

Ref: 12/12/20/685

Tel: (012) 310 3031 Fax: (012) 320 7539 e-mail: mntene@deat.gov.za
Enquiries: Ms Masili Ntere

Ms D Herbst
Eskom Holdings Limited: Generation Division
PO Box 1091
JOHANNESBURG
2000

Fax: (011) 800 3501

Dear Ms Herbst

**GRANTING OF CONDITIONAL AUTHORISATION FOR PROJECT REFERENCE 12/12/20/685:
CONSTRUCTION OF THE PROPOSED ESKOM HOLDINGS LIMITED: GENERATION DIVISION
4800MW COAL FIRED POWER STATION AND ASSOCIATED INFRASTRUCTURE NEAR
LEPHALALE**

Please find attached the record of decision in respect of your application for authorisation in terms of Regulations R1182 and R1183 (as amended) promulgated under sections 21, 22, 26 and 28 of the Environment Conservation Act (Act 73 of 1989).

Yours sincerely



Ms Pam Yeko
Director-General
Department of Environmental Affairs and Tourism

Date: 21/09/06

CC: Ms Ashlea Strong

Behlweki Environmental

Fax: (011) 465 3841

RECORD OF DECISION FOR PROJECT REFERENCE 12/12/20/695: CONSTRUCTION OF THE PROPOSED ESKOM GENERATION 4800MW COAL FIRED POWER STATION, NEAR LEPHALALE

By virtue of the power delegated by the Minister in terms of section 33(1) Environment Conservation Act, (Act 73 of 1989) ("the Act"), I hereby, in terms of section 22(3) of the Act, authorise Eskom Generation to undertake the activities specified/ detailed below subject to the indicated conditions.

1. DESCRIPTION, EXTENT AND LOCATION OF THE ACTIVITY:

As illustrated in the site layout Plan in Appendix A of the Final Environmental Impact Report dated 22 May 2006 the proposed development entails the following:

- The construction of a 4800MW coal fired power station near Lephalale, on approximately 700ha of the farm Naauwontkome 509 LQ
- The installation of ancillary infrastructure including the ashing facility on 500-1000ha of the farm Eenzaamheid 687 LQ
- The construction of a conveyor belt for coal supply on the eastern alignment
- The re-routing of the Steenbokpan Road to the northern alternative
- The construction of the overland ash conveyor belt

2. KEY FACTORS INFORMING THE DECISION:

2.1 In reaching its decision in respect of the application, the Department of Environmental Affairs and Tourism ("the Department") has taken, *inter alia*, the following into consideration:

a) The information contained in the:

- Final Scoping Report dated
- Final Environmental Impact Assessment Report dated 22 May 2006.
- Specialist Reports contained in the Final Environmental Impact Assessment Report.
- Addendum to the Final Environmental Impact Assessment Report dated June 2006.
- Comments on the Environmental Impact Assessment Report dated 18 July 2006 from the Department of Water Affairs and Forestry (DWAF).
- Minutes of the meeting held on 10 May 1982 in the office of the Chief Officer (Air Pollution Control) between Eskom and the Department of Health to discuss the Pollution Control conditions related to Eskom's power stations and related matters.

b) Compliance with applicable international and national legislation and departmental policies:

- The Act
- The principles set out in Section 2 of the National Environmental Management Act, 1998 (Act 107 of 1998) (NEMA)
- Process 29 set out in the Scheduled processes under the Second Schedule to the Atmospheric Pollution Prevention Act, 1965 (Act No. 45 of 1965).
- The principles of sound management of toxic chemical set out in Chapter 19 of Agenda 21
- Minimum requirements for landfills by the Department of Water Affairs and Forestry (second edition, 1998)
- Stockholm Convention

- c) The findings of the site inspection undertaken by Mr Vincent Matabane and Mr Ndhivhuwo Netshilaphala on 6th April 2005
- d) The objections from MW De Jager Kinder Trust/Landelani Game Lodge & MW De Jager Safaris set out in the letter dated 2nd August 2006 from Ivan Pauw & Partners to Bohleki Environmental Consultants in Midrand.

