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environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Private Bag X 447 · PRETORIA · 0001 · Fedsure Building · 315 Pretorius Street · PRETORIA
Tel (+ 27 12) 310 3911 · Fax (+ 2712) 322 2682

NEAS Reference: DEA/EIA/0000345/2011

DEA Reference: 12/12/20/2273

Enquiries: Fiona Grimett

Telephone: 012-395-1793 Fax: 012-320-7539 E-mail: fggrimett@environment.gov.za

Mr. Julian Nair
Eskom Holdings (Pty) Ltd
P.O. Box 1003
PULLENSHOPE
1096

Fax no: 086 586 3847

PER FACSIMILE / MAIL

Dear Mr. Nair

APPLICATION FOR INTEGRATED ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) AS AMENDED, AND THE NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008, (ACT NO. 59 OF 2008); THE REVERSE OSMOSIS PLANT AT HENDRINA POWER STATION, MPUMALANGA PROVINCE

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

In terms of regulation 10(2) of the Environmental Impact Assessment Regulations, 2010 (the Regulations), you are instructed to notify all registered interested and affected parties, in writing and within 12 (twelve) days of the date of the EA, of the Department's decision in respect of your application as well as the provisions regarding the submission of appeals that are contained in the Regulations.

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Your attention is drawn to Chapter 7 of the Regulations, which prescribes the appeal procedure to be followed. This procedure is summarised in the attached document. Kindly include a copy of this document with the letter of notification to interested and affected parties.

Should the applicant or any other party wish to appeal any aspect of the decision a notice of intention to appeal must be lodged by all prospective appellants with the Minister, within 20 days of the date of the EA, by means of one of the following methods:

- By facsimile: 012 320 7561;
- By post: Private Bag X447,
Pretoria, 0001; or
- By hand: 2nd Floor, Fedsure Building, North Tower,
cnr. Van der Walt and Pretorius Streets,

Pretoria.

If the applicant wishes to lodge an appeal, it must also serve a copy of the notice of intention to appeal on all registered interested and affected parties as well as a notice indicating where, and for what period, the appeal submission will be available for inspection, should you intend to submit an appeal.

Please include the Department (*Attention: Director: Environmental Impact Evaluation*) in the list of interested and affected parties, notified through your notification letter to interested and affected parties, for record purposes.

Appeals must be submitted in writing to:

Mr T Zwane, Senior Legal Administration Officer (Appeals) of this Department at the above mentioned addresses or fax number. Mr Zwane can also be contacted at:
Tel: 012-310-3929
Email: tzwane@environment.gov.za

The authorised activity/ies shall not commence within twenty (20) days of the date of signature of the authorisation. Further, please note that the Minister may, on receipt of appeals against the authorisation or conditions thereof suspend the authorisation pending the outcome of the appeals procedure.

Yours sincerely


Mr Ishaam Abader
Deputy Director-General: Environmental Quality and Protection
Department of Environmental Affairs

Date:

6/2/2012

CC:	Ms. Louise Corbett	Aurecon South Africa (Pty) Ltd	Tel: 021 481 2501	Fax: 021 424 5588
	Mr G.R. Batchelor	MDEDET	Tel: 013 759 4099	Email: gbatchelor@mpg.gov.za
	Ms. M. Skosana	Steve Tshwete Local Municipality	Tel: 013 249 7000	Fax: 013 243 2550
	Mr. T. Zwane	Appeals Authority (DEA)	Tel: 012-310-3929	Fax: 012-320-7561

APPEALS PROCEDURE IN TERMS OF CHAPTER 7 OF THE NEMA EIA REGULATIONS, 2010 (THE REGULATIONS) AS PER GN R.543 OF 2010 TO BE FOLLOWED BY THE APPLICANT AND INTERESTED AND AFFECTED PARTIES UPON RECEIPT OF NOTIFICATION OF AN ENVIRONMENTAL AUTHORISATION (EA)

