rondebosch, 7701
Fax: 021 685 7105 Tel: 021 659 3060,

E-mail: jedutoit@srk.co.za

### PLEASE PRINT CLEARLY

PLEASE PRINT CLEARLY	
TO REGISTER AS A STAKEHOLDER:	041
Name: Bettie Leedo Date: 9/1	0/2015
Organisation (if any): City of Cape Town	
Capacity (if applicable): Environmental Health ! Western DISKIC	JT
Postal address:	
Postal code:	
	720
Telephone number: Fax number: ODI 51191	
E-mail: Bettie Lecdo e capetoon gov. 2a.  Preferred communication method (email / fax / post):	
Preferred communication method (email / fax / post):	
Please indicate any direct business, financial, personal or other interest that you may have i application:	n the
Prevention of contamination to suronding	
reighbourhoods.	
Any initial comments or concerns that you may have regarding the proposed project can indicated below and/or on a separate page:	be
1. period of storage on site 2. prevention of grand contamination	
a grand contamination	
2. presencia	
3. Why is CISF assumed unavailas	
3. Why is CISF assumed unavailars	



## **SCIENTIFIC SERVICES**

postal Private Bag X5014 Stellenbosch 7599physical Assegaaibosch Nature Reserve Jonkershoek

website www.capenature.co.za

enquiries Rhett Smart

telephone +27 21 866 8017 fax +27 21 866 1523

email rsmart@capenature.co.za

reference SSD14/2/6/1/4/1/34\_waste storage\_Koeberg

date 9 November 2015

SRK Consulting Postnet Suite 206 Private Bag X18 Rondebosch 7701

Attention: Jessica du Toit By email: jedutoit@srk.co.za

Dear Jessica

# Background Information Document for the Proposed Used Fuel Transient Interim Storage Facility at Koeberg Nuclear Power Station, Cape Town

CapeNature would like to thank you for the opportunity to comment on the proposed development and would like to make the following comments. Please note that our comments only pertain to the biodiversity related impacts and not to the overall desirability of the proposed development.

The proposed facility will be placed on a concrete slab within the existing designated operational area of the existing nuclear power station. It is assumed that any natural vegetation within the footprint of the two proposed alternatives would already be impacted by the activities related to the adjacent power station, however CapeNature will comment further once a description is provided in the Draft Scoping Report. The proposed activities could also impact on coastal processes due to the proximity to the coastline.

It is assumed that the proposed development will include specialist studies related to health and safety risk. These studies should also include the natural environment as potential affected components within these studies.

CapeNature reserves the right to revise initial comments and request further information based on any additional information that may be received.

Yours sincerely

**Rhett Smart** 

For: Manager (Scientific Services)

# ENVIRONMENTAL IMPACT ASSESSMENT PROCESS FOR THE PROPOSED USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER STATION

SRK PROJECT NO: 478317

# STAKEHOLDER REGISTRATION AND COMMENT FORM

Please complete and submit this form by hand, post, fax or email to: SRK Consulting

Jessica du Toit

The Administrative Building, Albion Springs, 183 Main Road, Rondebosch, 7700
Postnet Suite #206, Private Bag X18, Rondebosch, 7701
Fax: 021 685 7105 Tel: 021 659 3060,

E-mail: jedutoit@srk.co.za

# PLEASE PRINT CLEARLY

	TO REGISTER AS A STAKEHOLDER:	
Name: GRAHAM	MBUCICLE Date: 27	10/2015
Organisation (if any):		
Capacity (if applicable):		
Postal address:	DO BOX 382 MELKBOSSTRAND	
	Postal code: 7437	
Telephone number:	021-553-5623 Fax number:	
E-mail: graham	@nimblemouse.co.29	
•	on method (email / fax / post): Emkic	
Please indicate any d	direct business, financial, personal or other interest that you may ha application:	ve in the
LANDOWNEYZ,	M NEIGHBOURING KUEBERG NUCLEAR POWER	STATION
	nts or concerns that you may have regarding the proposed project of indicated below and/or on a separate page:	
(1) - REQUIRE	COMPREHENSIVE RISK ASSESSMENT MARKAGOS,	
IN WOIN	G BLAN CONSEQUENTIAL RISKS & CUMULATION	J <sub>C</sub>
Disk i	IN THE EUCH OF 1) STEAM STEISMIC	-
EUCHT	; 2) FIRE (- 3) NULLERY EMERGINAY @	enps.
6) visum	im pact	
(3) - NUCEM	WASTE SHOULD BE STIMED IN AN BANDAGE E FROM DENSE HABITATION.	méa
ré more	E FROM DENSE HABITATION.	

## Comments from Graham Arbuckle:

As a resident of VanRiebeeckstrand and owner of land neighbouring Koeberg, my overiding concerns are:

- That potentially harmful radioactive materials spent fuel are to be stored on site at the KNPS in quantities higher than originally planned for by the design of KNPS –within 2km of a residential suburb, and on a site optimized for power plant operation, as opposed to nuclear waste storage.
- 2) That due to the lack of any existing permanent storage solutions, the Transient Interim Storage Facility will be used indefinitely up to and beyond the operating life of KNPS.
- 3) That due to the lack of any existing permanent storage solutions, the Transient Interim Storage Facility will be used for waste from other Nuclear Power Stations.
- 4) That due to the construction of the Transient Interim Storage Facility, the political will to pursue construction of permanent storage solutions will become diffused.

# Specifics:

- 1) Please could you make available the slides/posters that made up the Public Open Day presentation. This would allow an opportunity for the many stakeholders that could not attend the Public Open Day to comment on the more (as opposed the BID) comprehensive material presented.
- 2) Please ensure that the S&EIA takes into consideration the other proposed projects for the site. To assess the impact of a project in isolation of other plans for the area would render this S&EIA flawed, and in turn would render the pre-existing S&EIA reports meaningless. Amongst others, this project could potentially interrelate with:
  - Eskom Nuclear-1 proposals
  - Eskom Weskusfleur substation proposals
  - Sunbird Ibhubesi methane gas pipeline proposals
  - Western Cape Government LNG pipeline proposals
  - City of Cape Town pilot desalination plant proposals.
- 3) It should be required that a stakeholder-reviewed comprehensive risk analysis of the consequential and cumulative risks associated with the project and its location be undertaken. These include risks associated with a nuclear emergency at KNPS and/or Nuclear-1; fire; and natural events including an earthquake, tremor, sinkhole, or tsunami.

- 4) Please detail the regulatory/legislative framework that would prohibit the use of the site beyond the operating life of KNPS, and prohibit the use of the site for storage of waste from other sites, including Nuclear-1.
- 5) Please detail the projected design lifespan of the proposed casks, and detail the expected period that the materials stored within the casks would remain hazardous. Please detail the safety checks that would be undertaken to ensure the casks remain effective, and detail the procedures in place for replacing the casks as required.
- 6) The approval of construction of the TISF should be conditional on a commitment to build a permanent storage/reprocessing facility at a site elsewhere.

# ENVIRONMENTAL IMPACT ASSESSMENT PROCESS FOR THE PROPOSED USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER STATION

SRK PROJECT NO: 478317

# STAKEHOLDER REGISTRATION AND COMMENT FORM

Please complete and submit this form by hand, post, fax or email to.
SRK Consulting

Jessica du Toit

The Administrative Building, Albion Postnet Suite #206, Pri	vate Bag X18, Ror	idebosch, 7701	sch, 7700
E-mail: j	05 Tel. 021 66 edutoit@srk co.za PRINT CLEARL\		. Hebert
·	AS A STAKEHO		· Herbore
Name: Discussion with Gro	uhoun Arbu	ichle.	Date:
Organisation (if any):			
Capacity (if applicable):			
ostal address:			
		Destal and a	
Felephone number:			
E-mail:		. aa iidiisbel	· · · · · · · · · · · · · · · · · · ·
Preferred communication method (email / fax / p	post):		
Please indicate any direct business, financia	pplication:		
- EIA - Sunbird _ EIA - EIA - COCT Pipeline _ 100	4 - Westflew esalitation	, Plant	
- Ella - Nuclear 1			
Any initial comments or concerns that you indicated below a			ed project can be
- Lisk Assessment on the Nuclear 1	interaction	in betw.	Koeberg &
	magement f	Jan.	
- Koeberg Nortune Rogerie Mo Co No we need Cape	:Nature's	¿ Manager	ned Appreval
befere we can start	- on this	prepor.	
- Has the cumulative impact	es of this	project an	of Nuclear 1
athor ardeal been con	vijak keal / -	HOW WILL	()
- What happening in the Disposal Act. Why is	National	Nuclear Ro	active N
Disposal Act. Why is	; the CIST	not in pl	
- Layout Élocation of Til	it in relu	itical to t	he Nuclear

# **ENVIRONMENTAL IMPACT ASSESSMENT PROCESS FOR THE PROPOSED USED FUEL TRANSIENT INTERIM STORAGE FACILITY** AT KOEBERG NUCLEAR POWER STATION

SRK PROJECT NO: 478317

# STAKEHOLDER REGISTRATION AND COMMENT FORM

Please complete and submit this form by hand, post, fax or email to: **SRK Consulting** 

Jessica du Toit

The Administrative Building, Albion Springs, 183 Main Road, Rondebosch, 7700 Postnet Suite #206, Private Bag X18, Rondebosch, 7701 Fax: 021 685 7105 Tel: 021 659 3060,

E-mail: jedutoit@sri PLEASE PRINT CL		the matter than an arms on the month.
TO REGISTER AS A STA	KEHOLDER:	
NORMAN		Date: 9 10 2015
NA		
Home owner		
ERF 3108, 25	EDWARD CRES	LENT
	Postal code:	7441
078 733 8307		086 608 2452
method (email / fax / post):	EMAIL/FAX	
	l or other interest that	you may have in the
OMER AND ABUTTING ED AREA	NEIGHBOR TO	THE KOSBERG
indicated below and/or on a	separate page:	•
OF A SPEMBT FUEL, AREA	STO RAGE ARE	a close to
	PLEASE PRINT CLI  TO REGISTER AS A STA  NOR MAN  NIA  HOME OWNER  ERF 3108 J5  278 733 8307  MAN @ ESKOM. Co. ZA  method (email / fax / post):  ect business, financial, persona application:  WHER AND A BUTTIME  ED AREA  For concerns that you may have indicated below and/or on a  of a SPENDT FULL	PLEASE PRINT CLEARLY  TO REGISTER AS A STAKEHOLDER:  NOR MAN  NIA  HOME OWNER  ERF 3108 JS EDWARD CRES  Postal code:  Postal code:  Postal code:  Fax number:  MAN @ ESKOM. CO. ZA  method (email / fax / post):  ECT business, financial, personal or other interest that application:  ONER AND ABUTTING NEIGHBOR TO SED AREA  For concerns that you may have regarding the proposindicated below and/or on a separate page:  OF A SPENDT FULL STO RAGE AREA

# **ENVIRONMENTAL IMPACT ASSESSMENT PROCESS FOR THE PROPOSED** USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER STATION

SRK PROJECT NO: 478317

# STAKEHOLDER REGISTRATION AND COMMENT FORM

Please complete and submit this form by hand, post, fax or email to:

**SRK Consulting** 

Jessica du Toit

The Administrative Building, Albion Springs, 183 Main Road, Rondebosch, 7700

P	ostnet Suite #206, Private Bag Fax: 021 685 7105 T E-mail: jedutoit@ PLEASE PRINT	el: 021 659 3060 )srk.co.za			
	TO REGISTER AS A S	TAKEHOLDER:	1805	A	
Name: DLoFF	DREYER			_ Date: _	16/10/2015
Organisation (if any):	MELK BOSSTRAND	PRIVATE	Sella	OC	
Capacity (if applicable):	200				a e e s
Postal address:	P.O. BOX 441				· · · ·
	MEUKBOSSTRAND				
	1.000	Posta	l code: _	74.	37
Telephone number:	021 553 1530				53 0610
E-mail: into @ meck	Bospeivale, co. Za				
Preferred communication		EMAIL			
Please indicate any dire	ect business, financial, perso application		erest that	you may	have in the
	or concerns that you may h indicated below and/or o	n a separate pa	ge:		
GENERAL OPERA	A TIONAL HEACTH	AND S	AFE FY	ARELA	PUTIONS.

# ENVIRONMENTAL IMPACT ASSESSMENT PROCESS FOR THE PROPOSED USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER STATION

SRK PROJECT NO: 478317

# STAKEHOLDER REGISTRATION AND COMMENT FORM

Please complete and submit this form by hand, post, fax or email to:

# **SRK Consulting**

Jessica du Toit

The Administrative Building, Albion Springs, 183 Main Road, Rondebosch, 7700
Postnet Suite #206, Private Bag X18, Rondebosch, 7701
Fax: 021 685 7105 Tel: 021 659 3060,
E-mail: jedutoit@srk.co.za

PLEASE PRINT CLEARLY

# TO REGISTER AS A STAKEHOLDER: Name: Ryno yan Drak from Date: 2315-10-26 Organisation (if any): Capacity (if applicable): Postal address: Cy Beach Roan, Menk Bosspando Postal code: 7441 Telephone number: O21 444 8402 (w) Fax number: E-mail: Yudriet@telkom so. net Preferred communication method (email / fax / post): @ Hand Please indicate any direct business, financial, personal or other interest that you may have in the application:

Any initial comments or concerns that you may have regarding the proposed project can be indicated below and/or on a separate page:

	indicated below and/or on a separate page:
	SEP is already at perfor tid risk it damaged/leaker bombed. It is not a secure few lity to present
	radiation such as the contain went and in what will be done to have a never radiation facility?" Will share be any prediction syponere to will full
0	will there be any prolication of some used fuel period dress if the cooled down used fuel period for the ask, and if danceged assembly is transferred to the ask, and if danceged
	is she cash or the cash being domaged?
0	what will be done @ KarPs if the cooling lauls are not achieved of agrant fuel assemble for safe transfer to the casks?
	transfer to the carks?
	0 1-1-10-20





E-mail duvall@mweb.co.za
Phone Chairperson 073 357 6359
Postal P O Box 235 Melkbosstrand 7437

Website www.melkbosstrand.net

12th October, 2015

Ms Jessica Du Toit SRK Consulting 183 Main Road Rondebosch 7700

Dear Ms Du Toit,

Re: Transient Interim Storage Facility at Koeberg Nuclear Power Station

Thank you for the information relating to the storage of dry casks at Koeberg Nuclear Power Station. The Melkbosstrand Ratepayers Association has no objection to this facility.

Please continue to keep us on your mailing list.

Yours sincerely

(Mrs) SM La Grange Chairperson - Melkbosstrand Ratepayers Association Ward 23 Representative (Previous Chairperson – Koeberg Public Safety Information Forum 2015)



# ENERGY, ENVIRONMENT AND SPATIAL PLANNING DIRECTORATE ENVIRONMENTAL RESOURCE MANAGEMENT DEPARTMENT

Morné Theron Senior Environmental Practitioner

T: (021) 444 0601 F: (021) 444 0605 E: morne.theron@capetown.gov.za Ref: BA 21/1/2/2/13N

9 November 2015

SRK Consulting (South Africa) (Pty) Ltd Postnet Suite #206 P Bag X18 RONDEBOSCH 7701

Attention: Ms Jessica du Toit

[e-mail: jedutoit@srk.co.za] Tel: 021 659 3060 Fax: 021 685 7105

Dear Madam

# CAPE FARM 34, DUYNEFONTEIN: USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER STATION: BACKGROUND INFORMATION DOCUMENT

The abovementioned Background Information Document (BID), your reference SRK Project Number 478317, dated September 2015, refers.

Kindly register the Environmental Resource Management Department: Blaauwberg District as the official City of Cape Town entry point for comment on the aforementioned EIA.

- 1. Be advised that the Environmental Resource Management Department (ERMD) is the duly mandated department to provide co-ordinated City comment on EIAs conducted within the municipality's jurisdiction. As the Koeberg Nuclear Power Station falls within the Blaauwberg District of the City your EIA must be submitted to this office for comment.
- 2. In order for the City to meet the statutory commenting deadline(s) you are required to timeously submit 1 x CD and 1 x hard copy of the various Environmental Impact Assessment reports to this office before ERMD can circulate the draft scoping report to all our affected line departments. The public participation commenting period will be calculated from the date that this office receives the CD and hard copy. As such please ensure that the CD and necessary documentation is delivered to our physical address as stated below.
- 3. In the interim the following comment is provided based on the limited information that was provided in the BID:
  - a. Please reflect the DEA reference number in all future correspondence.
  - b. Please list the listed activities in terms of the NEMA Listing notices that environmental authorization is being required.
  - c. Reflect the erf number of the subject property (i.e. Cape Farm 34, Duynefontein) in future documentation.