2.2 In reviewing this information, the Department made the following findings:

The existing Matimba Power Station is a dry cooled, coal fired pulverised fuel power station comprising six 665 MW units, representing a total nominal capacity of 3990 MW and a total net maximum generation capacity of 3690 MW

- The proposed power station is a dry cooled, coal fired pulverised fuel power station will have a generation capacity of 4800 MW
- Existing sources of atmospheric emission which occur in the vicinity of the proposed development sites include:
 - Existing Matimba Power Station and its associated ash dump
 - Grootgeluk coal mining operations
 - Brickworks operating at Hanglip
 - Household fuel combustion
 - Potential veld fires
 - Sewage works (Farm Nelsonkop)
 - Wind blown dust from areas and agricultural activities
 - Vehicle exhaust releases and road dust entertainment along paved and unpaved roads in the area
- The proposed power station is approximately 3 Km away from the existing Matimba Power Station and the Marapong Village
- The existing Matimba Power Station does not have SO₂ and NO₂ abatement measures in place
- The burning of coal in the proposed power station will potentially release significant amounts of air pollutants such as Sulphur Dioxide (SO₂), Nitrogen oxides (NO_x), Carbon Monoxide (CO), and trace amounts of mercury.

Ambient SO₂ levels resulting from the new power station are predicted to cause health effects in the Marapong residential area

The proposed power station will potentially release significant amounts of greenhouse gases, namely, Carbon Dioxide (CO₂) and Nitrous Oxide (N₂O).

Ambient SO₂ standards are already being exceeded in the area where the new power station is proposed.

- Ambient air quality standards in the Marapong residential area are already being exceeded
- The proposed development will result in a loss of approximately 1 500 hectares of vegetation due to the required pre construction site clearing.

Approximately 1000 ha of the above are intended for facility for disposal / storage of ash. A conventional ash dam has been proposed and assessed but mention is made of investigations into alternatives to this disposal option, including backfilling at the Grootegeluk open cast coal mine. The investigation of alternatives in this regard has not sufficiently progressed to allow for an informed decision with regard to ash disposal / storage at this stage. It is however acknowledged that an ashing facility will be required.

The proposed development is part of Eskom's new capacity installation programme and is intended to meet the future base load electricity demands of South Africa which is under severe pressure.

- The purpose of the proposed power station is to increase the Eskom Generation base load capacity to facilitate the forecast increase in demand by 2010 and to further supply this additional capacity in such a way that it improves security of supply to the national grid system and South Africa in its entirety.

Based on the information considered, the Department's conclusions are that:

- (a.) the proposed activities may lead to substantial detrimental impact on the environment;
- (b.) the need for the project have been adequately demonstrated;
- (c.) the activities will result in some socio-economic benefits, not only to the Lephalale area, but to the country as a whole;
- (d.) the implementation of the mitigation measures and conditions set out in this Record of Decision, are considered adequate to minimise detrimental impacts to acceptable levels;
- (e.) subject to successful implementation of conditions and mitigation measures, the proposed development is likely to be acceptable; and
- (f.) the principles of section 2 of NEMA can largely be upheld.

It is further the Department's conclusion that further information on alternatives for the disposal of ash produced by the facility is required before an informed decision can be made on this aspect of the application.

The Department has accordingly decided to grant Eskom Holdings Limited: Generation Division authorisation in terms of Regulations R 1182 and R 1183 (as amended), promulgated under section 21, 22 and 26 of the Environment Conservation Act (Act 73 of 1989) for the activities specified below, subject to the conditions and provisions listed below.

3. CONDITIONS

3.1 Description of the activity

The authorisation applies in respect of the following activities as listed in Schedule 1, regulation R. 1182 and described in the final environmental impact report dated 22 May 2006 and the addendum report to the final environmental impact report dated June 2006:

Item 1: The construction, erection or upgrading of-

- (a) facilities for commercial electricity generation with an output of at least 10 megawatts and infrastructure for bulk supply;
- (c) with regard to any substance which is dangerous or hazardous and is controlled by national legislation-
 - (i) infrastructure, excluding road and rails, for the transportation of any such substance; and
 - (ii) manufacturing, storage, handling, treatment or processing facilities for any such substance;
- (d) roads, railways, airfields and associated structures;
- (n) sewerage treatment plants and associated infrastructure;

Item 2: The change of land use from-

- (c): agricultural or zoned undetermined use or an equivalent zoning to any other land use.