APPLICANT	INTERESTED AND AFFECTED PARTIES (IAPs)
1. Receive EA from the relevant Competent Authority (the Department of Environmental Affairs [DEA])	1. Receive EA from Applicant/Consultant
2. Within 12 days of date of the EA notify all IAPs of the EA and draw their attention to their right to appeal against the EA in terms of Chapter 7 of the Regulations.	2. N/A
3. If you want to appeal against the EA, submit a notice of intention to appeal within 20 days of the date of the EA with the Minister of Water and Environmental Affairs (the Minister).	3. If you want to appeal against the EA, submit a notice of intention to appeal within 20 days of the date of the EA. with the Minister of Water and Environmental Affairs (the Minister).
4. After having submitted your notice of intention to appeal to the Minister, provide each registered IAP with a copy of the notice of intention to appeal within 10 days of lodging the notice	4. After having submitted your notice of intention to appeal to the Minister, provide the applicant with a copy of the notice of intention to appeal within 10 days of lodging the notice
5. The Applicant must also serve on each IAP: <ul style="list-style-type: none"> • a notice indicating where and for what period the appeal submission will be available for inspection. 	5. Appellant must also serve on the Applicant within 10 days of lodging the notice, <ul style="list-style-type: none"> • a notice indicating where and for what period the appeal submission will be available for inspection by the applicant.
6. The appeal must be submitted in writing to the Minister within 30 days after the lapsing of the period of 20 days provided for the lodging of the notice of intention to appeal.	6. The appeal must be submitted to the Minister within 30 days after the lapsing of the period of 20 days provided for the lodging of the notice of intention to appeal.
7. Any IAP who received a notice of intention to appeal may submit a responding statement to that appeal to the Minister within 30 days from the date that the appeal submission was lodged with the Minister.	7. An Applicant who received notice of intention to may submit a responding statement to the appeal to the Minister within 30 days from the date that the appeal submission was lodged with the Minister.

NOTES:

1. **An appeal against a decision must be lodged with:-**
 - a) the Minister of Water and Environmental Affairs if the decision was issued by the Director- General of the Department of Environmental Affairs (or another official) acting in his/ her capacity as the delegated Competent Authority;
 - b) the Minister of Justice and Constitutional Development if the applicant is the Department of Water Affairs and the decision was issued by the Director- General of the Department of Environmental Affairs (or another official) acting in his/ her capacity as the delegated Competent Authority;
2. **An appeal lodged with:-**
 - a) the Minister of Water and Environmental Affairs must be submitted to the Department of Environmental Affairs;
 - b) the Minister of Justice and Constitutional Development must be submitted to the Department of Environmental Affairs;
3. **An appeal must be:-**
 - a) submitted in writing;
 - b) accompanied by:
 - a statement setting out the grounds of appeal;
 - supporting documentation which is referred to in the appeal; and
 - a statement that the appellant has complied with regulation 62 (2) or (3) together with copies of the notices referred to in regulation 62.





environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Integrated Environmental Authorisation Issued in terms of
The National Environmental Management Act, 1998 and the Environmental Impact
Assessment Regulations 2010

and

The National Environmental Management: Waste Act, 2008 and Government Notice 718
of 2009

The Reverse Osmosis Plant at Hendrina Power Station, Mpumalanga Province

Nkangala District Municipality

Authorisation register number:	12/12/20/2273
Last amended:	First Issue
Holder of integrated authorisation:	Eskom Holdings (Pty) Ltd
Location of activities:	GAUTENG PROVINCE: Remainder of Farm 162 (Hendrina Power Station), Steve Tshwete Local Municipality

This 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

INTEGRATED ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (NEMA), NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (NEMWA), GOVERNMENT NOTICE 718 OF 2009 AND THE ENVIRONMENTAL IMPACT ASSESSMENT (EIA) REGULATIONS, 2010

1. DECISIONS

The Department is satisfied, on the basis of information available to it and subject to compliance with the conditions of this integrated environmental authorisation ("the environmental authorisation") as well as the EMPr dated June 2011 that the applicant should be authorised to undertake the NEMA EIA and NEMWA listed activities specified below.

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

2. NEMA EIA AND NEMWA ACTIVITIES AUTHORISED

By virtue of the powers conferred on it by NEMA, the NEMA EIA Regulations, 2010, NEMWA and Government Notice 718 of 3 July 2009 the Department hereby authorises –

ESKOM HOLDINGS (PTY) LTD

with the following contact details –

Mr. Julian Nair

Eskom Holdings (Pty) Ltd

P.O. Box 1003

PULLENSHOPE

1096

Tel: 013 296 3400

Fax: 086 586 3847



to undertake the following activities (hereafter referred to as "the activities"):

GN R. 544

Item 28: The expansion of or changes to existing facilities for any process or activity where such expansion or changes to will result in the need for a permit or license in terms of national or provincial legislation governing the release of emissions or pollution, excluding where the facility, process or activity is included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case that Act will apply.