MILNERTON CIVIC CENTRE MILNERTON IZIKO LOLUNTU 87 PIENAAR ROAD CAPE TOWN 7441 P O BOX MILNERTON 7435 WWW.CAPETOWN.GOV.ZA MILNERTON BURGERSENTRUM

Kindly submit the draft Scoping Report (once available) to this office in the form of 1 x hard copy and 1  $\times$  CD version.

Yours faithfully

PAT TITMUSS

REGIONAL MANAGER: ENVIRONMENTAL & HERITAGE MANAGEMENT: Northern Region (Blaauwberg District)

# **Questions for the EIA; from 'TUG' WILSON**

1/ The original Koeberg Emergency Plan which I was involved in writing followed strict guidelines especially with respect to Source Term, Emergency planning Zones, EPZ,LPZ.OCA etc. are we not already in conflict with the original licence.

2/ With the stockpiling of used fuel at Koeberg you will be increasing the potential "Source Term" while at the same time the population is increasing in the EPZ (16km) and getting EVER NEARER TO KOEBERG! Are you aware that a huge Shopping Mall (R1,9 Billion) is under construction within the zone and only 12 KM from Koeberg.

3/ Why not Vaalpoets as originally envisaged? If we are really going to build more Nuclear Stations it makes more sense to have a central repository.

\* ARE THE CASICE SAFE TO FLY!

# ENVIRONMENTAL IMPACT ASSESSMENT PROCESS FOR THE PROPOSED USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER STATION

SRK PROJECT NO: 478317

# STAKEHOLDER REGISTRATION AND COMMENT FORM

Please complete and submit this form by hand, post, fax or email to: SRK Consulting

Jessica du Toit

The Administrative Building, Albion Springs, 183 Main Road, Rondebosch, 7700 Postnet Suite #206, Private Bag X18, Rondebosch, 7701 Fax: 021 685 7105 Tel: 021 669 3060,

E-mail: jedutoit@srk.co.za

# PLEASE PRINT CLEARLY

Name: Lobert Mayhew. Date:  Organisation (if any):  Capacity (if applicable):  Postal code:  Fax number:  E-mail:  Preferred communication method (email / fax / post):  Please Indicate any direct business, financial, personal or other interest that you may have in the application:  Any initial comments or concerns that you may have regarding the proposed project can be indicated below and/or on a separate page:  Nhal are the plans for transportation of the cashs (each option)  Has Estorm considered reprocessing a cost of repressessing is cost to environment / humans. So much left in used rods so now crophing the earth of minerals?  Why aren's Estorn disposing used bell of Vaalpub ? rather than temporary.  Has Coct considered evacuation plan a new developments within liken of Volkery eg now shapping nall at sunningdal.			TO REGISTER AS A S	STAKEHOLDER:
Organisation (if any):  Capacity (if applicable):  Postal address:  Postal code:  Telephone number:  E-mail:  Preferred communication method (email / fax / post):  Please indicate any direct business, financial, personal or other interest that you may have in the application:  Any initial comments or concerns that you may have regarding the proposed project can be indicated below and/or on a separate page:  Nhat are the plant for transportation of the cashs (each option)  Has Eskom considered reprocessing a cost of reprosessing is cost to environment / humans. So much left in used rods so not crophing the earth of minerals?  Why aren't Eskon disposing used bel at Vaalgots? rather than temporary.  Has Coct considered evacuation plan a new developments withing liken of Koeberg eg now shopping nall at Sunningdal.	Name:	Lobert	Mayhew.	Date:
Postal address:    Postal code:	Organisatio	on (if any):	J	
Postal code:  Telephone number:  E-mail:  Preferred communication method (email/fax/post):  Please indicate any direct business, financial, personal or other interest that you may have in the application:  Any initial comments or concerns that you may have regarding the proposed project can be indicated below and/or on a separate page:  What are the plans for transportation of the cashs (each option)  Has Esluom considered reprocessing a cost of reprosessing is cost to environment humans. So much left in used rods so not problems the earth of minerals?  Why aren't Esluon disposing used bell at Vaalpots? rather than has cost of corsidered evacuation plan a new developments within like of Kolberg eg now shopping nall at Sunningdali	Capacity (if	applicable):		
Telephone number:  E-mail:  Preferred communication method (email/fax/post):  Please indicate any direct business, financial, personal or other interest that you may have in the application:  Any initial comments or concerns that you may have regarding the proposed project can be indicated below and/or on a separate page:  • What are the plans for transportation of the cashs (each option)  • Has Eshom considered reprocessing a cost of reproscessing is cost to environment humans. So much left in used rods so not (robbing the earth of minerals).  • Why aren't Eshon disposity used hell at Vaalpub ? rather than temporary.  • Itas Coct considered evacuation plan a new developments within likem of Voeterg eg now shopping nall at Sunningdale.	Postal addr	maa.		
Telephone number:  E-mail:  Preferred communication method (email/fax/post):  Please indicate any direct business, financial, personal or other interest that you may have in the application:  Any initial comments or concerns that you may have regarding the proposed project can be indicated below and/or on a separate page:  • What are the plans for transportation of the cashs (each option)  • Has Eshom considered reprocessing a cost of reproscessing is cost to environment humans. So much left in used rods so not (robbing the earth of minerals).  • Why aren't Eshon disposity used hell at Vaalpub ? rather than temporary.  • Itas Coct considered evacuation plan a new developments within likem of Voeterg eg now shopping nall at Sunningdale.				·
Preferred communication method (email / fax / post):  Please Indicate any direct business, financial, personal or other interest that you may have in the application:  Any initial comments or concerns that you may have regarding the proposed project can be indicated below and/or on a separate page:  • What are the plans for transportation of the cashs (each option)  • Has Eshorn considered reprocessing a cost of reprosessing is cost to environment / humans. So much left in used rods so not crophing the earth of minerals?  • Why aren't Eshon disposity used bell at Vaalputs? rather than than that Cost considered evacuation plan a new developments within like of Valvery ey now shopping nall at Sunmingdale				Postal code:
Preferred communication method (email/fax/post):  Please indicate any direct business, financial, personal or other interest that you may have in the application:  Any initial comments or concerns that you may have regarding the proposed project can be indicated below and/or on a separate page:  Nhal are the plans for transportation of the cashs (each option)  Has Esteom considered reprocessing a cost of reprosessing is cost to environment humans. So much left in used rods so not problems the earth of minerals?  Why aren't Esteon disposing used bel at Vaalputs? rather than themselves that coefficients are developments that themselves the coefficients of the plans of the position of the plans are developments.	Telephone :	number:		Fax number:
Please indicate any direct business, financial, personal or other interest that you may have in the application:  Any initial comments or concerns that you may have regarding the proposed project can be indicated below and/or on a separate page:  • What are the plant for transportation of the cashs (each option)  • Has Eshom considered reprocessing a cost of reprosessing is cost to environment humans. So much left in used rods so now crobbing the earth of minerals?  • Why aren't Eshom disposing used hel at Vaalputs? rather than that (temporary).  • Has Coct considered evacuation plan a new developments within like of Koeherg eg now shopping mall at Sunmingdale	E-mail:			
Any initial comments or concerns that you may have regarding the proposed project can be indicated below and/or on a separate page:  Nhat are the plant for transportation of the cashs (each option)  Has Eshorn considered reprocessing a cost of reprosessing is cost to environment / humans. So much left in used rods so not crophing the earth of minerals?  Why aren't Eshorn disposity used bell at Vaalputs? rather than that cost cost developments within like of koeperg eg now shopping nall at sunningdal.	Preferred c	ommunication met	nod (email / fax / post):	
Any initial comments or concerns that you may have regarding the proposed project can be indicated below and/or on a separate page:  • What are the plant for transportation of the cashs (each option)  • Has Eshorn considered reprocessing a cost of reprospession is cost to environment / humans. So much left in used rods so not cropping the earth of minerals?  • Why aren't Eshorn disposity used bell at Vaalputs? rather than temporary.  • Has Coct considered evacuation plan a new developments within like of Koeherg eg now shopping nall at sunningdal.	Please ir	ndicate any direct b		
indicated below and/or on a separate page:  Nhat are the plans for transportation of the cashs (each option)  Has Esteom considered reprocessing a cost of reproseessing is cost to environment / humans. So much left in used rods so now crobbing the earth of minerals?  Nhy aren't Esteon disposing used bell at Vaalputs? rather than temporary.  Has Coct considered evacuation plan a new developments within them of Koeberg eg now shopping nall at sunmingulation.			applicati	ion:
indicated below and/or on a separate page:  What are the plans for transportation of the cashs (each option)  Has Esteom considered reprocessing a cost of reproseessing is cost to environment / humans. So much left in used rods so now (robbing the earth of minerals).  Why aren't Esteon disposing used bell at Vaalputs? rather than temporary.  Has Coct considered evacuation plan a new developments within them of Koeberg eg now shopping nall at sunmingdal.				
indicated below and/or on a separate page:  Nhat are the plans for transportation of the cashs (each option)  Has Esteom considered reprocessing a cost of reproseessing is cost to environment / humans. So much left in used rods so now crobbing the earth of minerals?  Nhy aren't Esteon disposing used hel at Vaalputs? rather than temporary.  Has Coct considered evacuation plan a new developments within them of Koeherg eg now shopping nall at sunmingdal				
<ul> <li>What are the plans for transportation of the cashs (each option)</li> <li>Has Estrom considered reprocessing a cost of reprosessing is cost to environment/humans. So much left in used rods so not cropping the earth of minerals?</li> <li>Why aren't Estron disposing used hel at Variables? rather than temporary.</li> <li>Has Coct considered evacuation plan a new developments within 16 hum of Koeberg eg now shopping mall at sunningdal.</li> </ul>	Any in			
* Has Eshom considered reprocessing a cost of reproseessing is cost to environment/humans. So much left in used rods so not cropping the earth of minerals?  * Why aren't Eshon disposing used bel at Vaalputs? rather than temporary is that Coct considered evacuation plan a new developments within them of Koeperg eg now shopping nall at sunmingulat	• Whal	are the plant	ans for transport	ration of the cashs (each orthon)
so nov (robbing the earth of minerals).  • Why aren't Eston disposing used bel at Vaalpuls? rather than temporary.  • Has Coct considered evacuation plan & new developments within 16 km of Koeberg eg now shopping nall at sunningdal	• 1-101	Estrom con	sidered reamcessi	it a cost of managers
so nov (robbing the earth of minerals).  • Why aren't Eston disposing used bel at Vaalpuls? rather than temporary.  • Has Coct considered evacuation plan & new developments within 16 km of Koeberg eg now shopping nall at sunningdal	د ۱۸۸۰	bo Obsalian	want / hours	So marial 1-Di 1
· Why aren't Eston disposity used bel at Vaalpuls? rather than temporary.  · Itas Coct considered evacuation plan & new developments within 16 km of Koeherg eg now stopping nall at sunningdal	COLA	to CVALLOVII	very indivant.	so with lett in used rod!
· Itas Coct considered evacuation plan & new developments ) within 16 km of Koeberg eg now shopping nall at sunningdal				
· Itas Coct considered evacuation plan & new developments ) within 16 km of Koeberg eg now shopping nall at sunningdal	. Mm	y arn't tsh	on disposity usi	ed wel at Vaalpuls? rather than
γ Ο	· Ital	(6CT con	sidered evacua	ation plan & new developments.
γ Ο	will	in 16km	of Koehera a	eg now shopping hall at Sunminadal
" WWY affil Mair avair for hard Chan have none part corport it			<i></i>	υ μ
The product of the pr	• WW	aren'i Mir	provision to w	rolle Something more permanent si
why aren't this provision to make something more permanent if more nuclear facilities built at boekery?	more	nucteon 1	author built a	Voehery?

# Du Toit, Jessica

From: Trevor Moodley < Moodley T@eskom.co.za>

**Sent:** 18 March 2016 12:08 PM

**To:** Du Toit, Jessica **Subject:** Dry Casking

Follow Up Flag: Follow up Flag Status: Flagged

Ηi

Hope you all are well.

Used fuel transient interim storage facility

External casking is an excellent and proven technology that is safe for this cause. The chosen locations on site guarantees its protection, control and strict oversight.

Experience from the current storage on-site at the Low Level Storage Area justifies this claim of safe spent fuel storage. Have yourselves a great day further.

With Kind Regards

Ps: When do we build the next Nuclear Power Plant.

MAHATMA GANDHI: I shall pass through this world but once. Any good that I can show to my fellow human being, let me do it now. Let me not deter or neglect, for I shall not pass this way again.

MAHATMA GANDI: "Silence becomes cowardice when occasion demands speaking out the whole truth and acting accordingly.

BENJAMIN FRANKLIN: "Tell me and I forget. Teach me and I remember. Involve me and I learn.

# Make your passion your job, and you will never work a day in your life.

**Trevor Moodley** 

Quality Control Inspector (Mech/Corr)

Eskom(Koeberg Nuclear Power Station)

Private Bag X10, Kernkrag, 7440, CAPE TOWN, RSA.

R27 Off West Coast Rd, Melkbosstrand, Western Cape.

Tel+27(0)21 550 4911 | Direct +27(0)21 522 3116/ 522 2718 | Fax+27(0)86 667 4953

Cell a/h: +27(0)79 797 0363

E-mail trevor.moodley@eskom.co.za, Website www.eskom.co.za





NB: This email and its contents are subject to the Eskom Holdings SOC Limited email legal notice which can be viewed at <a href="http://www.eskom.co.za/Pages/Website Terms Conditions.aspx">http://www.eskom.co.za/Pages/Website Terms Conditions.aspx</a>

I'm part of the 49Million initiative...

http://www.49Million.co.za

# Du Toit, Jessica

**From:** Mike Thurgood <mike.thurgood@imaginet.co.za>

**Sent:** 18 March 2016 04:34 PM

**To:** Du Toit, Jessica

Subject: Re: 478317: Koeberg TISF EIA - Availability of Draft Scoping Report for comment

**Follow Up Flag:** Follow up **Flag Status:** Flagged

Jessica du Toit BSc (ConsEcol), MPhil (Env Mgmt) Environmental Consultant



Dear Ms du Toit,

## **KOEBERG TISF**

There are no specific technical points I wish to raise in addition to what have already been raised and answered.

However, there is an issue which could become a major one at some stage in the future, and that is the terrorist activities of Muslim extremists. No matter how remote we might wish to believe that South Africa is from their terrorist activities, they may see targets in South Africa as easy ones to attack in contrast to those in the Middle East and Europe and the USA where anti-terrorist measures are continually being strengthened. The basis of such attacks, if they ever occurred, would be unlikely to be against South Africa *per se*, but merely to demonstrate their capabilities to the rest of the world with whom they are waging their terrorist activities.

I do not doubt that the Koeberg NPS site is a secure site, and attacks by suicide agents would be most unlikely. The most likely type of attack goes modern these days, with the use of drones. Therefore I would see such a storage site, with its upstanding containers for dry used fuel elements, being a major risk from possible drone attacks.

Therefore sophisticated air strike detecting equipment would need to be installed around the site, with the accompanying means to both divert the drones and to shoot them down.

If it ever goes ahead, at some considerable time in the future there could be further nuclear power plants constructed in the Duynefontein area, being a part of the projected nuclear expansion programme, for which two sites have been selected, Thuyspunt in the Eastern Cape, and Duynefontein. A similar storage problem could eventually arise, specifically if a national used fuel element storage facility hasn't become available by then.

Regards,

R Mike Longden-Thurgood

5 Nerina Street, Milnerton 7441

'ph: 021-552-6634 Cell; 072-345-6507

---- Original Message -----

From: <u>Du Toit, Jessica</u>
To: Masson, Scott

Sent: Friday, March 18, 2016 11:10 AM

Subject: 478317: Koeberg TISF EIA - Availability of Draft Scoping Report for comment

Dear Stakeholder

# NOTICE OF RELEASE OF DRAFT SCOPING REPORT: PROPOSED USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER STATION

Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of dry casks at the Koeberg Nuclear Power Station (KNPS) to accommodate used nuclear fuel from the reactors of the power station, thereby ensuring the continued operation of the KNPS. SRK Consulting (South Africa) (Pty) Ltd (SRK) has been appointed to undertake the Scoping and Environmental Impact Reporting (S&EIR – often referred to as the Environmental Impact Assessment [EIA]) process required in terms of the National Environmental Management Act 107 of 1998 (NEMA) and the EIA Regulations, 2014.

Although the EIA process has not yet formally commenced, SRK previously requested interested parties to register as stakeholders for this EIA process, at which stage you were registered as a stakeholder.

The **Draft Scoping Report** has been compiled and is now available for public review for a period of 30 days, from **18 March until 25 April 2016**. Please find attached a copy of the Executive Summary of the Draft Scoping Report, which also provides details of how you can participate in the EIA process.

