



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Private Bag X 447· PRETORIA · 0001· Environment House · 473 Steve Biko Road, Arcadia · PRETORIA
Tel (+ 27 12) 399 9372

DEA Reference: 14/12/16/3/3/1/1759

Enquiries: Mr Jay-Jay Mpelane

Telephone: (012) 399 9404, **E-mail:** impelane@environment.gov.za

Mr Velaphi Ntuli
Eskom Holdings SOC Limited
Private Bag X10
KERNKRAG
7440

Tel number: (021) 522 3849
Email address: ntuli@eskom.co.za

PER E-MAIL / MAIL

Dear Mr Ntuli

ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998: GN R. 982/983/985: FOR THE PROPOSED DEVELOPMENT OF A HARDENED WATER RESERVOIR AND ASSOCIATED PIPING AT THE KOEBERG NUCLEAR POWER STATION WITHIN THE CITY OF CAPE TOWN, WESTERN CAPE PROVINCE

With reference to the above application, please be advised that the Department has decided to grant environmental authorisation. The Environmental Authorisation (EA) and reasons for the decision are attached herewith.

In terms of Regulation 4(2) of the Environmental Impact Assessment Regulations, 2014 (the Regulations), you are instructed to notify all registered interested and affected parties, in writing and within 14 (fourteen) days of the date of the EA, of the Department's decision in respect of your application as well as the fact that an appeal may be lodged against the decision in terms of the National Appeals Regulations, and the provisions regarding the submission of appeals as contained in the Regulations.

Should any person wish to lodge an appeal against this decision, he/she must submit the appeal to the appeal administrator, and a copy of the appeal to the applicant, any registered interested and affected party, and any organ of state with interest in the matter within 20 days from the date that the notification of the decision was sent to the registered interested and affected parties by the applicant; or the date that the notification of the decision was sent to the applicant by the Department, whichever is applicable.

Appeals must be submitted in writing in the prescribed form to:

Mr Z Hassam, Director: Appeals and Legal Review of this Department at the below mentioned addresses.

By email: appealsdirector@environment.gov.za;

MS

By hand: Environment House
473 Steve Biko Road,
ARCADIA,
Pretoria; or

By post: Private Bag X447,
Pretoria,
0001

Please note that in terms of Section 43(7) of the National Environmental Management Act, 1998, the lodging of an appeal will suspend the environmental authorisation or any provision or condition attached thereto. In the instance where an appeal is lodged, you may not commence with the activity until such time that the appeal is finalised.

To obtain the prescribed appeal form and for guidance on the submission of appeals, please visit the Department's website at https://www.environment.gov.za/documents/forms#legal_authorisations or request a copy of the documents at appealsdirector@environment.gov.za.

Yours faithfully



Mr Sabelo Malaza
Chief Director: Integrated Environmental Authorisations
Department of Environmental Affairs

Date: 25/10/2017

Cc	Adel Groenewald	Doug Jeffery Environmental consultant (Pty) Ltd	Tel: 021 875 5272	Email: Adel@dougjeff.co.za
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environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Environmental Authorisation

In terms of Regulation 25 of the Environmental Impact Assessment Regulations, 2014

**DEVELOPMENT OF A HARDENED WATER RESERVOIR AND ASSOCIATED PIPING AT THE
KOEBERG NUCLEAR POWER STATION WITHIN THE CITY OF CAPE TOWN,
WESTERN CAPE PROVINCE**

CITY OF CAPE TOWN

Authorisation register number:	<i>14/12/16/3/3/1/1759</i>
Last amended:	<i>First issue</i>
Holder of authorisation:	<i>Eskom Holdings SOC Limited</i>
Location of activity:	<i>WESTERN CAPE PROVINCE: City of Cape Town: Within Ward 32 at the Koeberg Nuclear Power Station (KNPS) on Farm Duynfontyn No. 1552.</i>

This environmental authorisation does not negate the holder of the authorisation's responsibility to comply with any other statutory requirements that may be applicable to the undertaking of the activity.

MS

Decision

The Department is satisfied, on the basis of information available to it and subject to compliance with the conditions of this environmental authorisation, that the applicant should be authorised to undertake the activities specified below.

Non-compliance with a condition of this environmental authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, 1998 and the EIA Regulations, 2014.

Details regarding the basis on which the Department reached this decision are set out in Annexure 1.