GN 718:

Category B

Item 4 (7): The treatment of effluent, wastewater or sewage with an annual throughput capacity of 15 000 cubic meters or more; and

Item 4 (11): The construction of the facility listed as Item 4 (7).

as described in the Basic Assessment Report (BAR) dated August 2011 at:

Alternative S1	Latitude	Longitude
Centre point co-ordinate of the Reverse Osmosis plant site	26° 1' 37.92" S	29° 36' 7.74" E

Coordinates of the existing Hendrina Power Station precinct	Latitude	Longitude
1	26° 1' 31.48" S	29° 36' 3.53" E
2	26° 1' 38.48" S	29° 36' 27.49" E
3	26° 2' 31.45" S	29° 36' 11.67" E
4	26° 2' 27.06" S	29° 35' 55.63" E
5	26° 2' 17.98" S	29° 35' 58.65" E
6	26° 2' 14.32" S	29° 35' 47.60" E
7	26° 2' 6.80" S	29° 35' 41.67" E
8	26° 1' 35.45" S	29° 35' 56.09" E

- for the construction of a Reverse Osmosis (RO) effluent treatment plant which will treat concentrated cooling water (CCW) currently being disposed of to the Hendrina Power Station ashing system as waste water. The effluent treatment plant will be located approximately 16km North West of Hendrina town, within the Hendrina Power Station precinct, on Remainder of Farm 162 in the Steve Tshwete Local Municipality (Pullenshope), Mpumalanga Province, hereafter referred to as "the site".

The RO plant will be integrated with existing water cooling infrastructure, and will be located on the north side of the station, between two cooling towers. The plant will be constructed on a concrete slab within a footprint of 0.5 ha and will incorporate the following components:

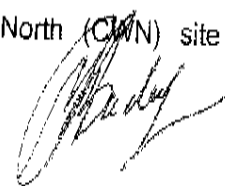
- Building to house the RO effluent treatment plant: 15 m x 45 m x 5.5 m (height); and
- Outside the building:
 - clarifier / floc Tank: 120 m³ capacity;
 - back wash settler Tank: 120 m³ capacity;
 - RO feed water Tank: 120 m³ capacity;
 - permeate storage Tank: 300 m³ capacity; and
 - small chemical storage tanks (x 4): 5 m³ capacity.

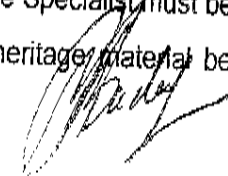
The following pipelines and infrastructure will support the proposed RO plant:

- From the cooling water sedimentation basin to the proposed RO plant (approximately 100m);
- From the proposed RO plant to the demineralisation plant in the WTP (approximately 150m);
- From the proposed RO plant to the cooling water system (approximately 100 m); and
- From the proposed RO plant to the effluent sumps at the WTP (approximately 130m). (Total pipeline length of approximately 480m).
- Bunded chemicals storage area within the footprint of the treatment plan with a maximum storage capacity of 30MI at any one time.

3. SCOPE OF AUTHORISATION

3.1 Authorisation is granted for the construction of a RO effluent treatment plant and for the recycling of concentrated cooling water (CCW). The Cooling Water North (CWN) site



- alternative within the confines of the Hendrina Power Station precinct at site coordinates as indicated in Section 2 above is hereby approved.
- 3.2 Authorisation of the activities is subject to the conditions contained in this authorisation, which form part of the environmental authorisation and are binding on the holder of the environmental authorisation.
- 3.3 The EMPr dated June 2011, is hereby approved and forms part of the environmental authorisation. The recommendations and mitigation measures included in this EMPr are binding on the holder of the environmental authorisation.
- 3.4 The Department may by written notice to the holder of an environmental authorisation suspend with immediate effect an environmental authorisation if suspension of the authorisation is necessary to prevent harm or further harm to the environment.
- 3.5 The holder of the environmental authorisation shall be responsible for ensuring compliance with the conditions contained in this environmental authorisation. This includes ensuring the compliance of 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.
- 3.6 The activities authorised may only be carried out at the site with coordinates identified in Section 2 of this environmental authorisation.
- 3.7 Any changes to; or deviations from the project description set out in this authorisation must follow the amendment processes as prescribed in Chapter 4 (Parts 1-3) of the NEMA EIA Regulations, 2010 and 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 authorisation in terms of the regulations.
- 3.8 This 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. Relevant legislation that must be complied with by the holder of this authorisation includes, *inter alia*:
- Archaeological remains, artificial features and structures older than 60 years are protected by National Heritage Resources Act, 1999 (Act No. 25 of 1999). Should any archaeological artefacts be exposed during excavation for the purpose of construction, construction in the vicinity of the finding must be stopped immediately. A registered Heritage Specialist must be called to the site for inspection. Under no circumstances shall any heritage material be
- 

destroyed or removed from the site and the relevant heritage resource agency must be informed about the finding. Heritage remains uncovered or disturbed during earthworks must not be disturbed further until the necessary approval has been obtained from the South African Heritage Resources Agency and/or any of their delegated provincial agencies.