Hard copies of the full report are available for viewing at the following venues:

- Koeberg Public Library, Duynefontein;
- Wesfleur Public Library, Atlantis;
- Cape Town Public Library;
- The KNPS Visitors Centre; and
- SRK's office in Rondebosch.

An electronic version of the report can also be accessed on SRK's website: http://www.srk.co.za/en/koeberg-tisf-eia.

Stakeholders are invited to comment, and/or to register on the project database. Stakeholders must provide their comments together with their name, contact details (preferred method of notification, e.g. email), and an indication of any direct business, financial, personal or other interest which they have in the application, to Jessica du Toit at SRK Consulting: Tel: 021 659 3060; Fax: 021 685 7105; or email: <a href="mailto:jedutoit@srk.co.za">jedutoit@srk.co.za</a>.

Jessica du Toit BSc (ConsEcol), MPhil (Env Mgmt)

**Environmental Consultant** 



SRK Consulting (South Africa) Pty Ltd

The Administrative Building, Albion Spring, 183 Main Road, Rondebosch, 7700

Postnet Suite # 206, Private Bag X18, Rondebosch, 7701

**Tel:** +27-(0)21-659-3060; **Fax**: +27-(0)21-685-7105 **Mobile**: +27-(0)76-133-9776; **Direct**: +27-(0)21-659-3083

Email: jedutoit@srk.co.za

www.srk.co.za

This transmission is intended for the sole use of the addressee, and may contain information that by its privileged and confidential nature is exempt from disclosure under applicable law. You are hereby notified that any dissemination, distribution or duplication of this transmission by someone other than the intended recipient or its designated agent is strictly prohibited. If you have received this transmission in error, please notify the sender immediately by replying to this transmission, or by collect call to the above phone number.

Please consider the environment before printing this e-mail.

# Du Toit, Jessica

From: Alvin Cope <Alvin.Cope@westerncape.gov.za>

**Sent:** 06 April 2016 03:51 PM

To:Du Toit, JessicaCc:Masson, ScottSubject:KNPS - JN 16301

# Hi Ms JEdT,

- 2. PI note that the transport by road of the casks, 6m by 3m  $\Phi$  (mass unknown), from the point of manufacture to the TISF (unladen) and (eventually) from the TISF to the Centralised ISF (laden) at an as yet unknown locality will require Abnormal Load permits, with associated conditions, to be issued by this Branch.
- 3. In all likelihood, the laden casks will also be subject to other restrictive conditions of transport, approval of which by the relevant institutions will be necessary before this Branch will consider issuing the necessary permits for road travel.
- 4. Cognizance is taken of the use of the existing access via the R27 (PTR 77 / 1) for all transport to and from the KNPS.

Thanx,

Regards.

Α

Alvin L Cope
WCG
9 Dorp Street
P O Box 2603
Cape Town 8000
Road Network Management - Room 3-32
+27 21 483 2009 (tel)
Alvin.Cope@WesternCape.Gov.ZA



<sup>&</sup>quot;All views or opinions expressed in this electronic message and its attachments are the view of the sender and do not necessarily reflect the views and opinions of the Western Cape Government (the WCG). No employee of the WCG is entitled to conclude a binding contract on behalf of the WCG unless he/she is an accounting officer of the WCG, or his or her authorised representative. The information contained in





File Reference: 2016/480

The Environmental Consultant SRK Consulting (South Africa) Pty Ltd Postnet Suite #206 Private Bag X18

RONDEBOSCH

7701

Per Email: jedutoit@srk.co.za

Dear Ms Du Toit

# PROPOSED USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER **STATION**

I refer to your letter dated 18 March 2016, regarding the above-mentioned matter.

My Department is not in a position to give any comment on the proposed used fuel transient interim storage facility at Koeberg Nuclear Power Station.

Yours faithfully

G PAULSE

**ACTING HEAD OF DEPARTMENT** 



Private Bag X 447· PRETORIA · 0001· Environmental House · 473 Steve Biko Road · PRETORIA Tel (+ 27 12) 399 9972

DEA Reference: 14/12/16/3/1/71 Enquiries: Ms Salome Mambane

Tel: 012 399 9385 E-mail: SMambane@environment.gov.za

Jessica du Toit SRK Consulting (South Africa) (Pty) Ltd Postnet Suite #206 P Bag X18 RONDEBOSCH 7701

**Fax:** 021 685 7105 **Tel:** 021 659 3060

Email: capetown@srk.co.za

PER EMAIL / MAIL

Dear Sir/Madam

ACKNOWLEDGEMENT OF RECEIPT OF DRAFT SCOPING REPORT FOR THE PROPOSED USED FUEL TRANSIET INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER STATION, WESTERN CAPE PROVINCE

The Department confirms having received the Draft Scoping Report for the above-mentioned project on 22 March 2016

Please take note of Regulation 40(3) of the 2014 EIA Regulations, which states that potential Interested & Affected Parties, including the competent authority, may be provided with an opportunity to comment on reports and plans contemplated in subregulation (1) prior to the submission of an application but <u>must</u> be provided an opportunity to comment on such reports once an application has been submitted to the competent authority.

Furthermore, take note that this Department does not have an application with you and therefore you are required to lodge an application form accompanied by a draft basic assessment report for considerations by this Department. You are hereby reminded that the activity may not commence prior to an environmental authorisation being granted by the Department.

Yours sincerely

Mr Sabelo Malaza

**Chief Director: Integrated Environmental Authorisations** 

**Department of Environmental Affairs** 

Letter signed by: Ms Senisha Soobramany

Designation: Environmental Officer (Grade A): Integrated Environmental Authorisations

Date: 5 April 2016

# Adri La Meyer DIRECTORATE: DEVELOPMENT FACILITATION Adri.LaMeyer@westerncape.gov.za

### **REFERENCES:**

16/3/3/6/4/2/1/A1/14/3085/16 (Development Management)
19/2/5/3/A1/14/WL0051/16 (Waste Management)
19/4/4/A1/14 - Koeberg Nuclear Power Station (Air Quality Management)

DATE:

2016 -04- 2.5

The Board of Directors SRK Consulting Postnet Suite # 206 Private Bag X18 RONDEBOSCH 7701

For attention: Ms Jessica du Toit

Tel: (021) 659 3060

Fax: (086) 530 7003

Dear Madam

# COMMENT ON THE PRE-APPLICATION SCOPING REPORT FOR THE PROPOSED USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT THE KOEBERG NUCLEAR POWER STATION ON FARM DUYNEFONTYN NO. 1552

- The above-mentioned Scoping Report dated March 2016 and received by the Department of Environmental Affairs and Development Planning (hereinafter referred to as "the Department") on 16 March 2016, refers. The following consolidated comment by various directorates in the Department is hereby offered.
- 2. Directorate: Development Management (Region 1) Melanese Schippers (Melanese.Schippers@westerncape.gov.za; Tel: (021) 483 8349)
- 2.1 It is noted that a new haul road with a length of 100m and an unspecified width will be constructed at the entrance to site alternative 1. Clarity with respect to the width of the road must be provided in order to determine whether Activity 4 of GN. No. R. 985 of 4 December 2014 is applicable to the proposed development.
- 2.2 It is noted that a more detailed description of the proposed development will be included in the Environmental Impact Assessment (EIA) Report. Please note the activity description must include,

- inter alia, a description of the associated infrastructure (e.g. width of the road to be constructed) and water and electricity requirements for the proposed development.
- 2.3 According to Appendix 2 (Content of a Scoping Report) of GN No. R. 982 of 4 December 2014, the Scoping Report must include a motivation for the need and desirability of the proposed development, including the need and desirability of the activity in the context of the preferred location. It is acknowledged that the pre-application Scoping Report includes a motivation for the need of the proposed development; however a motivation of the need and desirability in the context of the preferred location has not been included. This aspect needs to be addressed in the Draft Scoping Report (DSR) to be submitted for public comment.
- 2.4 The high-water mark indicated in Figure 3-5 of the pre-application Scoping Report appears to depict the low-water mark of the sea. Please ensure that the high-water mark of the sea is accurately delineated and reported on in the DSR to determine whether other EIA listed activities are triggered.
- 2.5 The Scoping Report to be submitted to the competent authority must include details of the public participation process undertaken in terms of regulation 41 of the 2014 EIA Regulations, including proof of notification to interested and affected parties.
- 3. Directorate: Waste Management Muneeb Baderoon (<u>Muneeb.Baderoon@westerncape.gov.za</u>; Tel: (021) 483 2965):
- 3.1 The waste management hierarchy (reduction, re-use and recycling of waste) must be implemented to ensure that the disposal of waste should only be considered as a last resort. All non-radioactive waste generated during the construction and operation of the transient interim storage facility (TISF) which cannot be re-used or recycled, must be disposed of at a waste disposal facility licenced to accept such waste.
- 3.2 Your attention is drawn to Schedule 3 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008), which defines and identifies categories and waste types. Category A, Section 15 of Schedule 3 identifies certain types of construction waste as hazardous waste (e.g. wastes from other construction and demolition, etc.). Such wastes must be stored in hazardous waste containers and be disposed of at a hazardous waste facility (i.e. it may not be disposed of with non-hazardous construction waste).
- 3.3 General waste and the non-hazardous portion of construction waste should be stored and disposed of separately. This recommendation is due to general waste being disposed of on the working phase of a waste disposal facility, whilst the non-hazardous construction waste is often used as cover material.
- 4. Directorate: Air Quality Management Peter Harmse (<u>Peter.Harmse@westerncape.gov.za</u>; Tel: (021) 483 8343):
- 4.1 It is anticipated that the construction of access roads and the development of the TISF will generate noise, dust and exhaust emissions, which could potentially result in significant impacts. The applicant must comply with the National Dust Control Regulations of 1 November 2013 (GN No. R. 827), promulgated in terms of the National Environmental Management: Air Quality Act, 2004

- (Act No. 39 of 2004). These regulations prohibit a person from conducting any activity in such a way as to give rise to dust in such quantities and concentrations that the dust, or dust fall, may have a detrimental impact on the environment, including health.
- 4.2 Noise generated during the construction and operation of the proposed TISF must comply with the Western Cape Noise Control Regulations (Provincial Notice 200/2013) of 20 June 2013.
- 4.3 The TISF must meet the requirements of the National Nuclear regulator and must be constructed and managed according to the International Atomic Energy Agency safety standards.
- 4.4 Personnel must be trained in emergency response procedures dealing with accidental spillage/leakage of spent fuel from dry casks.
- 4.5 The review of the existing Koeberg Nuclear Power Station Emergency Response Plan must address accidental emission from the dry casks to the atmosphere and must include the emergency incident procedures referred to in Section 30 of National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA). Any incident must immediately be reported to the relevant and all the necessary documentation must be completed and submitted to the relevant authorities within the prescribed timeframes.
- 4.6 The applicant is hereby reminded of his requirement to comply with the "Duty of care" as defined in Section 28 of the NEMA.
- 5. Directorate: Pollution and Chemicals Management Zayed Brown (Zayed.Brown@westerncape.gov.za; Tel: (021) 483 8367)
- 5.1 This Directorate has no comments on the pre-application Scoping Report and will provide detailed comment on the specialist studies to be included in the EIA Report.
- 6. Please direct all enquiries to the officials indicated in this correspondence should you require any clarity on any of the issues/comments provided.
- 7. The Department reserves the right to revise initial comments and request further information based on the information received.

Yours faithfully

HEAD OF DEPARTMENT

DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING



# ENERGY, ENVIRONMENT AND SPATIAL PLANNING DIRECTORATE ENVIRONMENTAL RESOURCE MANAGEMENT DEPARTMENT

Morné Theron

Senior Environmental Practitioner

T: (021) 444 0601 F: (021) 444 0605 E: morne.theron@capetown.gov.za

Ref: BA 21/1/2/2/13N

25 April 2016

SRK Consulting (South Africa) (Pty) Ltd Postnet Suite #206 P Bag X18 RONDEBOSCH 7701

Attention: Ms Jessica du Toit

[e-mail: jedutoit@srk.co.za] Tel: 021 659 3060

Fax: 021 685 7105

Dear Madam

# CAPE FARM 1552, DUYNEFONTEIN: USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER STATION: DRAFT SCOPING REPORT

The abovementioned draft scoping report (DSR), your reference SRK Report Number 478317/03, dated March 2016, refers.

- 1. Reflect the erf number of the subject property (i.e. Cape Farm 1552, Duynefontein) in all future documentation/report's cover pages.
- 2. A conceptual stormwater management plan in terms of the City of Cape Town: Management of Urban Stormwater Impacts Policy (2009) must form part of the final EIR. As such this must be included in the proposed Plan of Study of the EIA as already acknowledged in section 3.5.7 of the DSR.
- 3. Adequately air pollution, dust and noise mitigation measures for all phases of the project must be included in the draft Environmental Management Programme (EMPr) to be submitted during the next phase of the EIA process.
- 4. Both site alternatives are considered previously disturbed as a result of the previous power station construction activities, but appear to have been recolonized well by strandveld species. The proposal to appoint a terrestrial specialist during the EIA phase therefore is supported. The specialist should ensure that no threatened species will be impacted and this will require a late winter/early spring survey, with assistance from a local botanist familiar with the flora. These aspects should be specified in the Terms of Reference. In addition, the specialist should consider suitable mitigation for the loss of over one hectare of an Endangered ecosystem.
- 5. No infrastructure under the control of the City of Cape Town: Bulk Water Branch exists in the immediate vicinity of the proposed TISF. However, as no anticipated water demands (i.e. AADD, peak week average daily demand) were provided, the City is currently unable to confirm whether or not the City's bulk supply system has sufficient resources, treatment, bulk storage and conveyance capacity to supply the TISF (if required). Further comment will be provided during the next phase of the EIA process, provided that the AADD is provided.
- 6. Page 9 of the Draft Scoping Report stated that a NID was submitted to HWC in February 2016. A copy of the NID submitted to HWC must be included in the next phase of the EIA process.

MILNERTON IZIKO LOLUNTU MILNERTON CIVIC CENTRE 87 PIENAAR ROAD CAPE TOWN 7441 P O BOX MILNERTON 7435 WWW.CAPETOWN.GOV.ZA

MILNERTON BURGERSENTRUM

The abovementioned comment must be included and addressed in the final scoping report and Specialist Study Terms of References (as applicable). Be advised that, other than the issues raised above, the City of Cape Town concurs with the proposed specialist studies for the Impact Assessment Phase, as well as the proposed Specialist Study Terms of References listed in Section 7 of the DSR.

The City now awaits the competent authority's decision on the proposed Plan of Study for the EIA.

Kindly submit the draft Environmental Impact Report (once available) to this office in the form of 1  $\times$  hard copy and 1  $\times$  CD / flash disk version.

Yours faithfully

MORNÉ THERON

14

[ACTING] REGIONAL MANAGER: ENVIRONMENTAL & HERITAGE MANAGEMENT: Northern Region (



# **SCIENTIFIC SERVICES**

postal Private Bag X5014 Stellenbosch 7599physical Assegaaibosch Nature Reserve Jonkershoek

website www.capenature.co.za

enquiries Rhett Smart

telephone +27 21 866 8017 fax +27 21 866 1523

email rsmart@capenature.co.za

reference SSD14/2/6/1/4/1/34\_waste storage\_Koeberg

date 26 April 2016

SRK Consulting Postnet Suite 206 Private Bag X18 Rondebosch 7701

Attention: Jessica du Toit By email: jedutoit@srk.co.za

Dear Jessica

# Draft Scoping Report for the Proposed Used Fuel Transient Interim Storage Facility at Koeberg Nuclear Power Station, Cape Town

CapeNature would like to thank you for the opportunity to comment on the proposed development and would like to make the following comments. Please note that our comments only pertain to the biodiversity related impacts and not to the overall desirability of the proposed development.

The proposed facility will be placed on a concrete slab within the existing designated operational area of the existing nuclear power station. This area has been classified as No Natural, with the remainder of the Koeberg property forming part of the Koeberg Nature Reserve and therefore classified as Protected Area. The natural vegetation occurring on the property is Cape Flats Dune Strandveld, listed as Endangered. There are no freshwater features or wetlands within the footprint of the proposed facility, although they do occur elsewhere within the Koeberg Nature Reserve.

The Plan of Study for EIA proposes a terrestrial ecology specialist study, in addition to other specialist studies not related to biodiversity. CapeNature supports the proposed specialist study and recommends that the focus must be on the impact on coastal and dune ecology and related processes, due to the location near the coastline. This is however in the context of the surrounding much larger existing facility.

It should further be noted that there is already a large volume of existing information for the Koeberg property due to the various applications that have taken place on the property and could potentially be used to inform the assessment of potential impacts of the proposed facility, and therefore may not require further fieldwork, depending on the information available.