Activities authorised

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No.107 of 1998) and the Environmental Impact Assessment Regulations, 2014 the Department hereby authorises –

ESKOM HOLDINGS SOC LIMITED

(hereafter referred to as the **holder of the authorisation**)

with the following contact details –

Mr Velaphi Ntuli

Eskom Holdings SOC Limited

Private Bag X10

KERNKRAG

7440

Tel number: (021) 522 3849

Email address: ntuli@eskom.co.za

to undertake the following activities (hereafter referred to as "the activity") indicated in Listing Notice 1 & 3 (GN R. 983 and 985):

Listed activities	Activity/Project description
<p><u>GN R. 983 Item 19</u></p> <p>The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from—</p> <p>(i) the seashore,</p> <p>(ii) the littoral active zone, an estuary or a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever distance is the greater.</p>	<p>The installation of the piping associated with the hardened water reservoir will require excavation and removal of more than 5 cubic metres of soil within 100 metres inland from the high-water mark of the sea.</p>
<p><u>GN R. 985: Item 2</u></p> <p>The development of reservoirs, excluding dams, with a capacity of more than 250 cubic metres.</p> <p>i. Western Cape</p> <p>i. A protected area identified in terms of NEMPAA, excluding conservancies;</p> <p>ii. In areas containing indigenous vegetation.</p>	<p>The activity involves the construction of a reservoir, with a total volume of 9 500 cubic metres at the KNPS, within an area containing Cape Flats Strandveld vegetation and within the Koeberg Nature Reserve Protected Area in terms of NEMPAA.</p>
<p><u>GN R. 985: Item 12</u></p> <p>The clearance of an area of 300 square metres or more of indigenous vegetation, <i>"except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan"</i></p> <p>(i) Western Cape,</p> <p>(i) Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in</p>	<p>Upon development of the hardened water reservoir, more than 300 square metres of the endangered natural vegetation (Cape Flats Strandveld) will be removed, within 100 metres inland from the high-water mark of the sea.</p>

Listed activities	Activity/Project description
<p>the National Spatial Biodiversity Assessment 2004;</p> <p>(iii) Within the littoral active zone or 100 metres inland from high water mark of the sea or an estuarine functional zone, whichever distance is the greater.</p>	

As described in the Basic Assessment Report (BAR) dated 20 July 2017 at:

- Farm Name: Farm Duynfontyn No. 1552, and Portion 0.
- SG code: C01600000000155200000).

Co-ordinates of the preferred	Latitude (S)	Longitude (E)
Site A	33° 40'21.33"S	18° 25'51.60"E

Pipeline Route Coordinates	Latitude (S)	Longitude (E)
Alternative 1	33°40'21.10"S	18°25'50.38"E
	33°40'23.86"S	18°25'45.65"E
	33°40'33.85"S	18°25'51.35"E

-for the proposed development of a Hardened Water Reservoir and associated piping at the Koeberg Nuclear Power Station within the City of Cape Town in the Western Cape Province, hereafter referred to as "the property".

Conditions of this Environmental Authorisation

Scope of authorisation

1. The preferred site and pipeline for the construction of Hardened Water Reservoir at the Koeberg Nuclear Power Station (KNPS) within Ward 32 of the City of Cape Town in the Western Cape Province is **approved** as per abovementioned geographical coordinates.
2. Authorisation of the activity is subject to the conditions contained in this environmental authorisation, which form part of the environmental authorisation and are binding on the holder of the authorisation.

3. The holder of the authorisation is responsible for ensuring compliance with the conditions contained in this environmental authorisation. This includes any person acting on the holder's behalf, including but not limited to, an agent, servant, contractor, sub-contractor, employee, consultant or person rendering a service to the holder of the authorisation.
4. The activities authorised must only be carried out at the property as described above.
5. Any changes to, or deviations from, the project description set out in this environmental authorisation must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of the authorisation to apply for further environmental authorisation in terms of the regulations.
6. The holder of an environmental authorisation must apply for an amendment of the environmental authorisation with the competent authority for any alienation, transfer or change of ownership rights in the property on which the activity is to take place.
7. This activity must commence within a period of five (5) years from the date of issue of this environmental authorisation. If commencement of the activity does not occur within that period, the authorisation lapses and a new application for environmental authorisation must be made in order for the activity to be undertaken.
8. Commencement with one activity listed in terms of this environmental authorisation constitutes commencement of all authorised activities.

Notification of authorisation and right to appeal

9. The holder of the authorisation must notify every registered interested and affected party, in writing and within 14 (fourteen) calendar days of the date of this environmental authorisation, of the decision to authorise the activity.
10. The notification referred to must –
 - 10.1. specify the date on which the authorisation was issued;
 - 10.2. inform the interested and affected party of the appeal procedure provided for in the National Appeal Regulations, 2014;
 - 10.3. advise the interested and affected party that a copy of the authorisation will be furnished on request; and
 - 10.4. give the reasons of the competent authority for the decision.