- Relevant provisions of the Occupational Health and Safety Act, 1993 (Act 85 of 1993).
- Relevant provisions of the National Water Act, 1998 (Act 36 of 1998).
- Relevant provisions of the National Forests Act, 1998 (Act 84 of 1998).
- Relevant provisions of the National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004).
- Relevant provisions of the National Environmental Management: Protected Areas Act, 2003 (Act 57 of 2003) and its Regulations.
- Should fill material be required for any purpose, the use of borrow pits must comply with the provisions of the Minerals and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) administered by the Department of Minerals and Energy.

3.9 An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate reduction, recycling, re-use and disposal options where appropriate. Any solid waste shall 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).

4. **SPECIFIC CONDITIONS**

4.1 **Site Security and Access Control**

(a) The holder of the environmental authorisation must ensure effective access control of the effluent treatment plant to prevent unauthorised entry. Weatherproof, durable and legible signs, in at least three official languages applicable in the area, must be displayed at each entrance to the site. The signs must indicate the risks involved in entering the site, warn against the use of water containing waste and must include the person responsible for the operation of the site.

4.2 **Permissible Waste**

4.2.1 The treatment facility may only be used for the treatment of concentrated cooling water (CCW) from the Hendrina Power Station.



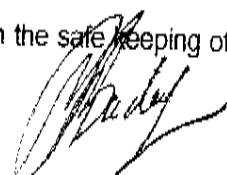
4.2.2 The classification, handling and treatment of the effluent must conform to the latest edition of the document "Minimum Requirements for Handling, Classification and Disposal of Hazardous Waste, Waste Management Series, Department of Water Affairs and Forestry" or its successor.

4.3 Construction and commissioning of waste management activities

- 4.3.1 All design and construction activities requiring the sign off and supervision of a registered profession shall be undertaken by recognised and registered professionals within approved engineering standards.
- 4.3.2 The site plan must only be changed under the supervision of a registered professional engineer.
- 4.3.3 The treatment and storage areas must have firm and impermeable base to prevent contamination of ground water.

4.4 General operation and impact management of waste management activities

- (a) Waste, which is not permissible under condition 4.2, must be dealt with according to relevant legislation or the Department's policies and practices.
- (b) The holder of the environmental authorisation must prevent spillages. Where they happen nonetheless, the Emergency Preparedness Plan (condition 5.1.3 of this environmental authorisation) shall apply and the holder of the environmental authorisation must ensure the effective and safe cleaning of such spillages.
- (c) The treatment of effluent must not impact on a water resource or on any other person's water use, property or land and must not be detrimental to the health and safety of the public in the vicinity of the activity.
- (d) The holder of the environmental authorisation must ensure that emissions from the activities are free from odour at levels likely to cause annoyance.
- (e) The holder of the environmental authorisation must prevent the occurrence of nuisance conditions or health hazards.
- (f) The pipelines used for the conveyance of effluent must be painted in a conspicuous colour or manufactured of a coloured material distinctly different from the colour of the pipes in which the drinking water is flowing to avoid the possibility of any cross-connection of the different pipelines.
- (g) All stop-valves and taps on the pipelines conveying effluent must be of a type that can be opened and closed by means of a loose wrench. The wrench must be in the safe keeping of



- the holder of the environmental authorisation or delegated member of the staff to prevent unauthorised use thereof.
- (h) The holder of the environmental authorisation must ensure that all personnel who work with hazardous waste are trained to deal with these potentially hazardous situations so as to minimise the risks involved. Records of training and verification of competence must be kept by the holder of the environmental authorisation.
 - (i) The holder of the environmental authorisation must ensure that the effluent treatment plant operates within its design parameters at all times.
 - (j) The holder of the environmental authorisation must ensure that brine produced through the effluent treatment process is disposed of at a Waste Management Facility are licenced to accept such wastes.
 - (k) The holder of the environmental authorisation must ensure that the integrity of the effluent treatment tanks, the chemical storage tanks and the bunded storage areas are monitored quarterly. If the containment integrity is found to be compromised, corrective action must be taken before the containment integrity is breached.
 - (l) No effluent must be discharged into any storm water drain or furrow, whether by commission or by omission.