CapeNature will comment further in the EIA Phase of the project. We do wish to however point out the potential confusion that may arise between the reference to the Koeberg Nuclear Power Station Protected Area which is a restricted area surrounding the reactor units to which only authorised personnel have access and the protected area status that Koeberg Nature Reserve has in terms of the National Environmental Management: Protected Areas Act (Act 57 of 2003).

CapeNature reserves the right to revise initial comments and request further information based on any additional information that may be received.

Yours sincerely

**Rhett Smart** 

For: Manager (Scientific Services)

SRK Consulting: 478317: Koeberg TISF <i><u>Final</u></i> Scoping Report
Appendix Q:
Written Comments from Stakeholders during Scoping Phase

# **Du Toit, Jessica**

From: Trevor Moodley < Moodley T@eskom.co.za>

**Sent:** 08 July 2016 12:02 PM

**To:** Du Toit, Jessica

**Subject:** Stakeholder Engagement Process (KNPS)

Follow Up Flag: Follow up Flag Status: Flagged

Subject:Environmental Impact Assessment (EIA) for the Proposed Used Fuel Transient Interim Storage Facility at Koeberg Nuclear Power Station

Hi Jessica,

I hope you are well.

Note: The current storage in the ISI is sufficient evidence to warrant the continued storage of spent fuel, ie: Dry Casking ©. My comments/discussion:

### Location:

- 1) Will the new build and the future of Nuclear Build affect its on-site location.
- 2) The considered Ideal Location would be (North, opposite Low Level Waste area).

### Preparation for the replacement of PTR Tanks as well as the Steam Generator Replacement:

- 1) Will the time lines and urgency for implementation not clash with these activities.
- 2) Will an alternative route(extra road) be created that will service the building/construction of the Dry Cask area and not interfere with the general running and outlay of the current power plant (consider this as an alternative "evacuation" route).

I thank you and have yourself a great day further.

With Kind Regards

MAHATMA GANDHI: I shall pass through this world but once. Any good that I can show to my fellow human being, let me do it now. Let me not deter or neglect, for I shall not pass this way again.

MAHATMA GANDI: "Silence becomes cowardice when occasion demands speaking out the whole truth and acting accordingly.

BENJAMIN FRANKLIN: "Tell me and I forget. Teach me and I remember. Involve me and I learn.

# Make your passion your job, and you will never work a day in your life.

**Trevor Moodley** 

Quality Control Inspector (Mech/Corr)

Eskom(Koeberg Nuclear Power Station)

Private Bag X10, Kernkrag, 7440, CAPE TOWN, RSA.

R27 Off West Coast Rd, Melkbosstrand, Western Cape.

Tel+27(0)21 550 4911 | Direct +27(0)21 522 3116/ 522 2718 | Fax+27(0)86 667 4953

Cell a/h: +27(0)79 797 0363

E-mail trevor.moodley@eskom.co.za, Website www.eskom.co.za





NB: This email and its contents are subject to the Eskom Holdings SOC Limited email legal notice which can be viewed at <a href="http://www.eskom.co.za/Pages/Website">http://www.eskom.co.za/Pages/Website</a> Terms Conditions.aspx

I'm part of the 49Million initiative... www.eskom.co.za/idm

NB: This Email and its contents are subject to the Eskom Holdings SOC Limited EMAIL LEGAL NOTICE which can be viewed at <a href="http://www.eskom.co.za/Pages/Email Legal Spam Disclaimer.aspx">http://www.eskom.co.za/Pages/Email Legal Spam Disclaimer.aspx</a>

#### Du Toit, Jessica

From: Duval La Grange <duvall@mweb.co.za>

**Sent:** 11 July 2016 05:10 PM

**To:** Du Toit, Jessica; Shaun Pienaar; Debbie Joshua; Lewis Phidza

**Cc:** Jones, Sharon

Subject: Re: 478317: Koeberg TISF EIA - Availability of Scoping Report for comment

Follow Up Flag: Follow up Flag Status: Completed

Dear Jessica Du Toit,

I refer to our initial response: The Melkbosstrand Ratepayers Association has no objection to the Proposed Transient Interim Storage Facility for the storage of used nuclear fuel at Koeberg Nuclear Power Station. Our members regularly attend the Koeberg Public Safety Information Forum where these issues are discussed. I have also read the scoping report at the Koeberg Public Library.

Thank you for keeping us on your list of interested parties.

Best regards

Smokie La Grange

Chairperson - Melkbosstrand Ratepayers Association

Email: duvall@mweb.co.za

Cell: 073 357 6359

On 07 Jul 2016, at 5:00 PM, Du Toit, Jessica < JeDuToit@srk.co.za> wrote:

Dear Stakeholder

# NOTICE OF RELEASE OF SCOPING REPORT: PROPOSED TRANSIENT INTERIM STORAGE FACILITY FOR THE STORAGE OF USED NUCLEAR FUEL AT KOEBERG NUCLEAR POWER STATION

Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of dry casks at the Koeberg Nuclear Power Station (KNPS) to accommodate used nuclear fuel from the reactors of the power station, thereby ensuring the continued operation of the KNPS. SRK Consulting (South Africa) (Pty) Ltd (SRK) has been appointed to undertake the Scoping and Environmental Impact Reporting (S&EIR – often referred to as the Environmental Impact Assessment [EIA]) process required in terms of the National Environmental Management Act 107 of 1998 (NEMA) and the EIA Regulations, 2014.

SRK previously requested interested parties to register as stakeholders for this EIA process, and subsequently released the Draft Scoping Report to all registered stakeholders for comment, before the formal commencement of the EIA process.

The **Scoping Report** has been amended in response to the comments received during this comment period, and the EIA process has formally commenced with the submission of the Application Form to the Department of Environmental Affairs. The Scoping Report, in which changes to the previous version are clearly indicated, is now available for public review for a period of 30 days, from **8 July until 8 August 2016**. Please find attached a copy of the Executive Summary of the Scoping Report, which also provides details of how you can participate in the EIA process.

Hard copies of the full report are available for viewing at the following venues (from 8 July 2016):

- Koeberg Public Library, Duynefontein;
- Wesfleur Public Library, Atlantis;
- Cape Town Public Library;
- The Koeberg Visitors Centre; and

SRK's office in Rondebosch.

An electronic version of the report can also be accessed on SRK's website: http://www.srk.co.za/en/koeberg-tisf-eia.

Stakeholders are invited to comment, and/or to register on the project database. Stakeholders must provide their comments together with their name, contact details (preferred method of notification, e.g. email), and an indication of any direct business, financial, personal or other interest which they have in the application, to Jessica du Toit at SRK Consulting: Tel: 021 659 3060; Fax: 021 685 7105; or email: jedutoit@srk.co.za.

A **Public Open Day** will be held at the Koeberg Visitors' Centre from 15:00 until 18:30 on Thursday, 21 July 2016 at which stakeholders can discuss the project with relevant members of the Project Team. Stakeholders are invited to attend the Open Day anytime between the above times, and are requested to **confirm their intention to attend the Open Day with the contact person below**. Proof of identity will be required for access to the KNPS site.

Jessica du Toit BSc (ConsEcol), MPhil (Env Mgmt)
Environmental Consultant

#### <image001.gif>

SRK Consulting (South Africa) Pty Ltd The Administrative Building, Albion Spring, 183 Main Road, Rondebosch, 7700 Postnet Suite # 206, Private Bag X18, Rondebosch, 7701

Tel: +27-(0)21-659-3060; Fax: +27-(0)21-685-7105 Mobile: +27-(0)76-133-9776; Direct: +27-(0)21-659-3083

Email: jedutoit@srk.co.za

#### www.srk.co.za

This transmission is intended for the sole use of the addressee, and may contain information that by its privileged and confidential nature is exempt from disclosure under applicable law. You are hereby notified that any dissemination, distribution or duplication of this transmission by someone other than the intended recipient or its designated agent is strictly prohibited. If you have received this transmission in error, please notify the sender immediately by replying to this transmission, or by collect call to the above phone number.

A Please consider the environment before printing this e-mail.

<478317\_Koeberg TISF EIA\_SR Executive Summary\_July 2016.pdf>

#### Du Toit, Jessica

From: Alvin Cope <Alvin.Cope@westerncape.gov.za>

**Sent:** 12 July 2016 12:19 PM

**To:** Du Toit, Jessica

**Subject:** RE: 478317: Koeberg TISF EIA - Availability of Scoping Report for comment

Follow Up Flag: Follow up Flag Status: Completed

#### Hi Ms JdT,

- 1. Your e-m SRK Project No: 478317 of 7 July 2016 and accompanying Executive Summary to do with the Scoping Report for the Transient Interim Storage Facility on the Koeberg Nuclear Power Station site; Still no DEA&DP Ref No I see?
- 2. The contents of this Branch' se-m to you of 6 April 2016 apply *mutatis mutandis* to this latest request for comment.

Thanx,

Regards.

Α

Alvin L Cope
WCG
9 Dorp Street
P O Box 2603
Cape Town 8000
Road Network Management - Room 3-32
+27 21 483 2009 (tel)
Alvin.Cope@WesternCape.Gov.ZA



"All views or opinions expressed in this electronic message and its attachments are the view of the sender and do not necessarily reflect the views and opinions of the Western Cape Government (the WCG). No employee of the WCG is entitled to conclude a binding contract on behalf of the WCG unless he/she is an accounting officer of the WCG, or his or her authorised representative. The information contained in this message and its attachments may be confidential or privileged and is for the use of the named recipient only, except where the sender specifically states otherwise. If you are not the intended recipient you may not copy or deliver this message to anyone."

#### Adri La Meyer DIRECTORATE: DEVELOPMENT FACILITATION

Adri.LaMeyer@westerncape.gov.za

#### REFERENCES:

16/3/3/6/4/2/1/A1/14/3085/16 (Development Management) 19/2/5/3/A1/14/WL0051/16 (Waste Management) 19/4/4/A1/14 - Koeberg Nuclear Power Station (Air Quality Management)

DATE:

2016 -08- 08

The Board of Directors SRK Consultina Postnet Suite #206 Private Baa X18 RONDEBOSCH 7701

For attention: Ms Jessica du Toit

Tel: (021) 659 3060

E-mail: jedutoit@srk.co.za

Dear Madam

COMMENT ON THE DRAFT SCOPING REPORT AND PLAN OF STUDY FOR ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT THE KOEBERG NUCLEAR POWER STATION ON CAPE FARM DUYNEFONTYN NO. 1552 (DEA REFERENCE: 14/12/16/3/3/2/947)

- 1. This Department's comment of 25 April 2016 on the pre-application Scoping Report and the Draft Scoping Report ("DSR") dated July 2016 that was received on 6 July 2016, refer. The following comment from various Directorates within the Department is based on the information and responses provided in the DSR and the Comments and Responses Summary ("CRS").
- 2. Directorate: Development Management (Region 1) Melanese Schippers (Melanese.Schippers@westerncape.gov.za; Tel: (021) 483 8349):
- 2.1 The CRS states that the proposed new access road at the entrance to site alternative 1 will be between 4 and 8 metres in width and will be located inside an urban area. The DSR and CRS argues that Activity 4 of Government Notice (GN) No. R. 985 of 4 December 2014 is not applicable to the proposed development since the road will be located in an urban area. However, please be advised of the following:

- 2.1.1 As per the definition of urban areas<sup>1</sup> in terms of the Environmental Impact Assessment ("EIA") Regulations, 2014, this Directorate regards the proposed development to be located outside an urban area. As such, Activity 4 of GN. No. R. 985 may be applicable to the proposed development should the road be developed in an area containing indigenous vegetation.
- 2.1.2 Should the abovementioned listed activity be applicable to the proposed development, it must be applied for and authorisation obtained from the competent authority prior to commencement of said listed activity.
- 2.2 This Directorate is satisfied that all other issues raised in the previous comments dated 25 April 2016 have been adequately addressed.
- 3. Directorate: Waste Management Muneeb Baderoon (<u>Muneeb.Baderoon@westerncape.gov.za</u>; Tel: (021) 483 2965) and Directorate: Air Quality Management Peter Harmse (<u>Peter.Harmse@westerncape.gov.za</u>; Tel: (021) 483 8343):
- 3.1 These Directorates are satisfied that their comments dated 25 April 2016 have been adequately addressed and responded to.
- 4. Directorate: Pollution and Chemicals Management Zayed Brown (Zayed.Brown@westerncape.gov.za; Tel: (021) 483 8367):
- 4.1 This Directorate awaits the EIA Report to provide more detailed comment.
- 5. Directorate: Development Facilitation Adri La Meyer (<u>Adri.LaMeyer@westerncape.gov.za</u>; Tel: (021) 483 2887):
- 5.1 The DSR and Plan of Study ("PoS") for EIA indicate that a Heritage Specialist Study will be undertaken during the EIA phase. In response to the Notice of Intent to Develop that was submitted, Heritage Western Cape on 16 March 2016 responded that no further action in terms of Section 38 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) is required. The rationale for conducting a Heritage Specialist Study is therefore questioned since the competent heritage resources authority indicated that no further studies/assessments are required.
- 5.2 The DSR and PoS for EIA indicate that a Geohydrology Specialist Study will be undertaken during the EIA phase. Appendix B of the DSR contains comment from the Department of Water and Sanitation dated 10 May 2016, in which they state that the proposed development does not constitute a water use and hence does not require a water use authorisation in terms of the National Water Act, 1998 (Act No. 36 of 1998). The DSR states that the construction of the transient interim storage facility ("TISF") may potentially impact on groundwater levels and quality, "although this is unlikely as groundwater at the project site is deeper than the proposed TISF excavation depth." It is further noted that there is no downstream use of groundwater and that the receiving environment/ downstream

<sup>&</sup>lt;sup>1</sup> "urban areas" means areas situated within the urban edge (as defined or adopted by the competent authority), or in instances where no urban edge or boundary has been defined or adopted, it refers to areas situated within the edge of built-up areas.

receptor of any potential contamination would be the shore zone/sea. Considering the above, the rationale for conducting a Geohydrology Specialist Study is therefore questioned.

- 6. Please direct all enquiries to the officials indicated in this correspondence should you require any clarity on any of the issues/comments provided.
- 7. The Department reserves the right to revise initial comments and request further information based on new information received.

Yours faithfully

PP HEAD OF DEPARTMENT

DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING

Copy to: Ms Toinette van der Merwe (DEA)

E-mail: <u>Ivandermerwe@environment.gov.za</u>



#### ENERGY, ENVIRONMENT AND SPATIAL PLANNING DIRECTORATE ENVIRONMENTAL RESOURCE MANAGEMENT DEPARTMENT

Morné Theron Senior Environmental Practitioner

T: (021) 444 0601 F: (021) 444 0605 E: morne.theron@capetown.gov.za Ref: BA 21/1/2/2/13N

8 August 2016

SRK Consulting (South Africa) (Pty) Ltd Postnet Suite #206 P Bag X18 RONDEBOSCH 7701

Attention: Ms Jessica du Toit

[e-mail: jedutoit@srk.co.za] Tel: 021 659 3060 Fax: 021 685 7105

Dear Madam

#### CAPE FARM 1552, DUYNEFONTEIN: USED FUEL TRANSIENT INTERIM STORAGE FACILITY AT KOEBERG NUCLEAR POWER STATION: SCOPING REPORT

The abovementioned scoping report (DSR), your reference SRK Report Number 478317/04, dated July 2016, refers.

The City of Cape Town (hereafter 'the City') comments, dated 9 November 2015 and 25 April 2016, on the BID and draft scoping report respectively have adequately been reflected and addressed in the scoping report.

- The City of Cape Town: Air Quality Branch requested that the Environmental Management Programme (EMP) must contain details of how the storage facility will be monitored for radiation for worker- and public safety for the duration of the project.
- 2. The City has nothing further to add to the proposed Plan of Study for the EIA as contained in Section 7 of the scoping report.

The City now awaits the competent authority's decision on the proposed Plan of Study for the EIA.

Kindly submit the draft Environmental Impact Report (once available) to this office in the form of 1  $\times$  hard copy and 1  $\times$  CD / flash disk version.

Yours faithfully

(for) REGIONAL MANAGER: ENVIRONMENTAL & HERITAGE MANAGEMENT: Northern Region

MILNERTON CIVIC CENTRE MILNERTON IZIKO LOLUNTU 87 PIENAAR ROAD CAPE TOWN 7441 P O BOX MILNERTON 7435 WWW.CAPETOWN.GOV.ZA MILNERTON BURGERSENTRUM



#### **SCIENTIFIC SERVICES**

postal Private Bag X5014 Stellenbosch 7599physical Assegaaibosch Nature Reserve Jonkershoek

website www.capenature.co.za

enquiries Rhett Smart

telephone +27 21 866 8017 fax +27 21 866 1523

email rsmart@capenature.co.za

reference SSD14/2/6/1/4/1/34\_waste storage\_Koeberg

date 12 August 2016

SRK Consulting Postnet Suite 206 Private Bag X18 Rondebosch 7701

Attention: Jessica du Toit By email: jedutoit@srk.co.za

Dear Jessica

#### Final Scoping Report for the Proposed Used Fuel Transient Interim Storage Facility at Koeberg Nuclear Power Station, Cape Town

CapeNature would like to thank you for the opportunity to comment on the proposed development and would like to make the following comments. Please note that our comments only pertain to the biodiversity related impacts and not to the overall desirability of the proposed development.