Commencement of the activity

11. The authorised activity must not commence until the period for the submission of appeals has lapsed as per the National Appeal Regulations, 2014 and no appeal has been lodged against the decision. In terms of section 43(7), an appeal under section 43 of the National Environmental Management Act, 1998 will suspend the environmental authorisation or any provision or condition attached thereto. In the instance where an appeal is lodged you may not commence with the activity until such time that the appeal has been finalised.

Management of the activity

12. The Environmental Management Programme (EMPr) that complies with GN R.982 of Appendix 4(1) was integrated as part of the BAR. The EMPr is hereby approved and it must be implemented and strictly adhered to.

Frequency and process of updating the EMPr

13. The EMPr must be updated where the findings of the environmental audit reports, contemplated in Condition 23 below, indicate insufficient mitigation of environmental impacts associated with the undertaking of the activity, or insufficient levels of compliance with the environmental authorisation or EMPr.
14. The updated EMPr must contain recommendations to rectify the shortcomings identified in the environmental audit report.
15. The updated EMPr must be submitted to the Department for approval together with the environmental audit report, as per Regulation 34 of GN R. 982. The updated EMPr must have been subjected to a public participation process, which process has been agreed to by the Department, prior to submission of the updated EMPr to the Department for approval.
16. In assessing whether to grant approval of an EMPr which has been updated as a result of an audit, the Department will consider the processes prescribed in Regulation 35 of GN R.982. Prior to approving an amended EMPr, the Department may request such amendments to the EMPr as it deems appropriate to ensure that the EMPr sufficiently provides for avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity.
17. The holder of the authorisation may apply for an amendment of an EMPr, if such amendment is required before an audit is required. The holder must notify the Department of its intention to amend the EMPr at least 60 days prior to submitting such amendments to the EMPr to the Department for

approval. In assessing whether to grant such approval or not, the Department will consider the processes and requirements prescribed in Regulation 37 of GN R. 982.

Monitoring

18. The holder of the authorisation must appoint an experienced independent Environmental Control Officer (ECO) for the construction phase of the development that will have the responsibility to ensure that the mitigation/rehabilitation measures and recommendations referred to in this environmental authorisation are implemented and to ensure compliance with the provisions of the approved EMPr.
 - 18.1. The ECO must be appointed before commencement of any authorised activities.
 - 18.2. Once appointed, the name and contact details of the ECO must be submitted to the *Director: Compliance Monitoring* of the Department at Directorcompliance@environment.gov.za.
 - 18.3. The ECO must keep record of all activities on site, problems identified, transgressions noted and a task schedule of tasks undertaken by the ECO.
 - 18.4. The ECO must remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed and the site is ready for operation.

Recording and reporting to the Department

19. All documentation e.g. audit/monitoring/compliance reports and notifications, required to be submitted to the Department in terms of this environmental authorisation, must be submitted to the *Director: Compliance Monitoring* of the Department at Directorcompliance@environment.gov.za.
 20. The holder of the environmental authorisation must, for the period during which the environmental authorisation and EMPr remain valid, ensure that project compliance with the conditions of the environmental authorisation and the EMPr are audited, and that the audit reports are submitted to the *Director: Compliance Monitoring* of the Department at Directorcompliance@environment.gov.za.
 21. The frequency of auditing and of submission of the environmental audit reports must be as per the frequency indicated in the EMPr, taking into account the processes for such auditing as prescribed in Regulation 34 of GN R. 982.
 22. The holder of the authorisation must, in addition, submit an environmental audit reports to the Department within 30 days of completion of the construction phase (i.e. within 30 days of site handover) and a final environmental audit report within 30 days of completion of rehabilitation activities.
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23. The environmental audit reports must be compiled in accordance with appendix 7 of the EIA Regulations, 2014 and must indicate the date of the audit, the name of the auditor and the outcome of the audit in terms of compliance with the environmental authorisation conditions as well as the requirements of the approved EMPr.
24. Records relating to monitoring and auditing must be kept on site and made available for inspection to any relevant and competent authority in respect of this development.

Notification to authorities

25. A written notification of commencement must be given to the Department no later than fourteen (14) days prior to the commencement of the activity. Commencement for the purposes of this condition includes site preparation. The notice must include a date on which it is anticipated that the activity will commence, as well as a reference number.