4.5 Waste specific monitoring

- (a) The holder of the environmental authorisation must carry out all tests required in terms of this environmental authorisation in accordance with published laboratory analysis methods or those prescribed by and obtainable from the South African Bureau of Standards (SABS), referred to in the Standards Act, 2008 (Act 08 of 2008).
- (b) The holder of the environmental authorisation may only use another method of analysis if approved by the Department.

Water quality monitoring

Surface water quality monitoring shall be performed in all storm water drains on and adjacent to the site at locations selected in conjunction with the Department of Water Affairs and at such a frequency as determined by the responsible authority.



5. GENERAL CONDITIONS

5.1 Management of activities

5.1.1 General Management

- (a) The Environmental Management Programme (EMPr) dated June 2011, submitted as part of application for EA for the Reverse Osmosis effluent treatment plant, is hereby approved.
- (b) All correspondence with regard to this application must be forwarded for attention to the Director: Environmental Impact Evaluation within the Department.
- (c) The activities must be managed and operated:
 - (i) in accordance with an Environmental Management System (EMS), that inter alia identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents and non-conformances and those drawn to the attention of the holder of the environmental authorisation as a result of complaints;
 - (ii) in accordance with the conditions of this environmental authorisation and any other written instruction by the Department;
 - (iii) in accordance with the EMPr for the Reverse Osmosis effluent treatment plant; and
 - (iv) by sufficient persons who are competent in respect of the responsibilities to be undertaken by them in connection with the operation of the activities.

5.1.2 Designation of Environmental Control Officer and Waste Management Control Officer:

Environmental Control Officer

- (a) The applicant must appoint a suitably experienced 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 authorisation are implemented and to ensure compliance with the provisions of the EMPr.
- (b) The ECO shall be appointed before commencement of any land clearing or construction activities.
- (c) The ECO shall keep record of all activities on site, problems identified, transgressions noted and a task schedule of tasks undertaken by the ECO.



- (d) The ECO shall remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed and the site is ready for operation.

Waste Management Control Officer

- (a) The applicant must designate a Waste Management Control Officer (WMCO), who will monitor and ensure compliance and correct implementation of all conditions and provisions as stipulated in the environmental authorisation and EMPr on an ongoing basis.
- (b) The WMCO must report any non-compliance with any environmental authorisation conditions or requirements or provisions of NEMWA to the Department through the means reasonably available.
- (c) The duties and responsibility of the WMCO should not be seen as exempting the holder of the environmental authorisation from the legal obligations in terms of the NEMWA.

5.1.3 Emergency Preparedness Plan

The holder of the environmental authorisation must maintain and implement an emergency preparedness plan and review it annually when conducting audit and after each emergency and or major accident. The plan must include the contact details of police, ambulances and any emergency centre located in the vicinity of the site and must, amongst others, address:

- a) Site fire;
- b) Spillages (through the pipeline network or at the effluent treatment plant);
- c) Natural disasters such as floods; and
- d) Industrial action.

5.2 Auditing

5.2.1 Internal Audits

- (a) Internal audits must be conducted annually by the holder of the environmental authorisation in order to audit compliance with conditions of this environmental authorisation and the EMPr, and on each audit occasion an official report must be compiled by the relevant auditor to report the findings of the audits, which must be made available to the external auditor specified in condition 5.2.1(a) below.



5.2.2 External Audits

- (a) The holder of the environmental authorisation must appoint an independent external auditor to audit the site biennially subject to the authorisation and this auditor must compile an audit report documenting the findings of the audit, which must be submitted by the holder of the environmental authorisation according to condition 5.4.7, below.
- (b) The audit report must-
 - (i) Specifically state whether conditions of this environmental authorisation are adhered to;
 - (ii) Include an interpretation of all available data and test results regarding the operation of the site and all its impacts on the environment;
 - (iii) Specify target dates for the implementation of the recommendations by the holder of the environmental authorisation to achieve compliance;
 - (iv) Contain recommendations regarding non-compliance or potential non-compliance and must specify target dates for the implementation of the recommendations by the holder of the environmental authorisation and whether corrective action taken for the previous audit non conformities was adequate; and
 - (v) Show results graphically and conduct trend analysis.