CapeNature has taken note of the responses to our comments in the comments and response report and are satisfied that our comments have been addressed. We have noted that a clear distinction has been made between the protected area in terms of the NEM:PAA nature reserve and the protected area in terms of safety and security, which has been termed the security protected area (SPA), and that there should be no room for confusion.

In terms of the terrestrial ecology specialist report, we have noted that it has already been undertaken and we will comment in more detail on the Draft Environmental Impact Assessment Report which will contain the specialist reports.

CapeNature reserves the right to revise initial comments and request further information based on any additional information that may be received.

Yours sincerely

Rhett Smart

For: Manager (Scientific Services)

#### Appendix R: Comments and Responses Summary

#### Comments and Responses Summary: Koeberg Transient Interim Storage Facility (TISF): Pre-Application and Scoping Phase

The Comments and Responses Summary provided below reflects stakeholder comments received by SRK in response to the Background Information Document (BID) released to the public in October 2015, the (pre-application) Draft Scoping Report (DSR) released to the public in March 2016, and the (formal process) Scoping Report (SR) released to the public in July 2016 after the commencement of the formal NEMA EIA process.

Please note that the key issues (rather than the full comments by stakeholders) have been captured in the table. Full copies of all written comments received are included in Appendix L. Not all issues captured are based on written comments received; some arose from discussions with stakeholders at the Public Open Days (held on 27 October 2015 and 21 July 2016) or from authorities at the authorities' focus group meetings on 20 November 2015, 26 January and 27 July 2016. Notes of the authorities' focus group meetings are included in Appendix J. Responses to issues captured in the table are provided by SRK and/or Eskom.

Issues are grouped as per the following general themes in the Comments and Responses Summary Table:

- A. Project Motivation and Background
- B. Project Description
- C. Clarification of Project Description in Draft Scoping Report
- D. Alternatives
- E. Potential Impacts, Risks and Safety Concerns of the Project
- F. Cumulative Impacts
- G. Current Operations
- H. The EIA Process
- I. Regulatory Requirements
- J. General

#### Abbreviations used in the Comments and Responses Summary

AADD Annual Average Daily Demand
BID Background Information Document
CISF Central Interim Storage Facility

CoCT City of Cape Town
CSB Cask Storage Building

**DEA** Department of Environmental Affairs (National)

**DEA&DP** Department of Environmental Affairs and Development Planning (Western Cape)

**DSR** Draft Scoping Report

**DWS** Department of Water and Sanitation

**EIA** Environmental Impact Assessment

EMPr Environmental Impact Assessment Report
EMPr Environmental Management Programme

ERP Emergency Response Plan
HWC Heritage Western Cape
ISI In Service Inspection

**KNPS** Koeberg Nuclear Power Station

**LNG** Liquified Natural Gas

NEMA National Environmental Management Act 107 of 1998

NEM:PAA National Environmental Management: Protected Areas Act 57 of 2003

NHRA National Heritage Resources Act 25 of 1999

NID Notice of Intent to Develop

NNR National Nuclear Regulator

NWA National Water Act 36 of 1998

POS Plan of Study

SFP Spent Fuel Pool

SR Scoping Report

TISF Transient Interim Storage Facility

WCG Western Cape Government

Written comments were received from a number of stakeholders, as listed in Table 1.

Table 1: Written comments from Stakeholders (October 2015 – August 2016)

#	Stakeholder	Affiliation	Comment received					
Ba	Background Information Document							
1.	Bettie Leedo	City of Cape Town (CoCT), Environmental Health: Western District	9/10/2015					
2.	Jan Norman	Private	9/10/2015					
3.	SM La Grange	Chairperson: Melkbosstrand Ratepayers Association	12/10/2015					
4.	Oloff Dreyer	Melkbosstrand Private School	16/10/2015					
5.	Ryno van der Riet	Private	20/10/2015					
6.	Tug Wilson	Private	27/10/2015					
7.	Graham Arbuckle	Private	27/10/2015					
8.	Graham Arbuckle	Private	28/10/2015					

#	Stakeholder	Affiliation	Comment received
9.	Rhett Smart	CapeNature	9/11/2015
10.	Pat Titmuss	CoCT, Regional Manager: Environmental and Heritage Management: Northern Region (Blaauwberg District)	9/11/2015
Dra	ft Scoping Report (pre-appl	ication)	
11.	Trevor Moodley	Eskom Quality Control Inspector	18/03/2016
12.	Mike Thurgood	Private	18/03/2016
13.	Salome Mambane	DEA: Environmental Officer: Integrated Environmental Authorisations	05/04/2016
14.	Alvin Cope	Western Cape Government, Road Network Management	06/04/2016
15.	G Paulse	Western Cape Government	13/04/2016
16.	Morné Theron	CoCT: Environmental Resources Management	25/04/2016
17.	Melanese Schippers	DEA&DP Directorate: Development Management	25/04/2016
18.	Muneeb Baderoon	DEA&DP Directorate: Waste Management	25/04/2016
19.	Peter Harmse	DEA&DP Directorate: Air Quality Management	25/04/2016
20.	Zayed Brown	DEA&DP Directorate: Pollution and Chemicals Management	
Sco	pping Report (formal proces	s)	
21.	Trevor Moodley	Eskom Quality Control Inspector	08/07/2016
22.	SM La Grange	Chairperson: Melkbosstrand Ratepayers Association	11/07/2016
23.	Alvin Cope	Western Cape Government, Road Network Management	12/07/2016
24.	Melanese Schippers	DEA&DP Directorate: Development Management	08/08/2016
25.	Adri la Meyer	DEA&DP Directorate: Development Facilitation	08/08/2016
26.	Morné Theron	CoCT: Environmental Resources Management	08/08/2016

A number of verbal comments were received from stakeholders, as listed in Table 2.

Table 2: Verbal comments from stakeholders (October 2015 – August 2016)

#	Stakeholder	Affiliation				
Pul	Public Open Day: 27 October 2015					
1.	Robert Mayhew	Private				
2.	Graham Arbuckle	Private				
Tel	Telephone Call: 23 November 2015					
3.	A.M. Neethling	Private				

#	Stakeholder	Affiliation						
Au	Authorities' Focus Group Meeting: 26 January 2016							
4.	Morné Theron	CoCT: Environmental Resources Management						
5.	Russell Mehl	DEA&DP: Pollution Management						
6.	lan Gildenhuys	CoCT: City Health						
7.	Zayed Brown	DEA&DP: Pollution Management						
Au	Authorities' Focus Group Meeting: 27 July 2016							
8.	Thorsten Aab	DEA&DP: Waste Management						
9.	lan Gildenhuys	CoCT: City Health						
10.	Adri la Meyer	DEA&DP: Development Facilitation						

#### Comments and Responses Summary: Koeberg TISF: Pre-Application and Scoping Phase

No	Issues	Document <sup>1</sup>	Stakeholder	Response
A.	Project Motivation and Background			
1.	Used nuclear fuel should not be stored in such close proximity to a residential suburb.	Background Information	Jan Norman, private	The potential impact of the TISF on human health of the communities surrounding KNPS will be identified and assessed by a Human Health Specialist.
		Document (BID)		A Radiological Assessment was commissioned by Eskom prior to commencement of the EIA. The findings of the Radiological Assessment will feed into the Human Health Specialist Study. In order to meet the independence requirements as stipulated in the EIA
			Graham Arbuckle, private	Regulations, 2014, an independent review of the Radiological Assessment will be undertaken to inform the EIA process and ensure compliance with national legislation and international best practice.
2.	Why is the CISF assumed to be unavailable for use by 2025?	BID	Bettie Leedo, CoCT	The Radioactive Waste Management Policy and Strategy for the Republic of South Africa (2005) establishes a national radioactive waste policy framework setting out the principles
3.	Why is the CISF not in place?	BID	Graham Arbuckle, private	and structures for the management of radioactive waste in a coordinated and cooperative manner. The Policy acknowledges that the disposal of high level waste presents the greatest challenges and investigations into the best long-term option for the management of used fuel are ongoing. In the interim, the Policy states that used nuclear fuel is and
4.	If more nuclear stations are to be built, a central repository is more feasible.	BID	"Tug" Wilson, private	shall continue to be stored in authorised facilities within the generator's sites. The Policy does recognise that such storage is finite and storing used fuel on these sites is not
5.	Due to the construction of the TISF, the political will to pursue the construction of a permanent storage solution will become diffused. The approval of construction of the TISF should be conditional on a commitment to build a permanent storage/reprocessing facility at a site elsewhere.	BID	Graham Arbuckle, private	sustainable.  The Policy states that Government is responsible for ensuring that investigations are conducted within set timeframes to consider the various options for safe management of used fuel and high level radioactive waste in South Africa. Included in the options for investigation are the following:  • Long-term above ground storage at a CISF;
6.	Could the TISF potentially become permanent, until the end of Koeberg's operating life? What if the CISF is not built?	BID	Morné Theron, CoCT	<ul> <li>Reprocessing, conditioning and recycling; and</li> <li>Deep geological disposal.</li> </ul>
	- Suit.	SR	Thorsten Aab, DEA&DP	The CISF is a proposed central storage facility for used nuclear fuel and waste, to be established by the National Radioactive Waste Disposal Institute.  Due to the uncertainty regarding the development of the CISF, only likely to be in
7.	Why build the TISF? Why not go straight to the CISF?	SR	Thorsten Aab, DEA&DP	operation after 2025, it has become imperative for Eskom to investigate interim options the storage of used fuel on the KNPS site. Additional storage capacity will be required

<sup>&</sup>lt;sup>1</sup> Public document in response to which comments were made.

No	Issues	Document <sup>1</sup>	Stakeholder	Response
8.	If KNPS has been operating since 1984, and with the plans to build additional nuclear reactors in South Africa, why has the CISF not been established yet?	SR	Thorsten Aab, DEA&DP	accommodate any further used fuel generated at KNPS. Once (if and when) the CISF is constructed, the dry storage casks will be transported from the TISF to the CISF for long term storage/disposal.
9.	Due to the lack of any existing permanent storage solutions, will the TISF will be used for waste from other Nuclear Power Stations, including those proposed at	BID	Graham Arbuckle, private	The TISF will only store used fuel generated at the existing KNPS site. Any new facility would need to make allowance for the temporary storage of used fuel produced by the facility until the establishment of the CISF. For new nuclear reactors, the Spent Fuel Pools
	Duynefontein and Thuyspunt, which would also need temporary used fuel storage until the CISF has been established?		Zayed Brown, CoCT	(SFPs) only have capacity to store used fuel for 10 years. It is however anticipated that the new facility may only be established around 2025, approximately the same time that the CISF is due to be established.
	CStabilished:	DSR	Mike Thurgood, private	the olds is due to be established.
		SR	lan Gildenhuys, CoCT	
10.	Why is used fuel not being stored at Vaalputs?	BID	"Tug" Wilson, private	Vaalputs is the national nuclear waste disposal site for low and intermediate level waste. There is currently no national nuclear waste disposal site for high level waste.
			Robert Mayhew, private	
			A.M. Neethling, private	
			Zayed Brown, DEA&DP	
		SR	Thorsten Aab, DEA&DP	
11.	Potentially harmful radioactive materials should not be stored on site at KNPS in quantities higher than originally planned for by the design of KNPS.	BID	Graham Arbuckle, private	Due to the uncertainty regarding the development of the CISF, it has become imperative for Eskom to investigate interim options for the storage of used fuel on the KNPS site. Additional storage capacity will be required to accommodate any further used fuel
12.	Used fuel should not be stored on site as the site is optimized for power plant operation, not nuclear waste storage.	BID	Graham Arbuckle, private	generated at KNPS.  Eskom has a comprehensive Emergency Response Plan (ERP) for KNPS. The ERP will be reviewed and revised to incorporate emergency response procedures associated with the TISF. In the case of the TISF, there is very unlikely to be a scenario of severe damage to (KNPS and) the used fuel casks that would generate a radiation plume exceeding the plume from the (simultaneously damaged) reactor units or from the SFP. A detailed analysis of possible scenarios that may lead to radiological releases will be assessed in the Probabilistic Safety Assessment which has been commissioned by Eskom. The Probabilistic Safety Assessment will also inform the review of the KNPS ERP.  A Radiological Assessment, commissioned by Eskom, will assess the potential radiation

No	Issues	Document <sup>1</sup>	Stakeholder	Response
				impacts of the TISF on Eskom employees and surrounding communities. An independent review of the Radiological Assessment will be undertaken to inform the EIA process and ensure compliance with national legislation and international best practice.  Radiation risks associated with the TISF, and appropriate emergency response, will be evaluated by the National Nuclear Regulator (NNR), who will need to be assured that these matters are correctly addressed prior to authorising the TISF.
13.	The EIA Regulations, 2014, stipulate that a Scoping Report must include a motivation for the need and desirability of the activity in the context of the preferred location, however, a motivation of the need and desirability in the context of the preferred location has not been included.	DSR	Melanese Schippers, DEA&DP	A motivation for the need and desirability in the context of the preferred location has been included in the Scoping Report to be released for public comment following commencement of the formal Application process.
B.	Project Description			
14.	For how long will the used fuel be stored on site? With the lack of any existing permanent storage solutions, would this not continue up to and beyond the operating life of	BID	Bettie Leedo, CoCT	The strategy for storage of used fuel at the TISF assumes that the planned CISF will not be commissioned earlier than 2025. However, due to the uncertainty around the development of the CISF, the TISF may be required through to the end of the expected
	KNPS?		Arbuckle, private	operational life of KNPS. Once the CISF is constructed, the dry storage casks will be incrementally transported from the TISF to the CISF for long term storage/disposal.
15.	In terms of storage of used fuel in the TISF, how long is temporary?	SR	Thorsten Aab, DEA&DP	
16.	How would casks be transported?	BID	"Tug" Wilson, private	The dry storage casks will be transferred from the fuel buildings to the TISF on the existing KNPS internal road network and a new site access road on a specially designed
			Robert Mayhew, private	vehicle. The sequence of loading one dry storage cask at the fuel building and transferring the cask to the TISF will take approximately 10 working days.
			pau	The dry storage casks will be transported by road from the TISF to the CISF for long term storage/disposal.
17.	Are the storage casks safe to fly?	BID	"Tug" Wilson, private	Eskom is not planning to transport the casks by air.
18.	What procedure will be followed if a cask must be moved or removed from the TISF?	SR	Thorsten Aab, DEA&DP	The same procedure that will be used to place the casks in the TISF. The TISF ancillary building will house the necessary cask moving equipment.
19.	The stockpiling of used fuel at Koeberg will increase the potential "source term" while at the same time the population is increasing in the emergency planning zone	BID	"Tug" Wilson, private	Eskom has a comprehensive Emergency Response Plan (ERP) for KNPS. The ERP will be reviewed and revised to incorporate emergency response procedures associated with the TISF. In the case of the TISF, there is very unlikely to be a scenario of severe damage
	(16km) and getting closer to Koeberg. A large shopping mall (R1,9 Billion) is under construction within the zone and only 12km from Koeberg.		Robert Mayhew, private	to (KNPS and) the used fuel casks that would generate a radiation plume exceeding the plume from the (simultaneously damaged) reactor units or from the SFP. A detailed analysis of possible scenarios that may lead to radiological releases will be assessed in the Probabilistic Safety Assessment which has been commissioned by Eskom. The