Item 9: Scheduled processes listed in the Second Schedule to the Atmospheric Pollution Prevention Act, 1965 (Act No. 45 of 1965). (Process 29 (a) – Power Generation Processes in which fuel is burned for the generation of electricity for distribution to the public or for purposes of public transport).

The following activity applied for is not included in this authorisation and will be addressed in an amended or supplementary record of decision:

- o Item 8: The disposal of waste as defined in section 20 of the Act, excluding domestic waste, but including the establishment, expansion, upgrading or closure of facilities for all waste, ashes and building rubble

The decision contemplated above will be based on the review of the investigation and assessment of alternative ash disposal options to be submitted to the Department for consideration.

SPECIFIC CONDITIONS

Air quality management

- 3.2.1.1 Eskom must initiate a programme for the continuous monitoring of ambient concentrations of pollutants in the Marapong residential area as well as surrounding areas around the proposed power station and existing Matimba power station. This programme must be included in the construction EMP and the operational EMP to be submitted to the authorities for acceptance prior to construction, commissioning and operation of the power station. The programme must, among others, detail the installation of air quality monitoring equipment at an appropriate location within the Marapong residential area. The site for the air quality monitoring equipment should be such that the monitored ambient air represents a fair reflection of the ambient air the majority of Marapong residents are likely to breathe. The air quality monitoring equipment must be such as to provide continuous measurement of the following substances or mixtures of substances: Sulphur Dioxide (SO₂); Nitrogen Dioxide (NO₂); Carbon Monoxide (CO); Particulate Matter (PM10 and PM 2.5); Ozone (O₃); and Mercury (Hg).

The installation should also include gas-sampling systems as appropriate for the parameters being monitored, meteorological equipment and data management systems that will allow the effective and reliable transfer of data. The programme must also detail the compilation of a commissioning report produced by an independent party indicating that the installations are in place, calibrated and operating to internationally acceptable standards of operation. The programme must also detail reporting procedures including, among others, the submission of quarterly reports to the department detailing the monitoring results obtained from the installation detailed above and any other monitoring results from Eskom monitoring stations in the area. The monitoring reports must provide, but are not limited to the provision of, both a numeric and graphical representation of measured concentrations of the measured pollutants with a comparison against any applicable ambient air quality standards published in terms of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004). This information should include detailed information for the 3 month period to which the report relates as well as a summary of historical trends from the commencement of monitoring activities.

- 3.2.1.2 Eskom shall install, commission and operate any required SO₂ abatement measures that may be necessary to ensure compliance with any applicable emission or ambient air quality standards published in terms of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004).

- 3.2.1.3 Notwithstanding the measures referred to in 3.2.8.2, should the monitoring referred to in 3.2.8.1 indicate non-compliance with ambient SO₂ standards, Eskom shall install, commission and operate any required SO₂ abatement measures in respect of the existing Matimba Power Station as may be necessary to ensure compliance with any applicable emission or ambient air quality standards published in terms of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004).
- 3.2.1.4 Eskom must initiate a programme of support for initiatives aimed at improving air quality in the Marapong residential area. This programme must be included in the construction EMP and carried through to the operational EMP.
- 3.2.1.5 The power station must be operated in compliance with any related Registration Certificate issued in terms of the Atmospheric Pollution Prevention Act, Act 45 of 1965, or any related Atmospheric Emission License issued in terms of the National Environment Management: Air Quality Act, Act 39 of 2004.
- 3.2.2 Environmental Monitoring Committee (EMC)**
- 3.2.2.1 This development is authorised on condition that the developer establishes an EMC with clear terms of reference as described in 3.2.2.6.
- 3.2.2.2 Amongst others the EMC shall consist of the following members:
- (a) A chairperson as described in 3.2.2.3,
 - (b) The ecologist that participated in the EIA process, or any other suitably qualified and experienced ecologist approved for this purpose by the department,
 - (c) Two representatives of the public, one community member from Marapong and one from Lephalele.
 - (d) Environmental Control Officer (ECO) (once appointed in terms of 3.2.4 below), and
 - (e) A senior site manager from the main contractor.
- 3.2.2.3 The EMC must appoint an independent chairperson who has appropriate people and project management skills.
- 3.2.2.4 The EMC must meet on a bi-monthly basis from the inception of the project.
- 3.2.2.5 The EMC must report to the Director-General of the Department of Environmental Affairs and Tourism on a bi-monthly basis and the report must include matters as described in 3.2.2.6 below.
- 3.2.2.6 The purpose of the EMC is to execute the following:
- (a) To monitor and audit project compliance to the conditions of this record of decision, environmental legislation and specific mitigation requirements as stipulated in the environmental impact report and the Environmental Management Plans.
 - (b) To make recommendations to the Director-General on issues related to the monitoring and auditing of the project.