5.2.3 Departmental Audits and Inspections

- (a) The Department reserves the right to audit and/or inspect the site without prior notification at any time and frequency as may be determined by the Department.
- (b) The holder of the environmental authorisation must make any records or documentation available to the Department upon request, as well as any other information he/she may require.

5.3 Investigations

- 5.3.1 If, in the opinion of the Department, pollution, nuisances or health risks may be or are occurring on the site, the holder of the environmental authorisation must initiate an investigation into the cause of the problem or suspected problem, including such investigations as identified by the Department related to the risks posed.
- 5.3.2 Should the investigation carried out as per conditions 5.3.1 above reveal any unacceptable levels of pollution, the holder of the environmental authorisation must submit mitigation measures to the satisfaction of the relevant authority.



5.4 Reporting

- 5.4.1 The holder of the environmental authorisation must, within 24 hours of it occurring, notify the Department of the occurrence or detection of any incident on the site, or incidental to the operation of the site, including any malfunction, breakdown or failure of equipment, which has the potential to cause, or has caused pollution of the environment, health risks, nuisance conditions.
- 5.4.2 The holder of the environmental authorisation must, within 14 days, or a shorter period of time, if specified by the Department from the occurrence or detection of any incident referred to in condition 5.4.1, submit an action plan, which must include a detailed time schedule, and resource allocation signed off by top management, to the satisfaction of the Department of measures taken to –
- (a) correct the impact resulting from the incident;
 - (b) prevent the incident from causing any further impact; and
 - (c) prevent a recurrence of a similar incident.
- 5.4.3 In the event that measures have not been implemented within the time period identified by the Department, or the measures which have been implemented are inadequate, the Department may implement the necessary measures at the cost and risk of the holder of the environmental authorisation.
- 5.4.4 The holder of the environmental authorisation must keep an incident report and complaints register, which must be made available to the external auditor, representatives of this Departmental and Department of Water Affairs for the purpose of audit.
- 5.4.5 The Department must be notified within 14 days of the following changes:
- (a) steps taken with a view to the holder of the environmental authorisation, or its holding company, going into bankruptcy, entering into composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.
- 5.4.7 Each external audit report referred to in condition 5.2.2 must be submitted to the Department within 30 days from the date on which the external auditor finalised the audit. All compliance monitoring and audit reports must be submitted to the *Director: Compliance Monitoring* at the Department.

5.5 Commencement of activity

- 5.5.1 The authorised activities shall not commence within twenty (20) days of the date of signature of the environmental authorisation.



- 5.5.2 The activities must commence within a period of three (3) years from the date of issue. If commencement of the activity does not occur within that period, the environmental authorisation lapses and a new application for an environmental authorisation must be made for the activities to be undertaken. Commencement with one activity listed in terms of this authorisation constitutes commencement of all authorised activities.
- 5.5.3 If the holder of the environmental authorisation anticipates that commencement of the activity would not occur within a three (3) year period, he/she must apply and show good cause for an extension of the environmental authorisation six (6) months prior to its expiry date.
- 5.5.4 Should you be notified by the Minister of a suspension of the authorisation pending appeal procedures, you shall not commence with the activities unless authorised by the Minister in writing.

5.6 Notification of authorities

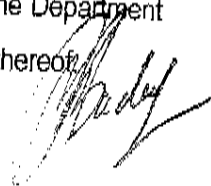
Fourteen (14) days written notice must be given to the Department that the activity will commence. Commencement for the purposes of this condition includes site preparation. The notice must include a date on which it is anticipated that the activity will commence. This notification period may coincide with the period contemplated in 5.5.1 above.

5.7 Operation of the activities

- 5.7.1 Fourteen (14) days written notice must be given to the Department that the activity operational phase will commence.
- 5.7.2 Operation of the Reverse Osmosis effluent treatment plant must comply with the Hendrina Power Station's EMP.

5.8 Site closure and decommissioning

- 5.8.1 Should the activity ever cease or become redundant, the applicant shall 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.
- 5.8.2 The holder of the environmental authorisation must rehabilitate the site or any portion thereof, in accordance with a closure report and rehabilitation plan, which must be submitted to the Department for approval at least one year prior to the intended closure of the site, or any portion thereof.