No	Issues	Document <sup>1</sup>	Stakeholder	Response
				Probabilistic Safety Assessment will also inform the review of the KNPS ERP.
				A Radiological Assessment, commissioned by Eskom, will assess the potential radiation impacts of the TISF on Eskom employees and surrounding communities. An independent review of the Radiological Assessment will be undertaken to inform the EIA process and ensure compliance with national legislation and international best practice.  Radiation risks associated with the TISF, and appropriate emergency response, will be evaluated by the NNR, who will need to be assured that these matters are correctly addressed prior to authorising the TISF.
20.	The Koeberg Emergency Plan contains strict guidelines with respect to source term, emergency planning zones, low population zone, owner-controlled area, etc. Is Koeberg not already in conflict with the original licence?	BID	"Tug" Wilson, private	The requirements for Emergency Preparedness and Response are specified in licence documentation such as NIL-001 "Nuclear Installation Licence", RD-0014 "Emergency Preparedness and Response Requirements for Nuclear Installations" and the Koeberg Safety Analysis Report. Some key pertinent points with respect to the question posed are the requirement to be able to evacuate the 5 km zone within 4 hours and the 16 km zone within 16 hours. These Emergency Preparedness and Response criteria were reviewed following the Fukushima Daiichi accident and were determined to still be appropriate ("Reassessment of Koeberg EP Technical Basis and EP Zone Sizes", R1617R1, Eskom, 2012). This review considered the potential radioactive releases from multi-unit accidents and the spent fuel pool accidents. The potential releases from used fuel storage casks has also been assessed and has no impact on the ability to implement emergency actions since any releases from the casks are orders of magnitude less than that possible from the reactors and the spent fuel pools on which the Emergency Preparedness and Response requirements are based.  The ability to meet these Emergency Preparedness and Response requirements depends upon disaster management resources both in terms of equipment and personnel. Although some challenges were experienced within the recent annual Emergency Preparedness and Response exercise; the evacuation times and source terms used were not questioned.  Further, a technical assessment was recently performed which indicates that the 5 km zone can indeed be evacuated within 4 hours and the 16 km zone within 16 hours for the predicted growth in local developments (housing and roads) that will occur while Koeberg operates ("Report on the update of the 2006 KNPS Traffic Evacuation Model", COC, 2012). All proposed developments within 16 km of KNPS undergo a similar assessment.
21.	Will the new casks be the same as the existing casks?	BID	Morné Theron, CoCT	The existing casks are metal casks. The nature of the new casks will depend on the tender process, but all casks will comply with the relevant NNR regulations and
22.	Will fuel assemblies be encapsulated in metal containers?	BID	Zayed Brown, DEA&DP	specifications.
23.	How long will it take to construct the concrete slab?	BID	Morné Theron,	The TISF facility would be required in 2019, and construction will take 12 months, so

No	Issues	Document <sup>1</sup>	Stakeholder	Response
24.	What is the construction lead time?		CoCT	construction is scheduled to commence in 2018. This allows sufficient time for the EIA process to be completed.
25.	Are there different design requirements for a temporary storage facility and a permanent facility?	BID	Russell Mehl, DEA&DP	A permanent facility (such as a CISF) would require a building with thick walls and a thick concrete slab, while a temporary structure requires only a thick concrete slab. A permanent structure cannot be authorised under KNPS' current licence from the NNR. Therefore a temporary storage facility is proposed at KNPS for which the existing licence can be amended.
26.	Will the TISF remain uncovered (without a roof structure)?	BID	Morné Theron, CoCT	Yes, the TISF will remain uncovered. An unenclosed concrete slab (on which the casks are positioned) is safer as it allows for effective heat exchange and cooling of the individual casks. In case of an emergency situation (e.g. a tsunami event) a building (with a roof structure) could collapse thus preventing adequate heat exchange of the casks. A building able to withstand a tsunami event would be extremely expensive to construct. Eskom cannot afford such a structure at present, and if constructed it could become a permanent facility.  The licence issued by the NNR would be valid for a storage period of 5 years, thereafter Eskom would need to re-apply, at which stage the NNR would re-assess the safety case.
27.	The waste management hierarchy (reduction, re-use and recycling of waste) must be implemented to ensure that the disposal of waste should only be considered as a last resort. All waste must be correctly stored, handled and disposed of depending on whether it is classified as hazardous or non-hazardous.	DSR	Muneeb Baderoon, DEA&DP	All non-radioactive or general waste generated during the construction and operational phases of the TISF project, which cannot be reused or recycled, will be disposed of at a licensed municipal facility.  Construction waste classified as hazardous (as per Category A, Section 15 of Schedule 3 of the National Environmental Management: Waste Act, 2008) generated during the construction and operational phases of the TISF project will be temporarily stored in a designated hazardous waste container or skip until final disposal at a licensed hazardous facility (i.e. Visserhok site).  General waste and the non-hazardous portion of construction waste generated by TISF project will be stored on site and disposed of separately.
28.	Will future building plans affect the on-site location of the TISF?	SR	Trevor Moodley, Eskom	The TISF location has taken priority over future on-site building plans.
29.	The ideal location of the TISF would be Alternative 1, which is adjacent to the low level waste area.	SR	Trevor Moodley, Eskom	Noted.
30.	Will an additional road be created for access to the TISF so that the TISF does not interfere with the operations of KNPS and the current layout of the plant? This additional road could be considered as an alternative evacuation route.	SR	Trevor Moodley, Eskom	The existing KNPS internal road network will be used to transfer casks from the SFP to the TISF. Casking operations will occur outside the outage / maintenance periods and will therefore not adversely interfere with the operations of KNPS.

No	Issues	Document <sup>1</sup>	Stakeholder	Response
C.	Clarification of Project Description in Draft Scoping Repor	t		
31.	Clarity with respect to the width of the access road to the entrance of site alternative 1 must be provided in order to determine whether Activity 4 of GN. No. R985 of 4 December 2014 is applicable to the proposed development.	DSR	Melanese Schippers, DEA&DP	The new access road at the entrance to site alternative 1 will be more than 4 m but less than 8 m in width. This information has been included in the Scoping Report to be released for public comment following commencement of the formal Application process. Activity 4 of GN. No. R985 is not applicable to the proposed development, as the development is within an urban area.
32.	The detailed activity description included in the EIAR must include, inter alia, a description of the associated infrastructure (e.g. width of the road to be constructed), water demands (i.e. Annual Average Daily Demand	DSR	Melanese Schippers, DEA&DP	More detailed design information related to the TISF project will be included in the EIA Report.  The estimated AADD and the weekly peak volumes required for the TISF project will be
	(AADD), peak week average daily demand) and electricity requirements for the proposed development.		Morné Theron, CoCT	provided during the EIA Phase.
33.	Potential confusion could arise between the reference to the Koeberg Nuclear Power Station Protected Area and the protected area status that Koeberg Nature Reserve has in terms of the National Environmental Management: Protected Areas Act (Act 57 of 2003) (NEM:PAA).	DSR	Rhett Smart, CapeNature	Although KNPS site does fall within the Koeberg Nature Reserve, which is classified as protected in terms of National Environmental Management: Protected Areas Act (NEM:PAA), the TISF site will be situated within the Development Zone - Noxious Industry.  In terms of the Koeberg's Standard Security requirements for Nuclear Power Stations, part of this Development Zone-Noxious Industry is also referred to as a "Protected Area" but has no relevance to any biodiversity / ecological aspects. This distinction has been made in the Scoping Report, where the KNPS protected Areas is referred to as the KNPS Security Protected Area.
34.	The high-water mark indicated in Figure 3-5 of the pre- application Scoping Report appears to depict the low-water mark of the sea.	DSR	Melanese Schippers, DEA&DP	The high-water mark in relation to Alternative 1 has been delineated in the Scoping Report (Figure 3-5) to be released for public comment following commencement of the formal Application process.
D.	Alternatives			
35.	Has Eskom considered reprocessing and the financial cost of reprocessing compared to the cost to the environment/humans? If there is fuel left in the used rods it should be utilised so that we do not deplete the earth of minerals.	BID	Robert Mayhew, private	The Radioactive Waste Management Policy and Strategy for the Republic of South Africa (2005) establishes a national radioactive waste policy framework setting out the principles and structures for the management of radioactive waste in a coordinated and cooperative manner.  The Policy states that Government is responsible for ensuring that investigations are
36.	Why has no contingency plan been put in place to recycle or reprocess used fuel?	BID	Zayed Brown, DEA&DP	conducted within set timeframes to consider the various options for safe management of used fuel and high level radioactive waste in South Africa including the reprocessing,
37.	Why isn't used nuclear fuel reprocessed?	SR	Thorsten Aab, DEA&DP	conditioning and recycling of used fuel.  Reprocessing is a future option and is not feasible at present.

No	Issues	Document <sup>1</sup>	Stakeholder	Response
E.	Potential Impacts, Risks and Safety Concerns of the Proj	ect	•	
38.	The proposed activities could impact on coastal processes due to the proximity to the coastline.	BID, DSR	Rhett Smart, CapeNature	The TISF will be located within the Security Protected Area of KNPS, a flat area disturbed by previous construction activities and by current operational activities at KNPS. The TISF will be located more than 100 m from the high-water mark of the sea.
				It is not considered necessary for the terrestrial specialist to focus on the impact on coastal and dune ecology and related processes. The terrestrial ecology specialist report has been drafted, and no impacts on these systems were identified by the specialist.
39.	What are the potential visual impacts of the TISF?	BID	Graham Arbuckle, private	The potential deterioration of sense of place and aesthetic value caused by the TISF will be assessed in a Visual Specialist Study. The TISF will be located in the KNPS Owner Controlled Area, a substantially modified landscape and is therefore unlikely to have significant negative visual impacts for receptors.
40.	How will the contamination of groundwater be prevented?	BID	Bettie Leedo, CoCT	The construction of the TISF may potentially impact on groundwater levels and quality although this is unlikely as groundwater at the project site is deeper than the proposed TISF excavation depth. The potential impact on groundwater will be assessed in a Geohydrology Specialist Study.
41.	General operational health and safety precautions must be followed.	BID	Oloff Dreyer, private	All applicable regulations and requirements will be met by Eskom.
42.	What is the projected design lifespan of the proposed casks, as well as the expected period that the materials stored within the casks would remain hazardous?	BID	Graham Arbuckle, private	The design lifespan is 50 years and service life is up to 100 years. The used fuel is hazardous for more than 100 years.
43.	What safety checks would be undertaken to ensure the casks remain effective, and what procedures are in place for replacing the casks as required?	BID	Graham Arbuckle, private	Casks are inherently safe. However, to ensure they remain effective, inspections are regularly performed.
44.	Koeberg is not secure enough from the sea side. What if there is an attack?	BID	A.M. Neethling, private	KNPS have security protocols in place to counteract seaside and land based attacks.
45.	Is there any international experience of casks leaking and emitting radiation?	BID	lan Gildenhuys, CoCT	The casks are constructed of steel and concrete and contain polymers which absorb radiation. The integrity of casks is stringently tested according to NNR standards. Extremely robust technology is used to prevent radiation exposure, and casks are designed to withstand a 9m drop and temperatures of 800°C. No casks are known to have leaked to date.
46.	If the casks are damaged, will there be radiation exposure?	BID	Morné Theron, CoCT	Casks cost approximately R 40 to 50 million each, and are designed for at least a 50 year lifespan. Monitoring between the two lids of an individual cask takes place, so that any leaks would be detected.
				Any maintenance on the casks will be conducted inside the Cask Storage Building (CSB). The lids of the casks will never be lifted, and the fuel assemblies will never be exposed to the atmosphere.

No	Issues	Document <sup>1</sup>	Stakeholder	Response
47.	What is the security risk of used fuel storage in the TISF?	BID	lan Gildenhuys, CoCT	Each cask weighs approximately 150 tonnes, so they are not easily moved or stolen.  In terms of International Atomic Energy Agency (IAEA) requirements, the TISF will need to be monitored and will be linked to cameras at KNPS. It will also be independently monitored by the IAEA.
48.	Although KNPS is a secure site, the TISF, with its upstanding storage casks, would be at a major risk of drone attacks. Sophisticated air strike detecting equipment would need to be installed around the site, with the capability to both divert the drones and shoot them down.	DSR	Mike Thurgood, private	The KNPS site has to comply with NNR and National Key Point Acts. Therefore all security threats on KNPS (which will include the TISF site) have been identified and addressed accordingly.  In addition, the cask design is robust against external impact forces (i.e. cask can typically withstand an aircraft crash), including explosive forces.  As part of the NNR licensing process all postulated credible and non-credible external influences (i.e. missile and explosive attacks) are considered.
49.	It is anticipated that the construction of access roads and the development of the TISF will generate noise, dust and exhaust emissions. The applicant must comply with the relevant noise and dust control regulations.  Adequate air pollution, dust and noise mitigation measures for all phases of the project must be included in the draft Environmental Management Programme (EMPr) to be submitted during the next phase of the EIA process.	DSR	Peter Harmse, DEA&DP	The impact of the construction of access roads and the development of the TISF on air quality (including noise, dust and emissions) will be assessed in the EIA.  Suitable mitigation measures with respect to managing impacts related to dust, noise and air pollution will be included in the EMPr (to be appended to the EIA Report). These mitigation measures will ensure compliance with the National Dust Control Regulations and Western Cape Noise Control Regulations.
		DSR	Morné Theron, CoCT	Noted.
50.	Personnel must be trained in emergency response procedures dealing with accidental spillage/leakage of spent fuel from dry casks.	DSR	Peter Harmse, DEA&DP	The update of the ERP will include appropriate mitigation measures for accident conditions.
51.	Both site alternatives are considered previously disturbed as a result of the previous power station construction activities, but appear to have been recolonized well by strandveld species. The terrestrial specialist should ensure that no threatened species will be impacted. This will require a later winter/early spring survey, with assistance from a local botanist familiar with the flora. These aspects should be specified in the Terms of Reference. In addition, the specialist should consider suitable mitigation for the loss of over one hectare of an Endangered ecosystem.	DSR	Morné Theron, CoCT	The terrestrial ecology specialist confirmed that "The vegetation assessment was undertaken in June 2015 and was therefore not undertaken in the peak spring flowering season for the region. Therefore, a lack of flowering perennial plant material and the absence of annual and bulbous species which only occur after winter rainfall, created a limitation to the identification of floral species and Species of Conservation Concern (SCC) in the area. However, the level of detail undertaken in the study is considered sufficient to ensure that the results of this assessment accurately define the Ecological Importance and Sensitivity (EIS) and the Present Ecological State (PES) of the site alternatives and to provide the relevant planners and decision makers with sufficient information to formulate an opinion on the viability of the proposed development from a conservation viewpoint."
52.	External casking is an excellent and proven technology that is safe for this cause. The chosen locations on site guarantee its protection, control and strict oversight.	DSR	Trevor Moodley, Eskom	Noted.

No	Issues	Document <sup>1</sup>	Stakeholder	Response
53.	Is used fuel solid or liquid? Can used fuel leak?	SR	Thorsten Aab, DEA&DP	Used fuel is solid, with some gases contained within a metal tube. The metal tube can form pinholes that leak due to oxidation. At KNPS, used fuel is tested for absence of leaks before it is loaded into dry storage casks. The interior of the casks is filled with Helium (an inert gas) to preclude oxidation thereby preventing degradation of the metal tube during storage.
54.	How hot are the storage casks storing used fuel after 10 years? Won't the heat generated from the storage casks affect the environment?	SR	Thorsten Aab, DEA&DP	The heat generated by the casks is minimal and is dissipated naturally without having an effect on the environment.
55.	Will the timelines and urgency for implementation of the TISF clash with the replacement of Refuelling Water Storage tanks and steam generators?	SR	Trevor Moodley, Eskom	Some work will take place concurrently. Dedicated project teams will ensure the projects are executed as planned.
F.	Cumulative Impacts			
56.	What is the layout and location of the TISF in relation to the Nuclear 1 site?	BID	Graham Arbuckle, private	The TISF will be located within the Owner Controlled Area of KNPS. The location of the TISF in relation to all other current projects at KNPS is illustrated on Figure 7-1 of the Scoping Report.
57.	The EIA process must take into consideration the other proposed projects on the Koeberg site, in order to assess the cumulative impact of all these projects. The following projects could potentially contribute to the cumulative impact:  • Eskom Nuclear-1 proposals • Eskom Weskusfleur substation proposals • Sunbird Ibhubesi methane gas pipeline proposals • Western Cape Government LNG pipeline proposals • City of Cape Town pilot desalination plant proposals.	BID	Graham Arbuckle, private	The potential direct, indirect and cumulative impacts (negative and positive) of the project and the No Go option will be addressed in the Impact Assessment Phase of the EIA. The cumulative impacts of those projects identified by the stakeholder as well as other proposed projects will be described qualitatively.
58.	What is the cumulative exposure of radiation from the TISF, the existing nuclear plant, and the proposed new nuclear plant (Nuclear 1)?	BID	lan Gildenhuys, CoCT	The cumulative radiation from the KNPS site and the TISF is expected to be almost negligible.
59.	The EMPr must contain details of how the storage facility will be monitored for radiation for worker and public safety for the duration of the project.	SR	Morné Theron, CoCT	Noted.
G.	<b>Current Operations</b>			
60.	How often do (maintenance) outages occur?	BID	Morné Theron, CoCT	KNPS performs an outage approximately every 18 months per reactor unit.