(c) The EMC shall decide on the frequency of meetings should a need arise to review the prescribed frequency. This change should be communicated to the department for acceptance.

3.2.2.7 All costs associated with the EMC shall be borne by the applicant. The terms of reference for the EMC must, in addition to the scope of work as detailed in 3.2.2.6, clearly set out roles and responsibilities related to logistical arrangements, administration and financial arrangements associated with the EMC.

3.2.2.8 Upon completion of construction, the role, responsibilities and constitution of the EMC shall be re-considered and re-established with new terms of reference for the operational phase of the development.

3.2.3 Environmental Management Plan (EMP)

3.2.3.1 Eskom must submit a site specific construction EMP to the relevant authorities for acceptance before commencement of any of the activities related to this authorisation. The EMP must include but not be limited to the following aspects:

- Rehabilitation of all areas disturbed during the construction phase of the project excluding those areas where permanent structures are erected.
- Siting and management of construction camps, sanitation, ablution and housing facilities as well as material storage areas used by the contractor. All work areas must be supplied with proper sanitation facilities.
Management and rehabilitation of access roads to individual construction areas that will not become permanent roads upon completion of construction. Any new road constructed for any purpose not authorised as part of this authorisation, must comply with the relevant SANS codes and permission for construction must be obtained from DEAT as required by Schedule 1, item 1 (d) of R. 1182.
- Waste avoidance, minimisation and disposal of waste at an appropriate facility.
- Protection of any heritage sites likely to be impacted by the development should such sites be found during any phase of the project to follow.
Provisions for harvesting of any medicinal plants that may occur on site prior to site clearance.
- Protection of indigenous vegetation where such is not affected by the physical footprint of the power station plant or ancillary infrastructure and associated construction works.
- Provision for plant search and rescue of protected and endangered species which should be done before commencement of any construction related activity.
- Management of traffic during the construction phase of the development where the site access roads and other transportation networks intersect.
- Measurement, monitoring and management of noise and dust pollution levels during the construction phase.
- A fire control management plan for implementation on site.
- Implementation of site specific erosion and sediment and dust control measures during the construction phase of the project.
- Insofar as it relates to the activities hereby approved, all recommendations and mitigation measures as proposed in the final environmental impact report dated 22 May 2006 and the

addendum report to the final environmental impact report dated June 2006 forms part of this record of decision and must be implemented as part of the EMP.
All relevant requirements emanating from 3.2.1 above.

- 3.2.3.2 Once accepted by DEAT, the revised construction EMP will be seen as a dynamic document. However, any changes to the EMP, must be submitted to DEAT for acceptance before such changes could be effected. Such a submission for consideration by DEAT must be accompanied by recommendations of the EMC.
- 3.2.3.3 Compliance with the accepted construction EMP must form part of all tender documentation for all contractors working on the project and must be endorsed contractually.
- 3.2.3.4 Eskom must submit an EMP for the operational phase of the development to DEAT and other relevant provincial and local authorities for acceptance prior to the completion of construction phase and the inception of the operational phase of the development. The revised operational EMP will be seen as a dynamic document. However, any substantial changes to the operational EMP, which is environmentally defensible, must be submitted to DEAT for acceptance before such changes could be effected.

