



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Private Bag X 447· PRETORIA · 0001· Environment House · 473 Steve Biko Road, Arcadia · PRETORIA

DEA Reference: 14/12/16/3/3/1/1988

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Mr Gersh Bonga
Eskom Holdings SOC Limited
Private Bag X5009
KRIEL POWER STATION
2272

Tel number: (017) 615 2300
Email address: BongaMG@eskom.co.za

PER E-MAIL / MAIL

Dear Mr Bonga

ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, ACT NO. 107 OF 1998, AS AMENDED: GN R982/983, AS AMENDED: FOR THE PROPOSED KRIEL POWER STATION LIME PLANT UPGRADE WITHIN THE EMALAHLENI LOCAL MUNICIPALITY, MPUMALANGA PROVINCE

With reference to the above application, please be advised that the Department has decided to grant 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, as amended (the EIA 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 as well as the provisions regarding the submission of appeals that are contained in the Regulations.

In terms of the Promotion of Administrative Justice Act, 2000 (Act No 3 of 2000), you are entitled to the right to fair, lawful and reasonable administrative action; and to written reasons for administrative action that affects you negatively. Further your attention is drawn to the provisions of the Protection of Personal Information Act, 2013 (Act no. 4 of 2013) which stipulates that the Department should conduct itself in a responsible manner when collecting, processing, storing and sharing an individual or another entity's personal information by holding the Department accountable should the Department abuses or compromises your personal information in any way.

Your attention is drawn to Chapter 2 of National Environmental Management Act, 1998 (Act No. 107 of 1998) National Appeal Regulations published under Government Notice R993 in Government Gazette No. 38303 dated 08 December 2014 (National Appeal Regulations, 2014), which prescribe the appeal procedure to be followed. Kindly include a copy of this document (National Appeal Regulations, 2014) with the letter of notification to interested and affected parties in this matter.

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

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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:

The Director: Appeals and Legal Review of this Department at the below mentioned addresses.

By email: appealsdirector@environment.gov.za;

By hand: Environment House
473 Steve Biko Road
ARCADIA
Pretoria
0083; or

By post: Private Bag X447
Pretoria
0001

Please note that in terms of Section 43(7) of the National Environmental Management Act, Act No. 107 of 1998, as amended, 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: 13/06/2019

CC:	Mr Reuben Maroga	Savannah Environmental (Pty) Ltd	Tel: 011 656 3237	Email: reuben@savannahsa.com
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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, as amended

PROPOSED KRIEL POWER STATION LIME PLANT UPGRADE WITHIN THE EMALAHLENI LOCAL
MUNICIPALITY, MPUMALANGA PROVINCE

NKANGALA DISTRICT MUNICIPALITY

Authorisation register number:	<i>14/12/16/3/3/1/1988</i>
Last amended:	<i>First issue</i>
Holder of authorisation:	<i>Eskom Holdings SOC Limited</i>
Location of activity:	<i>Mpumalanga Province: Ward 23 within the eMalahleni Local Municipality, at Kriel Power Station 69 IS, Portion 0.</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.

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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, Act No. 107 of 1998, as amended and the EIA Regulations, 2014, as amended.

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, Act No. 107 of 1998, as amended and the Environmental Impact Assessment Regulations, 2014, as amended, the Department hereby authorises –

ESKOM HOLDINGS SOC LIMITED

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

With the following contact details –

Gersh Bonga

Eskom Holdings SOC Limited

Private Bag X5009

KRIEL POWER STATION

2272

Tel number: (017) 615 2300

Email address: BongaMG@eskom.co.za

to undertake the following activities (hereafter referred to as "the activity") indicated in Listing Notice 1, (GN R983), as amended:

Listed activities	Activity/Project description
<p><u>GN R.983 Item 14:</u></p> <p>The development and related operation of facilities or infrastructure, for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80 cubic metres or more but not exceeding 500 cubic metres.</p>	<p>The storage capacity and handling of dangerous goods will not exceed the 500m³ threshold.</p>
<p><u>GN R.983 Item 27:</u></p> <p>The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation.</p>	<p>The construction phase of the proposed lime plant upgrades will involve the clearing of cultivated lawn/grass on both the northern and southern sections of the Cooling Towers at the KPS.</p>
<p><u>GN R.983 Item 46:</u></p> <p>The expansion and related operation of infrastructure for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes where the existing infrastructure—</p> <p>a) Where the facility or infrastructure is expanded by more than 1 000 metres in length; or</p> <p>b) Where the throughput capacity of the facility or infrastructure will be increased by 10% or more.</p>	<p>The throughput of the lime treatment plant will be increased by more than 10% (from 86 000m³ to 174 000m³ per day). The proposed pipeline on each side of the lime plants will have a length of 500m and a width of 600mm.</p>
<p><u>GN R.983 Item 48:</u></p> <p>The expansion of—</p> <p>(i) infrastructure or structures where the physical footprint is expanded by 100 square metres or more;</p>	<p>Both lime plants following the expansion will have a total development footprint of 1.96ha.</p>