No	Issues	Document <sup>1</sup>	Stakeholder	Response
61.	What is done with contaminated water used for cooling in the SFPs?	BID	Zayed Brown, DEA&DP	The SFPs are in a closed system, i.e. the water stays in the pools and is filtered to remove some of the contaminants. This water is not released into the environment.
62.	How long has KNPS been storing used fuel? Is all used fuel currently stored in the SPFs?	SR	Thorsten Aab, DEA&DP	All used fuel assemblies (with exception of 112 used fuel assemblies stored in dry storage casks) since the start of operation is stored in the spent fuel pools.
63.	Is the KNPS running at maximum capacity?	SR	Thorsten Aab, DEA&DP	The KNPS is currently running as designed, at 100% power output.
H.	The EIA Process			
64.	Will the proposed development include specialist studies related to health and safety risk? Will these studies also include the natural environment as potential affected components within these studies?	BID	Rhett Smart, CapeNature	A Terrestrial Ecology Specialist Study, Heath Specialist Study and Radiation Assessment Review will be undertaken as part of the Impact Assessment Phase. In addition, Eskom will commission review of the ERP to provide assurance that risks and emergency response linked to the TISF are adequately addressed and/or recommend measures to ensure that this is the case. SRK will ensure that the risk on the natural environment is included in the scope of these studies.
65.	The proposed project requires a comprehensive risk assessment, including consequential risks and cumulative risk in the event of:  1) A seismic event 2) Fire 3) A nuclear emergency at KNPS 4) Risk assessment on the interaction between Koeberg and Nuclear 1.	BID	Graham Arbuckle, private	The establishment of the TISF will be incorporated into the existing KNPS Emergency Response Plan (to be attached to the EIA Report as supporting information). This Plan will provide adequate management measures for environmental risks.
66.	The review of the existing Koeberg Nuclear Power Station Emergency Response Plan must address accidental emission from the dry casks to the atmosphere and must include the emergency incident procedures referred to in Section 30 of NEMA. Any incident must immediately be reported to the relevant authorities and all the necessary documentation must be completed and submitted to the relevant authorities within the prescribed timeframes.	DSR	Peter Harmse, DEA&DP	Update of the KNPS ERP falls outside the scope of this EIA process and will be undertaken/commissioned at a later stage.
67.	The applicant is hereby reminded of his requirement to comply with the "Duty of care" as defined in Section 28 of the NEMA.	DSR	Peter Harmse, DEA&DP	The construction and operational phases of the TISF project will take the "Duty of care" principle into account to lessen any negative impacts on the surrounding environment.
68.	A conceptual stormwater management plan in terms of the City of Cape Town: Management of Urban Stormwater Impacts Policy (2009) must form part of the final EIAR. As such this must be included in the proposed plan of Study of	DSR	Morné Theron, CoCT	A conceptual stormwater management plan for the TISF project, which complies with the CoCT requirements, will be included in the EIA Report.

No	Issues	Document <sup>1</sup>	Stakeholder	Response
	the EIA as already acknowledged in section 3.5.7 of the DSR.			
69.	Regulation 40(3) of the 2014 EIA Regulations states that potential Interested and Affected Parties, including the competent authority, may be provided with an opportunity to comment on reports and plans contemplated in subregulation (1) prior to the submission of an application but must be provided an opportunity to comment on such reports once an application has been submitted to the competent authority.	DSR	Salome Mambane, DEA	Noted. Although the Draft Scoping Report has been released to stakeholders and authorities for comment prior to submission of the application to DEA, the Scoping Report (revised in response to any comments received to date) will once again be released for public and authority comment following submission of the application.
70.	A copy of the Notice of Intent to Develop (NID) submitted to Heritage Western Cape (HWC) must be included in the next phase of the EIA process.	DSR	Morné Theron, CoCT	A copy of HWC's record of decision is attached as Appendix C to the Scoping Report. The NID can be provided to stakeholders on request.
71.	Will the specialist studies be peer reviewed?	SR	Ian Gildenhuys, CoCT	No, however, the radiological assessment, which was commissioned by Eskom and not SRK, will be independently reviewed.
	Although DEA&DP would consider the SRK specialist studies to be independent, if DEA does not share this view they may call for review.		Adri la Meyer, DEA&DP	In terms of the EIA Regulations, 2014, an EAP or specialist is considered independent if they have no business, financial, personal or other interest in the activity or application in respect of which that EAP, specialist or person is appointed; or that there are no circumstances that may compromise the objectivity of that EAP, specialist or person in performing such work; excluding normal remuneration for a specialist permanently employed by the EAP; or fair remuneration for work performed in connection with that activity or application
72.	Will the monitoring requirements specified by specialists be included in the EMPr? Will detail on the radiation monitoring network surrounding KNPS be included?	SR	lan Gildenhuys, CoCT	A separate section containing monitoring requirements will be included in the EMPr submitted with the EIA. Additional information regarding the radiation monitoring programme will be included in the EIA Report.
73.	As per the definition of urban areas in terms of the EIA Regulations, 2014, the proposed development is considered to be located outside of an urban area. As such, Activity 4 of GN. No. R.985 may be applicable to the proposed development should the road be developed in an area containing indigenous vegetation.	SR	Melanese Schippers, DEA&DP	Agreed, Alternative 1 for the proposed the TISF will be situated outside an urban area but located within the already developed KNPS site which is zoned as "Risk Industry".  It is important to note a new section of road will not be constructed but rather a portion of existing gravel road with dimensions (6m width and 20m length) will be surfaced / tarred to connect the existing haul road to the TISF at the entrance to Alternative 1. This section of gravel road to be upgraded is already disturbed (as per Figure 3.6 in the Scoping Report) and therefore does not contain any indigenous vegetation and therefore does not constitute an additional Listed Activity 4 in terms of the 2014 EIA Regulations.
74.	In response to the NID that was submitted on 16 March 2016, HWC responded that no further action in terms of Section 38 of the National Heritage Resources Act, Act 25	SR	Adri la Meyer, DEA&DP	Due to the timelines stipulated in the EIA Regulations (2014), specialist studies were commissioned prior to completion of the Scoping Phase, and receipt of this correspondence from HWC. The heritage assessment undertaken informed the NID

No	Issues	Document <sup>1</sup>	Stakeholder	Response
	of 1999 (NHRA) is required. The rationale for conducting a Heritage Specialist Study is therefore questioned.			submitted to HWC.
75.	The Department of Water and Sanitation (DWS) has indicated that the TISF does not require a water use authorisation in terms of the National Water Act 36 of 1998. The SR states that the construction of the TISF may potentially impact on groundwater levels and quality, "although this is unlikely as groundwater at the project site is deeper than the proposed TISF excavation depth." It is further noted that there is no downstream use of groundwater and that the receiving environment/downstream receptor of any potential contamination would be the shore zone/sea. The rationale for conducting a Geohydrology Specialist Study is therefore questioned.	SR	Adri la Meyer, DEA&DP	Due to the timelines stipulated in the EIA Regulations (2014), specialist studies were commissioned prior to completion of the Scoping Report, based on the potential impacts identified.
I.	Regulatory Requirements			
76.	With regards to the Koeberg Nature Reserve Management Plan, is CapeNature and Koeberg Nature Reserve Management's approval needed before the project can commence?	BID	Graham Arbuckle, private	The TISF does not fall within the Koeberg Nature Reserve and amendment of the Koeberg Nature Reserve management Plan will not be required. CapeNature is identified as a commenting authority for TISF EIA.
77.	What is happening in the National Nuclear Radioactive Waste Disposal Act?	BID	Graham Arbuckle, private	The purpose of the TISF will be for the temporary storage of used fuel and not nuclear waste and, therefore, this Act will not be applicable to this facility. The CISF (which is not included in this project scope) is a proposed central storage facility for used nuclear fuel and waste, to be established by the National Radioactive Waste Disposal Institute.
78.	The TISF must meet the requirements of the National Nuclear Regulator and must be constructed and managed according to the International Atomic Energy Agency safety standards.	DSR	Peter Harmse, DEA&DP	The TISF project will fulfil the requirements of the NNR and IAEA standards. The need for the facility to comply with the requirements of the NNR as well as the IAEA safety standards are discussed in sections 2.1.7 and 2.2.4 of the Scoping Report respectively.
79.	The transport of the casks by road from the point of manufacture to the TISF (unladen) and from the TISF to	DSR	Alvin Cope, WCG	Requirements for Abnormal Load Permit related to the TISF project will be applied for from the Western Cape Road Network Management Department.
	the CISF (laden) will require Abnormal Load permits to be issued by the WCG Road Network Management Branch. This Branch will not consider issuing the necessary permits until other restrictive conditions of transport are approved by the relevant institutions.	SR		
J.	General			

No	Issues	Document <sup>1</sup>	Stakeholder	Response
80.	What happened at the Fukushima nuclear power plant in Japan?	SR	Thorsten Aab, DEA&DP	Following a major earthquake, a 15m tsunami disabled the power supply and cooling of the three Fukushima reactors, causing a nuclear accident on the 11th of March 2011. There were no cooling problems with the dry storage casks during and following the nuclear accident.
81.	The current storage [next to] the In Service Inspection (ISI) building is sufficient evidence to warrant the continued storage of spent fuel in dry casks.	SR	Trevor Moodley, Eskom	Noted.
82.	The Melkbosstrand Ratepayers Association has no objection to the proposed TISF.	SR	Smokie la Grange, Melkbosstrand Ratepayers Association	Noted.

SPK	Consultina:	/78317·	Koohora	TICE	Final 9	Sconing	Panort
SKK	Consulting.	4/03//.	Nuebeld	HOF	riliai	SCOPILIQ	Report

Appendix S:
Posters and attendance register from Scoping Phase Public
Open Day



NAME	CAPACITY / ORGANISATION (if any)	POSTAL ADDRESS	CONTACT DETAILS
			Tel/Cell 0824309940
J. SMITH			Fax
0.2144			E-mail smithje 770323 Dagmant. com
			Tel/Cell
011077			Fax
L. CHETTY	N/m. Grom.		E-mail
			Tel/Cell 072990008/
Cola Toblandu	NPM Group Manager		Fax
3,5%	Manager	-	E-mail terblarche carla agnorla
			Tel/Cell 879 527 0755
S. PEMBA	NPM Group Manager - Ekoté		Fax
0. 1000	Choup varages - Electer		E-mail PembaS@ eskon. co. 29
			Tel/Cell
R. KROSSYNSKI	NE - IPDK KOGBERG	•	Fax
			E-mail
2	NICCEAR SUPPORT.		Tel/Cell 621 550 483(
K REATHERSTONE			Fax
			E-mail
			Tel/Cell 082 300 8535
Michelle Herbert	Advisian		Fax
			E-mail mrchelle herbert @ achisrain. com.
	0	9 Edward Creseent	Tel/Cell 021 533 4178
John Jones	Self	Helk bosstrane	Fax
		7641.	E-mail ankandjohn @ q mail . com.



NAME	CAPACITY / ORGANISATION (if any)	POSTAL ADDRESS	CONTACT DETAILS
	N 1 O-A A		Tel/Cell 0832703226
Johann Kotre	NbW		Fax
	•		E-mail KotzeJo eskum.co.za
	([ ( [ [ ] ]	12 Edward Gescent Duynefontein	Tel/Cell 021 550 5313.
Steph Steyn	Mudear Support (Fuel)	Duynefontein	Fax
	<i>1</i> ·	mellehosstrand, 7441	E-mail Steph. Steyn @ eskom. Co. Zg
	•		Tel/Cell
Ihndi Radebe	Communication	Kool-alea	Fax
- Taylor	CONTINUES	Coeberg	E-mail
			Tel/Cell 083 712 47/4
MARTIN Krawe	Eslan Kaely	Kaelez	Fax
			E-mail MARTIN KRAUSE (6) ESKOM. (0,2A
			Tel/Cell 021 659 3060
SCOTT MASSON	SKN CONSULTING.		Fax
		'- '	E-mail smassone srh. co. za.
	NA	COESTIR 9	Tel/Cell 073 90% 2484
TAO WEEM DE			Fax
			E-mail
1/ 1/ 1/ 1/1/	Λι:	96 Rh. da no	Tel/Cell 0833915654
Kush Marcus	Nucl Sites	In la li	Fax
		96 Rhodes Brive Newlands 7700	E-mail Marcuskoeskom. Co. Dr.
			Tel/Cell 0720826867 ·
Lewis Phidze	Stabeholde Myt	Koebery	Fax
			E-mail Phidzanlo Hom G. Za.



NAME	CAPACITY / ORGANISATION (if any)	POSTAL ADDRESS	CONTACT DETAILS
Lüka Pagiele	Eskan-liged team	Keeberg Nuclear Paver Stortin	Tel/Cell 0832354575  Fax 1/  E-mail Pagiel J & eskon. (-79
Roy Nagan	Atlantis Civic Ass.	P. 0 BOY 963 derl- 7552 Reg getsderl-	Tel/Cell \$2.0789057762 62157363 Fax
Nettre Fich	Eskem-project teau	Koebetg Nuckear Power Station	E-mail roy nagan of telkonga. not  Tel/Cell 0798274607  Fax  "  E-mail fichine @ adcom.co.29.
LEE Weus	ESKOM PROJECT TEAM	KOEBERG POWER STATION	Fax E-mail Wells Aleeskon. with
SHARON JONES	SRK CONFUTING		Tel/Cell  Fax  E-mail
Jessica du Tat	Sek consulting		Tel/Cell 076 133 9776  Fax  E-mail jedutut @ syk. co. za
Joan Mahlase	Eskom - Nuclear Fuel Depart	Keeberg Nuclear PS	Tel/Cell 011 800 4265  Fax Joan Mahlase Queskom Co-29  E-mail
Noxolo Kunene	Eskom-Nucleal Project Management	11	Tel/Cell 082548468Z  Fax  E-mail Kunenno @ eskom. (0.2a



NAME	CAPACITY / ORGANISATION (if any)	POSTAL ADDRESS	CONTACT DETAILS
Sarking Petersen	Eskon		Tel/Cell Ozi SSO S348
			Fax
			E-mail peterssq@eskom.co.zg
TAYEB JAPPIE	ESKOM		Tel/Cell 02  550 4655
TATED STITLE			Fax
·			E-mail tayeb, jappie Deskom. cu. 29.
			Tel/Cell 021 SSO S270
N - Calad	ESKom		Fax
mira cepteriz	ESKOVI		É-mail Cepterna eskon.co.29.
			Tel/Cell
			Fax
MATSE MAICHORTE	Estom.		E-mail
			Tel/Cell
HARDEN SATAR	Eskom		Fax
			E-mail
			Tel/Cell
			Fax
LUFUND MAHLANGU	ESKOM		E-mail
			Tel/Cell
			Fax
VUYANI XULUBANA	ESKOM		E-mail
			<b>Tel/Cell</b> 07/8979729_
Dean Jeans	Ч		Fax
			E-mail



NAME	CAPACITY / ORGANISATION (if any)	POSTAL ADDRESS	CONTACT DETAILS
	Porce of	71 Moce Vie Correte.	Tel/Cell 082 251 2637
KARE JOHAN	CSKrow-Project.	Bungard of Colate	Fax
	Can	part.	E-mail Ryan. Johns & advision con
·		49 FERMAND CLOSE	Tel/Cell 672 4R CLUT
STEPHEN PHETERSE	ESKOM	PARICLANDS	Fax
0 (0) (0)		7441	E-mail Pieters O Eskon Co.2a.
		17 New Way	Tel/Cell 082 580 4404.
Han Courence	Eston.	Pinelands.	Fax
		7205.	E-mail Jawrenca @ eston. co. 29
		58A Queen Victoria Rd	Tel/Cell 072 175 4461
Mark Vernon	Eskom	Cloremont	Fax
·		7708	E-mail Vernonmr@ eskom. CO.Za
			Tel/Cell 0733702340
Dan Dan			Fax
Bulchua Ngwenya	Erton		E-mail bulelwanquenya@eskon. Co. Za
			Tel/Cell 074 375 3067
RANDALL LAVELOT	Estom Koerserg		Fax
THINDALL. LIVELO	CSCWI KGC SCPO		E-mail LAVELORGESKOM. CO.ZA
	Λ		Tel/Cell 530 4242.
Cumpale Sibiliza	Eston Coeber		Fax
ON HAR SIBICIO	, J	·	E-mail
			Tel/Cell 07 9797 0363
TREVOR NOODLEY	Eskon-Korsoro (QC)		Fax
/ / / /			E-mail TREJON. NODIGY @ ESKON. CO.ZA

# Proposed Used Fuel Transient Interim Storage Facility (TISF) at Koeberg Nuclear Power Station (KNPS)

# ENVIRONMENTAL IMPACT ASSESSMENT (EIA):

**Scoping Phase Stakeholder Engagement Process** 



Koeberg Nuclear Power Station

PUBLIC OPEN DAY Thursday, 21 July 2016 15:00 - 18:30





# WELCOME TO THE EIA PUBLIC OPEN DAY

#### **PURPOSE OF THE OPEN DAY:**

- To introduce the Scoping Report to the public;
- ❖ To provide a platform for stakeholders to interact with the environmental consultants (SRK) and proponent (Eskom) in order to discuss the project and ask related questions.