3.2.4 Environmental Control Officer (ECO)

- 3.2.4.1 The EMC in conjunction with the developer must appoint a suitably qualified Environmental Control Officer (ECO) who would on behalf of the EMC, on a daily basis monitor the project compliance with conditions of the record of decision, environmental legislation and recommendations of the EMP. The cost of the ECO shall be borne by the applicant.
- 3.2.4.2 The ECO must be appointed one month before the start of construction and the authorities must be notified of such an appointment for communication purposes.
- 3.2.4.3 The ECO shall ensure that periodic environmental performance audits are undertaken on the project implementation.
- 3.2.4.4 The ECO shall submit an environmental compliance report on a two-monthly basis, in writing, to the Director-General of the Department of Environmental Affairs and Tourism (DEAT), copied to the Limpopo Department of Economic Development, Environment and Tourism.
- 3.2.4.5 The ECO shall maintain the following on site:
- A daily site diary
 - A non-conformance register
 - A public complaint register
 - A register of audits
- 3.2.4.6 The ECO shall remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed and the site is handed over to Eskom by the contractor for operation.

3.2.4.7 The ECO shall report to and be accountable to the EMC.

Monitoring and auditing

3.2.5.1 Records relating to monitoring and auditing must be made available for inspection to any relevant authority in respect of this development.

3.2.5.2 This department reserves the right to monitor and audit the development throughout its full life cycle to ensure that it complies with the conditions stipulated in the record of decision as well as mitigation measures in the final environmental impact report dated 22 May 2006, the addendum report to the final environmental impact report and the construction and operational EMPs.

Transportation and handling of hazardous materials.

3.2.6.1 During the construction of the power station, an effective monitoring system must be put in place to ensure safety and to detect any leakage or spillage of coolants from all oil containing equipment during transportation, their handling and installation.

3.2.6.2 The transportation and handling of hazardous substances must comply with all the provisions of the Hazardous Substances Act, (Act No.15 of 1973), associated regulations as well as SABS 0228 and SABS 0229 codes.

Rehabilitation after construction

3.2.7.1 No exotic plant species may be used for rehabilitation purposes. Only indigenous plants may be utilised.

3.2.7.2 Measures aimed at controlling invasive plant species and weeds must be implemented and must form part of the relevant EMP.

3.2.7.3 No disturbance of the land at any stream or rivers edge is allowed unless such disturbance complies with legislation and conforms to strict design parameters.

Compliance with other legislation

3.2.8. Archaeological remains, artificial features and structures older than 60 years are protected by the National Heritage Resources Act, 1999 (Act No. 25 of 1999). Should any archaeological artefacts be exposed during excavation for the purpose of laying foundations, construction in the vicinity of the finding must be stopped. An archaeologist must be called to the site for inspection. Under no circumstances shall any artefacts be destroyed or removed from the site. The South African Heritage Resource Agency must be contacted to this effect. Their recommendations should be included in the construction EMP and be adhered to.

3.2.8.2 All provisions of the Occupational Health and Safety Act, 85 of 1993, and any other applicable legislation must be adhered to by the holder of this authorisation.

- 3.2.8.3 All provisions of the National Water Act, Act 36 of 1998, must be adhered to by the holder of this authorisation.
- 3.2.8.4 All provisions of the National Environment Management: Air Quality Act, Act 39 of 2004, must be adhered to by the holder of this authorisation.
- 3.2.8.5 All provisions of the Atmospheric Pollution Prevention Act, Act 45 of 1965, must be adhered to by the holder of this authorisation.
- 3.2.8.6 All provisions of the National Environment Management: Biodiversity Act, Act 10 of 2004, must be adhered to by the holder of this authorisation.
- 3.2.8.7 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, 28 of 2002 administered by the Department of Minerals and Energy.
- 3.2.8.9 A permit shall be obtained from the provincial department of nature conservation for the removal of indigenous protected and endangered plant and animal species.

Water quality management

- 3.2.9.1 Eskom shall continuously monitor the ground water quality and implement measures to ensure that pollution of the resource does not occur. The monitoring programme for water quality and measures to control and prevent pollution of the resource shall be included in the operational EMP.