Operation of the activity

26. A written notification of operation must be given to the Department no later than fourteen (14) days prior to the commencement of the activity operational phase.

Site closure and decommissioning

27. Should the activity ever cease or become redundant, the holder of the authorisation must undertake the required actions as prescribed by legislation at the time and comply with all relevant legal requirements administered by any relevant and competent authority at that time.

Specific conditions

28. Should anything of a palaeontological nature are found on site during construction phase by the Contractor (or any other party), e.g. human remains exposed or uncovered during excavation not previously visible, work must be stopped immediately, and the Environmental Control Officer (ECO) must reported to the SAHRA (021 462 4502). Furthermore, no palaeontological or archaeological material must be removed from the site without a permit from Heritage Western Cape.
29. Bulk earth works and excavation for foundations/infrastructure must be monitored by a palaeontologist or archaeologist with appropriate palaeontological knowledge.
30. An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate reduction, recycling, re-use and disposal.
31. Any solid waste must be disposed of at a landfill licensed in terms of section 20 (b) of the National Environment Management Waste Act, 2008 (Act No.59 of 2008).

General

32. A copy of this environmental authorisation, the audit and compliance monitoring reports, and the approved EMPr, must be made available for inspection and copying-
- 32.1. at the site of the authorised activity;
 - 32.2. to anyone on request; and
 - 32.3. where the holder of the environmental authorisation has a website, on such publicly accessible website.
33. National government, provincial government, local authorities or committees appointed in terms of the conditions of this authorisation or any other public authority shall not be held responsible for any damages or losses suffered by the holder of the authorisation or his/her successor in title in any instance where construction or operation subsequent to construction be temporarily or permanently stopped for reasons of non-compliance by the holder of the authorisation with the conditions of authorisation as set out in this document or any other subsequent document emanating from these conditions of authorisation.

Date of environmental authorisation: 25/10/2012



Mr Sabelo Malaza

Chief Director: Integrated Environmental Authorisations

Department of Environmental Affairs

Annexure 1: Reasons for Decision

1. Information considered in making the decision

In reaching its decision, the Department took, *inter alia*, the following into consideration -

- a) The information contained in the BAR dated 20 July 2017.
- b) The comments received from the City of Cape Town Transport and Urban Development Authority, Western Cape Department of Environmental Affairs and Development Planning, CapeNature/Unxweme lezendalo leNtshona Koloni, ILifa leMveli leNtshona Koloni, and interested and affected parties as included in the BAR dated 20 July 2017.
- c) Mitigation measures as proposed in the BAR dated 20 July 2017 and the EMPr.
- d) The information contained in the specialist studies contained within Appendix D of the BAR; and
- e) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act No.107 of 1998).

2. Key factors considered in making the decision

All information presented to the Department was taken into account in the Department's consideration of the application. A summary of the issues which, in the Department's view, were of the most significance is set out below.

- a) The findings of all the specialist studies conducted and their recommended mitigation measures.
- b) The need for the proposed development is to ensure that there is adequate water inventory at the KNPS to provide core cooling and spent fuel pool make-up, to cope with an extended beyond design basis Loss of Ultimate Heatsink and/or Station Black-out, which could be precipitated by an extreme seismic and/or flooding event(s).
- c) The BAR dated 20 June 2017 identified all legislation and guidelines that have been considered in the preparation of the BAR dated 20 June 2017.
- d) The methodology used in assessing the potential impacts identified in the BAR dated 20 June 2017 and the specialist studies have been adequately indicated.

- e) A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA Regulations, 2014 for public involvement.

3. Findings

After consideration of the information and factors listed above, the Department made the following findings -

- a) The identification and assessment of impacts are detailed in the BAR dated 20 June 2017 and sufficient assessment of the key identified issues and impacts have been completed.
- b) The procedure followed for impact assessment is adequate for the decision-making process.
- c) The proposed mitigation of impacts identified and assessed adequately curtails the identified impacts.
- d) The information contained in the BAR dated 20 June 2017 is accurate and credible.
- e) EMPr measures for the pre-construction, construction and rehabilitation phases of the development were proposed and included in the BAR and will be implemented to manage the identified environmental impacts during the construction phase.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the environmental authorisation, the authorised activities will not conflict with the general objectives of integrated environmental management laid down in Chapter 5 of the National Environmental Management Act, 1998 and that any potentially detrimental environmental impacts resulting from the authorised activities can be mitigated to acceptable levels. The environmental authorisation is accordingly granted.