#### YOU ARE INVITED TO:

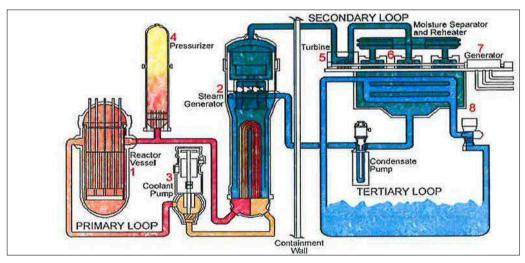
- Fill in the attendance register;
- Read about the proposed project;
- Raise and discuss issues and concerns with the project team;
- \* Record your views on a comment sheet; and
- Register as a stakeholder on the project database to be informed of further opportunities to participate in the project.





# THE NUCLEAR PROCESS

- \* Koeberg Nuclear Power Station has two nuclear reactor units, which are essentially heat sources. Heat is generated through the nuclear fission process, making use of uranium.
- Heat is transferred by water to the steam generators where water from a secondary loop is turned into steam. This steam drives a turbine which is connected to a generator, which uses the rotational energy to generate electricity.



#### The Nuclear Process

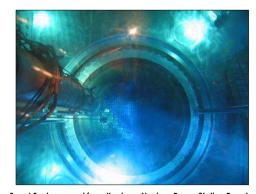
Source: Eskom Fact Sheet "Generating Electricity at a Nuclear Power Station", 2015

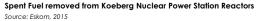


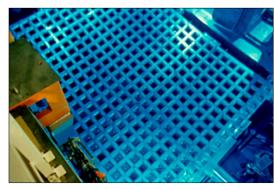


### THE NUCLEAR PROCESS

- Nuclear fuel in the reactor core consists of pellets of enriched uranium dioxide encased in long pencil-thick metal tubes, called fuel rods. These fuel rods are bundled to form fuel assemblies.
- Used fuel is nuclear fuel that has been used in the fission process and is no longer useful in sustaining a nuclear reaction.
- Used fuel assemblies are currently stored underwater in storage racks in spent fuel pools (SFPs) at Koeberg Nuclear Power Station. Water cools the fuel and serves as a shield from radiation.







Spent fuel stored in spent fuel pools





# **PROJECT MOTIVATION**

- The spent fuel pools storing used fuel assemblies at the Koeberg Nuclear Power Station (KNPS) are nearing capacity.
- ❖ To ensure continued plant operation, additional storage capacity is required to accommodate further used fuel generated at the KNPS.
- Eskom proposes to construct a Transient Interim Storage Facility (TISF) for the temporary storage of used fuel in dry storage casks at the KNPS.
- ❖ The TISF will be designed to accommodate used nuclear fuel from the reactors for the operational life of the power station, thereby ensuring the continued operation of the KNPS.





Example of a TISF

urce: http://berniesteam.com/limerick-horizontal-storage-module-project-page-3/ Source:http://gttsi.com/wp-content/uploads/2015/01/DryCaskSt

Note: These images are provided as examples and are not intended to indicate the selected technology.





# PROJECT MOTIVATION

- The proposed Transient Interim Storage Facility (TISF) forms part of the Koeberg Spent Fuel Storage Project:
  - Phase 1A: Procure 7 dry storage metal casks to ensure the Reactor Units can operate beyond 2018.
  - Phase 1B: Maximise storage capacity in spent fuel pools.
  - Phase 2: Procure 30 40 additional dry storage casks to allow ongoing operation of the Koeberg Nuclear Power Station until 2025.
  - Phase 3: Establish the TISF for the storage of the casks procured in Phase 2.
- The project assumes that a Centralised Interim Storage Facility (CISF) will be developed for use by 2025.
- Used fuel assemblies generated beyond 2025 will also be stored in casks at the TISF, should the CISF not be available.





# AUTHORISATIONS REQUIRED

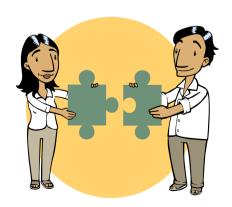
- The proposed Transient Interim Storage Facility requires Environmental Authorisation in terms of the National Environmental Management Act 107 of 1998 (NEMA) and the Environmental Impact Assessment Regulations, 2014, for the following listed activities:
  - Listing Notice 1: (27) clearance of more than 1ha, but less than 20ha, of indigenous vegetation;
  - Listing Notice 2: (3) development for nuclear activities (for storage of used fuel); and
  - ❖ Listing Notice 3: (12) clearance of 300m² or more of indigenous vegetation within any critically endangered or endangered ecosystem in the Western Cape.





# AUTHORISATIONS REQUIRED

- The proposed Transient Interim Storage Facility (TISF) requires licensing from the National Nuclear Regulator in terms of the National Nuclear Regulatory Act 47 of 1999.
- The Department of Water and Sanitation confirmed that a Water Use Licence is not required for the TISF.
- Heritage Western Cape confirmed that the TISF is unlikely to impact on heritage resources, and a Heritage Impact Assessment is not required.

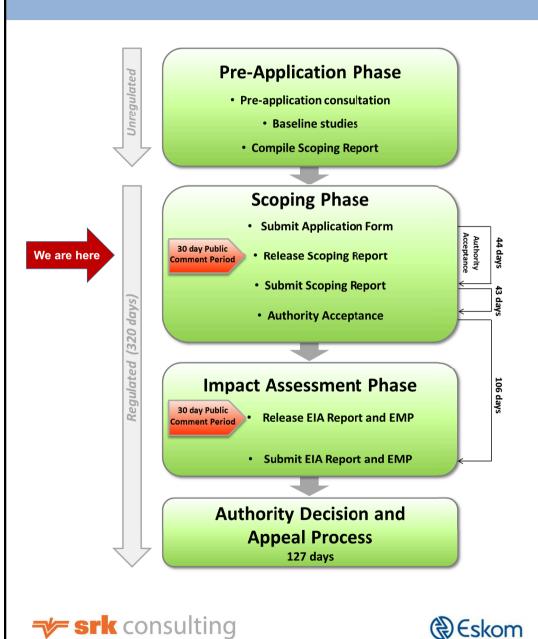








### **EIA PROCESS**





- A Background Information Document was released in October 2015 to inform potential stakeholders about the proposed project and Environmental Impact Assessment (EIA) process.
- The Draft Scoping Report was released to registered stakeholders during the Pre-Application Phase for a 30day comment period in March 2016.
- The Application Form for Environmental Authorisation (EA) was submitted to the Department of Environmental Affairs (DEA) on 6 July 2016.
- The Scoping Report and Plan of Study for the EIA have been amended in response to initial stakeholder comments, and are available for a 30 day public comment period ending 8 August 2016, before final submission to DEA.
- Specialist studies will be completed to inform the Environmental Impact Assessment Report.
- The EIA Report and the Environmental Management Programme will be released for public comment before submission to the DEA.
- The DEA will then make their decision to grant or refuse an EA.
- Stakeholders will be informed of the DEA's decision and provided with an opportunity to appeal.





# NATIONAL NUCLEAR REGULATOR

- ❖ The National Nuclear Regulator (NNR) is a public entity established in terms of the National Nuclear Regulatory Act 47 of 1999 to provide for the protection of persons, property and the environment against nuclear damage, through the establishment of safety standards and regulatory practices.
- ❖ Koeberg Nuclear Power Station is licenced with the NNR but would have to amend their existing licence to include the Transient Interim Storage Facility.
- The licence amendment application will be submitted to the NNR once Environmental Authorisation has been received.
- This application may include a separate stakeholder engagement process.
- \* Eskom must undertake an assessment to determine the potential radiological effects on the public to inform this application.





# **PROJECT ALTERNATIVES**

- Eskom initially identified six potential location alternatives at Koeberg Nuclear Power Station (KNPS) for the Transient Interim Storage Facility (TISF).
- ❖ The feasibility of the location alternatives was evaluated against key criteria, eliminating four potential sites.
- ❖ The two most viable site locations for the TISF were identified within the existing KNPS Security Protected Area (SPA): Alternative 1 (the preferred alternative) and Alternative 2.
- Alternative 1 is preferred because:
  - It is situated adjacent to an existing radiological zone;
  - It is located within a more ecologically disturbed area than Alternative 2: and
  - Less extensive haul road upgrades will be required than for Alternative 2.
- The No Go Alternative will also be considered in accordance with the EIA Regulations. This entails no change to the status quo, i.e. the TISF will not be built.





Alternative 2



### PROJECT DESCRIPTION

- ❖ The Transient Interim Storage Facility (TISF) will comprise of concrete pad(s) within a site footprint of ~12 800m² to accommodate up to 160 dry storage casks, which will be placed on the pad in a modular manner.
- The TISF will be constructed on vacant land within the Koeberg Nuclear Power Station (KNPS) Security Protected Area and will be surrounded by a perimeter fence with controlled access.
- Used fuel assemblies will be loaded into casks at the reactor fuel buildings and transferred to the TISF on the existing KNPS internal road network.

TISF comprising a concrete slab onto which dry storage casks can be placed, with a secure perimeter fence

Source: Maine Yankee







#### PROJECT DESCRIPTION

- The dry storage system is a passive system which does not rely on human action or active components to maintain a suitable safety level.
- The storage and surveillance of the casks are in accordance with the International Atomic Energy Agency (IAEA) and Koeberg Nuclear Power Station (KNPS) Safety Standards to ensure that radiation exposure is in line with As Low As Reasonably Achievable Standards.
- The transfer of casks to the Transient Interim Storage Facility (TISF) will be governed by the IAEA Transport Regulations.
- The TISF project requires an update to Eskom's existing Emergency Response Plan (ERP) for the KNPS.
- The ERP will address various types of emergency situations including security situations, human error and environmental disasters.





#### AFFECTED ENVIRONMENT

- The area is relatively flat with an active dunefield extending north of the Koeberg Nuclear Power Station (KNPS) and a dominant ridgeline inland of the KNPS.
- There are no significant sources of air pollution or noise in the area.
- There are no surface water features in close proximity to the KNPS.
- ❖ The KNPS occurs on the Strandveld Aquifer, an important aquifer supplying water to the surrounding towns (e.g. Atlantis).
- The KNPS is located within the Cape Flats Dune Strandveld vegetation type.
- \* Vegetation was historically disturbed during the construction of the KNPS, but has re-established in the area.







# AFFECTED ENVIRONMENT

- Neither site Alternative 1 nor Alternative 2 is within the coastal zone (100m of the High Water Mark of the sea).
- The location of the site within the Koeberg Nuclear Power Station (KNPS) largely precludes the existence of fauna, however, a variety of bird species are likely to inhabit the sites.
- ❖ A 5km Precautionary Action Planning Zone and 16km Urgent Protective Action Planning Zone have been delineated around the KNPS, where development is restricted. Therefore population density around the KNPS is low.
- While the area is rich in heritage resources, the site alternatives are significantly transformed by previous construction activities.
- The KNPS is a substantially modified landscape with high levels of visual impact caused by the reactor units and associated infrastructure.



View of the KNPS from the conservation area with Table Mountain in the background





# POTENTIAL ENVIRONMENTAL CONCERNS

- Geohydrology: potential impact on groundwater levels and quality although excavations are unlikely to intercept the groundwater table and the need for dewatering is unlikely.
- Terrestrial ecology: due to the ecological sensitivity of both site alternatives and the presence of sensitive vegetation types, the project may negatively impact threatened and/or protected floral species.
- Socio-economic: potential negative impacts on the surrounding communities associated with noise and dust conditions during construction. Benefits of the Transient Interim Storage Facility include ensuring the continued operation of the Koeberg Nuclear Power Station, a significant electricity producer in the Western Cape.





Cape Flats Dune Strandveld vegetation indigenous to the KNPS site, although the site has been disturbed by previous construction activities

Source: www.southsidewheelers.com; wikipedia.org





# POTENTIAL ENVIRONMENTAL CONCERNS

- Radiation and Human Health: potential exposure of Eskom employees as well as surrounding communities to radiation due to the handling and storage of used fuel at the Transient Interim Storage Facility (TISF) and the potential negative impacts on human health.
- Heritage: due to previous disturbance of the site and heritage landscape, the possibility of finding sites of archaeological or palaeontological importance is highly unlikely.
- Visual: the TISF will be located in the Koeberg Nuclear Power Station (KNPS) Security Protected Area, a substantially modified landscape and is therefore unlikely to have significant negative visual impacts for receptors.





The landscape surrounding KNPS is highly modified by existing infrastructure.





### **SPECIALIST STUDIES**

- A number of specialist studies have been commissioned to assess the impacts of the Transient Interim Storage Facility:
  - Geohydrology;
  - Terrestrial Ecology (vegetation & fauna);
  - Socio-economic;
  - Human Health;
  - Heritage; and
  - Visual.
- Less significant impacts will be assessed by SRK.
- A Radiological Assessment was commissioned by Eskom prior to the Environmental Impact Assessment (EIA) process. An independent review of the Radiological Assessment will inform the EIA process.

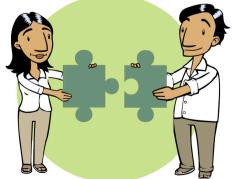






# **SPECIALIST STUDIES**

- The generic Terms of Reference and principal objectives for each specialist study are to:
- Describe the baseline characteristics of the study area and place this in a regional context;
- Identify and assess potential impacts of the project (including the construction and operation phases), using SRK's prescribed impact rating methodology;
- Identify and describe potential cumulative impacts in relation to proposed and existing developments in the surrounding area;
- Recommend mitigation measures to minimise impacts and/or optimise benefits associated with the proposed project; and
- Recommend and draft a monitoring programme, if applicable.

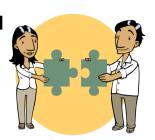






# PLAN OF STUDY FOR THE EIA

Specialists studies will be completed to provide detailed information regarding the affected environment and potential impacts of the project.



- Key potential issues and impacts will be investigated and assessed using standard impact rating methodology.
- Mitigation / optimisation measures will be identified to prevent / minimise negative impacts and enhance benefits.
- An Environmental Impact Report (EIR) will be compiled, which will include the Environmental Management Programme (EMPr).
- Public consultation will be conducted.
- Final EIR and EMPr will be compiled and submitted to authorities to inform their decision.

### PUBLIC PARTICIPATION

- Stakeholders will be given the opportunity to participate throughout the Environmental Impact Assessment (EIA) process.
- ❖ The first opportunity to participate was following the release of the Background Information Document in October 2015.
- ❖ The Draft Scoping Report was released for comment in March 2016 during the preapplication phase.
- The Scoping Report was released for comment during the formal application process in July 2016.
- Stakeholders can provide comment on the Scoping Report for the Transient Interim Storage Facility (TISF) project until 8 August 2016.
- After the Scoping Report has been accepted by the Department of Environmental Affairs (DEA) stakeholders will be given a 30 day period to comment on the Environmental Impact Assessment (EIA) Report and the Environmental Management Programme.
- Stakeholders will be informed of the DEA's final decision on the TISF project.









#### **WAY FORWARD**

The Scoping Report is available for viewing at:



- Koeberg Public Library, Duynefontein
- Wesfleur Public Library, Atlantis
- Cape Town Public Library
- The Koeberg Visitors' Centre
- SRK's office in Rondebosch; and
- SRK's website: <a href="www.srk.co.za">www.srk.co.za</a> (via the 'Library' and 'Public Documents' links)
- Stakeholders are invited to submit comments and/or register on the project database.
- Submissions from stakeholders must include their name, contact details (preferred method of notification, e.g. email) and an indication of any direct business, financial, personal or other interest which they have in the application, to the contact person mentioned below, by 8 August 2016.
- Registered stakeholders will be notified of the availability of the Scoping Report for comment and of future meetings.
- ❖ All written comments can be addressed to Jessica du Toit at SRK Consulting:
  Aug 2016

SRK Consulting Fax: 021 685 7105
Postnet Suite #206, Tel: 021 659 3060
Private Bag X18, email: jedutoit@srk.co.za

Rondebosch 7701





#### **SRK Report Distribution Record**

Report No.	478317/05
Copy No.	

Name/Title	Company	Сору	Date	Authorised by
Director: Directorate: Licensing	Department of Environmental Affairs	1-2HC + CD	23 August 2016	Sharon Jones
Randall Lavelot	Eskom	3HC + CD		
Ryan Jonas	Eskom	CD		
Sharon Jones	SRK	CD		
SRK Library	SRK	CD		

Approval Signature:



This report is protected by copyright vested in SRK (SA) (Pty) Ltd. It may not be reproduced or transmitted in any form or by any means whatsoever to any person without the written permission of the copyright holder, SRK.