Listed activities	Activity/Project description
<p><u>GN R.983 Item 57:</u></p> <p>The expansion and related operation of facilities or infrastructure for the treatment of effluent, wastewater or sewage where the capacity will be increased by 15 000 cubic metres or more per day and the development footprint will increase by 1000 square meters or more.</p>	<p>The treatment capacity of the lime treatment plants will be increased to a total 174000m³, whereas the proposed development footprint for the two (2) clarifiers and associated infrastructure exceeds 1000 square metres.</p>

As described in the Basic Assessment Report (BAR) dated February 2019 at:

Farm & Portion Number (s): Kriel Power Station 69 IS, Portion 0.

SG 21 Digit Code (s): T0IS0000000006500000.

Site coordinates	Latitude	Longitude
North	26°15'3.52"S	29°10'30.20"E
South	26°15'31.83"S	29°10'37.77"E

- for the proposed Kriel Power Station (KPS) Lime Plant Upgrade within the eMalahleni Local Municipality in the Mpumalanga Province, hereafter referred to as "the property".

The Lime Plant Upgrade at the KPS will be developed on the northern and southern sections of the Cooling Towers and will have a combined treatment capacity of 174 000m³. As a result, the proposed development will reduce the amount of raw water required in the CW system reducing the supply pressure on the Vaal Water Scheme supply.

The main infrastructure associated with the Lime Treatment Plant upgrades includes the following:

- Two additional clarifiers to each side with a capacity of 1750m³;
- Pipelines (500m x 600mm) to tie in the clarifiers to the existing Lime Treatment plants; and
- Dilution feed water pumps.

Conditions of this Environmental Authorisation

Scope of authorisation

1. The proposed Kriel Power Station Lime Plant Upgrade within the eMalahleni Local Municipality in the Mpumalanga Province, is **approved** as per the geographic coordinates cited in the table above.
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, Act No. 107 of 1998, as amended 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) submitted as part of the Application for EA is hereby approved. This EMPr must be implemented and strictly adhered to. The recommendations and mitigation measures recorded must be implemented.

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 R982 of 04 December 2014, as amended. 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 R982 of 04 December 2014, as amended. 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. In assessing whether to grant such approval or not, the Department will consider the processes and requirements prescribed in Regulation 37 of GN R982 of 04 December 2014, as amended.

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.
 - 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 R982 of 04 December 2014, as amended.
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.
23. The environmental audit reports must be compiled in accordance with Appendix 7 of the EIA Regulations, 2014, as amended, 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. An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate reduction, recycling, re-use and disposal.
29. 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).
30. In the event that fossil remains are discovered during any phase of construction, either on the surface or exposed by fresh excavations, the Chance Find Protocol must be immediately implemented by the ECO in charge of these developments. These discoveries must be secured (preferably *in situ*) and the ECO must alert SAHRA so that appropriate mitigation (e.g. recording, sampling or collection) can be undertaken by a professional palaeontologist.

General

31. A copy of this Environmental Authorisation, the audit and compliance monitoring reports, and the approved EMPr, must be made available for inspection and copying-
- 31.1. at the site of the authorised activity;
- 31.2. to anyone on request; and
- 31.3. where the holder of the Environmental Authorisation has a website, on such publicly accessible website.
32. 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: 13/06/2019



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 February 2019;
- b) The comments received from SAHRA and interested and affected parties as included in the BAR dated February 2019;
- c) Mitigation measures as proposed in the BAR dated February 2019 and the EMPr;
- d) The information contained in the specialist study contained within Appendix F2 of the BAR; and
- e) The objectives and requirements of relevant legislation, policies and guidelines, including Section 2 of the National Environmental Management Act, Act No.107 of 1998, as amended.

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 project is to increase the treatment capacity on both plants, located on the northern and southern sections of the four (4) cooling towers at the station.
- c) The BAR dated February 2019 identified all legislation and guidelines that have been considered in the preparation of the BAR dated February 2019.
- d) The methodology used in assessing the potential impacts identified in the BAR dated February 2019 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, as amended, 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 February 2019 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 February 2019 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.
- f) The three main objectives of the Lime Plant Upgrade include the following:
 - Improving and reducing the quality and quantity of water discharged to the Ash Dams;
 - Increasing the treatment and recovery of effluent through the process of Lime Softening at the WWTP; and
 - Reducing the demand for raw water in the cooling system, therefore reducing supply pressure on the Vaal Water Scheme supply.

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, Act No. 107 of 1998, as amended, and that any potentially detrimental environmental impacts resulting from the authorised activities can be mitigated to acceptable levels. The Environmental Authorisation is accordingly granted.