5.8.3 The holder of the environmental authorisation will remain responsible for the site, and/or any of its impacts on the environment, after operations on the site have ceased.

5.9 Leasing and alienation of the site

Should the holder of the environmental authorisation want to alienate or lease the site, he/she shall notify the Department in writing of such an intention at least 120 days prior to the said transaction. Should the approval be granted, the subsequent holder of the environmental authorisation shall remain liable to compliance with all licence conditions.

5.10 Transfer of Environmental Authorisation

5.10.1 Should the holder of the environmental authorisation transfer holdership of this environmental authorisation due to a change of ownership of the property [as provided for in terms of S24E(c) of NEMA], he/she must apply in terms of Section 52 of NEMWA.

5.10.2 Should the transfer of holdership of this environmental authorisation (mentioned in 5.10.1 above) be for any reason other than the change of ownership in the property, the holder of this environmental authorisation must notify the Department and request an amendment to this environmental authorisation.

5.10.3 Any subsequent holder of an environmental authorisation shall be bound by conditions of this environmental authorisation.

5.11 Recording

5.11.1 The holder of the environmental authorisation must keep records and update all the information referred to in Annexure II and submit this information to the Department on an annual basis.

5.11.2 All records and/or reports required or resulting from activities relating to this environmental authorisation must:

- (a) be legible;
- (b) be submitted as required and must form part of the external audit report;
- (c) if amended, the record and/or report must be amended in such a way that the original and any subsequent amendments remain legible and are easily retrievable; and
- (d) be retained in accordance with a documented procedure.



5.11.3 Records demonstrating compliance with any conditions of this environmental authorisation must be maintained by the holder.

5.12 Miscellaneous

- 5.12.1 A copy of this authorisation, the BAR dated August 2011, and the EMPr dated June 2011, must be kept at the site where the activities will be undertaken. The environmental authorisation as well as any amendment to the environmental authorisation must be provided to any authorised official of the Department who requests to see it and must be made available for inspection by any employee or agent of the holder of the environmental authorisation who works or undertakes work at the site.
- 5.12.2 Any persons having duties that are or may be affected by the matters set out in this environmental authorisation must have convenient access to a copy of it, kept at or near the place where those duties are carried out. A copy of this environmental authorisation may be published on any website deemed fit by the Department.
- 5.12.3 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.
- 5.12.4 Where any of the applicant's contact details change, including the name of the responsible person, the physical or postal address and/or telephonic details, the applicant must notify the Department as soon as the new details become known to the applicant.
- 5.12.5 The holder of the authorisation must notify the Department, in writing and within 48 (forty eight) hours, if any condition of this environmental authorisation cannot be or is not adhered to. Any notification in terms of this condition must be accompanied by reasons for the non-compliance. Non-compliance with a condition of this environmental authorisation may result in criminal prosecution or other actions provided for in NEMA, NEMWA and NEMA EIA Regulations.
- 5.12.6 National government, provincial government, local authorities or committees appointed in terms of the application or conditions of this environmental authorisation or any other public authority shall not be held responsible for any damages or losses suffered by the applicant or his 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 applicant with the conditions of the environmental authorisation as set out in this document or any other subsequent document emanating from these conditions of the authorisation.
- 5.12.7 Transgression of any condition of this environmental authorisation could result in the validity of the environmental authorisation being suspended by the Department.



- 5.12.8 In terms of sections 28 and 30 of NEMA, and sections 19 and 20 of the National Water Act, 1998 (Act No. 36 of 1998), any costs incurred to remedy environmental damage must be borne by the person responsible for the damage. It is therefore imperative that the holder of the environmental authorisation reads through and understand the legislative requirements pertaining to the project. It is the Applicant's responsibility to take reasonable measures which include informing and educating contractors and employees about environmental risks of their work and training them to operate in an environmentally acceptable manner.
- 5.12.9 This environmental authorisation is valid for a period of twenty (20) years. Every 5 years within this period, the holder thereof must initiate a review process. Based on the results of the review, compliance to the environmental authorisation's conditions, recommendations from audit reports and/or changing legislation, the Department may amend, withdraw or extend the validity of the environmental authorisation.
- 5.12.11 Applications for any amendment of the environmental authorisation must be made in writing to the Department.

Date of environmental authorisation: 6 FEBRUARY 2012



Mr Ishaam Abader

**Deputy Director-General: Environmental Quality and Protection
Department of Environmental Affairs**

Annexure 1: Reasons for Decision

1. Key factors 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 August 2011;
- b) The comments received from the Directorate: Authorisations & Waste Disposal Management and interested and affected parties as included in the BAR dated August 2011;
- c) The mitigation measures included in the BAR dated August 2011 and the EMPr;
- d) The information contained in the specialist studies contained within 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).

3. Findings

After consideration of the information listed above, the Department made the following findings:

- a) Details provided of the qualifications of the EAP indicate that the EAP is competent to carry out the environmental impact assessment procedures.
- b) The BAR dated August 2011 included a description of the environment that may be affected by the activity.
- c) The BAR dated August 2011 identified all legislation and guidelines that have been considered in the preparation of the whole basic assessment process.
- d) A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA regulations, 2010 for public involvement.
- e) The procedure followed for impact assessment is adequate for the decision-making process.
- f) All legal and procedural requirements have been met.
- g) The Reverse Osmosis (RO) plant will reduce the risk of non-compliance with Eskom's Zero Liquid Effluent Discharge (ZLED) and the Hendrina Power Station's licence conditions, by treating the concentrated cooling water (CCW) which is currently being disposed of at the ash dams as waste water. The volume of CCW would therefore be reduced, freeing up additional volume within the ashing system for storm events.



- h) The raw water currently used for producing demineralised water could also be replaced with the treated CCW, thus decreasing the Hendrina Power Station's raw water consumption. The re-use of the CCW would result in a net gain for the environment, compared to the current status, as the risk of a pollution event would be reduced.
- i) The impacts that would result from the construction and operation of the RO plant were determined to be of low significance and can be adequately mitigated.
- j) Mitigation measures for the development were proposed and included in the EMPr dated June 2011 and will be implemented to manage the identified environmental impacts.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the environmental authorisation, the 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 activity can be mitigated to acceptable levels. The application is accordingly granted.

ANNEXURE II

INFORMATION WHICH SHALL BE SUBMITTED ON AN ANNUAL BASIS CONDITION 5.11.1

* = indicate with an X. Please print legibly.

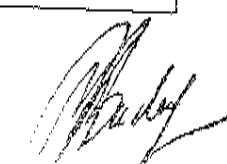
NAME OF SITE: _____	DATE OF REPORT: _____ (y/m/d)
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1. Registered owner(s) of property on which effluent treatment facility is situated:

Name	Telephone	
Postal Address	Fax	
	Postal Code	

2. Operator in control of the effluent treatment facility:

Name	Telephone	
Identity number	Tel. After hours	
Educational Qualifications		
Other Relevant competencies:		



3. Indicate the approximate quantities of effluent treated during the year:

Type of waste (Specify)	Quantity (m ³ annum ⁻¹)
TOTAL	

4. Indicate the approximate quantities of effluent treated or disposed during the year:

Type of waste	Quantity (m ³ annum ⁻¹)	treated or disposed
TOTAL		

I, the undersigned, declare that the information stated above is to my knowledge a true reflection of the status at the _____ effluent treatment facilities.

Signature: _____

Name: _____

Capacity: _____

Place: _____

Date _____



TRANSMISSION VERIFICATION REPORT

TIME : 06/02/2012 15:12
NAME :
FAX :
TEL :
SER.# : A9J860478

DATE, TIME	06/02 15:12
FAX NO./NAME	0214245588
DURATION	00:00:00
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RESULT	BUSY
MODE	STANDARD



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

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NEAS Reference: DEA/EIA/0000345/2011

DEA Reference: 12/12/20/2273

Enquiries: Fiona Grimett

Telephone: 012-395-1793 Fax: 012-320-7539 E-mail: forimett@environment.gov.za

Mr. Julian Nair
Eskom Holdings (Pty) Ltd
P.O. Box 1003
PULLENSHOPE
1096

Fax no: 086 586 3847

PER FACSIMILE / MAIL

Dear Mr. Nair

APPLICATION FOR INTEGRATED ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 of 1998) AS AMENDED, AND THE NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008, (ACT NO. 59 OF 2008): THE REVERSE OSMOSIS PLANT AT HENDRINA POWER STATION, MPUMALANGA PROVINCE

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

In terms of regulation 10(2) of the Environmental Impact Assessment Regulations, 2010 (the Regulations), you are instructed to notify all registered interested and affected parties, in writing and within 12 (twelve) days of the date of the EA, of the Department's decision in respect of your application as well as the provisions regarding the submission of appeals that are contained in the Regulations.