3.3 GENERAL CONDITIONS

This authorisation is granted only in terms of section 22 of the Environment Conservation Act, 1989 (Act No.73 of 1989) and does not exempt the holder thereof from compliance with any other legislation.

This authorisation refers only to the activities as specified and described in the final environmental impact report dated 22 May 2006 and the addendum report to the final environmental impact report dated June 2006. Any other activity listed under section 21 of the Environment Conservation Act, 1989 (No. 73 of 1989) which is not specified above, is not covered by this authorisation, and must therefore comply with the requirements of the Environment Conservation Act, Government Notice R 1182 and R.1183 (as amended).

This authorisation is subject to the approval of the relevant local authorities in terms of any legislation administered by those authorities.

The applicant must, within 7 (seven) calendar days of receipt of this record of decision inform all interested and affected parties and at least include the following:

- (i) That an authorisation has been issued to the applicant to proceed with the construction and operation of the activity. If requested, provide copies of this ROD.

- (ii) That any appeals against the issuing of the authorisation must be lodged with the Minister of Environmental Affairs and Tourism within 30 (thirty) days from the date on which this ROD has been issued to the applicant at the address stipulated in this ROD.
- (iii) That an appeal questionnaire may be used in the lodging of an appeal. It is obtainable from the Department's offices at tel. (012) 310 3590 or e-mail: cveeden@deat.gov.za.
- (iv) The date on which the ROD was issued to the applicant in terms of regulation 10(1) and the date by which appeals must reach the Minister.

Failure to inform interested and affected parties within the stipulated time period may result in the Minister considering requests from such parties for permission to submit a late appeal favourably.

One week's written notice must be given to this Department before commencement of construction activities. Such notice shall make clear reference to the site location details and reference number given above.

One week's written notice must be given to this Department before commencement of operation activities. Such notice shall make clear reference to the site location details and reference number given above.

The applicant shall be responsible for ensuring compliance with the conditions contained in this ROD by any person acting on his behalf, including but not limited to, an agent, servant, or employee or any person rendering a service to the applicant in respect of the activity, including but not limited to, contractors and consultants.

The applicant must notify the Department in writing, within 24 (twenty four) hours if any condition of this authorisation cannot, or is not, adhered to. The notification must be supplemented with reasons for non-compliance.

A copy of the authorisation and ROD shall be available on site during construction and all staff, contractors and sub-contractors shall be familiar with or be made aware of the contents of this authorisation and ROD.

- 3.3.10 Compliance/non-compliance records must be kept and shall be made available on request from the authorities within five days of receipt of the request.
- 3.3.11 Any changes to, or deviations from, the project description set out in this letter 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.
- 3.3.12 This Department may review the conditions contained in this letter from time to time and may, by notice in writing to the applicant, amend, add or remove a condition.

- 3.3.13 In the event that the predicted impacts exceed the significance as predicted by the independent consultant in the final environmental impact report and appendices dated 22 May 2006 and the addendum report to the final environmental impact report dated June 2006, the authorisation may be withdrawn after proper procedures have been followed.
- 3.3.14 In the event of any dispute concerning the significance of a particular impact, the opinion of the Department of Environmental Affairs and Tourism (DEAT) in respect of its significance will prevail.
- 3.3.15 The applicant must notify the Department, in writing, at least 10 (ten) days prior to the change of ownership, project developer or the alienation of any similar rights for the activity described in this letter. The applicant must furnish a copy of this document to the new owner, developer or person to whom the rights accrue and inform the new owner, developer or person to whom the rights accrue that the conditions contained herein are binding on them.
- 3.3.16 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.
- 3.3.17 National government, provincial government, local authorities or committees appointed in terms of the conditions of this application or any other public authority or authorisation 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 approval as set out in this document or any other subsequent document emanating from these conditions of approval.
- 3.3.18 If any condition imposed in terms of this authorisation is not complied with, the authorisation may be withdrawn after 30 days written notice to the applicant in terms of section 22(4) of the Environment Conservation Act, 1989 (Act No. 73 of 1989).
- 3.3.19 Failure to comply with any of these conditions shall also be regarded as an offence and may be dealt with in terms of sections 29, 30 and 31 of the Environment Conservation Act, 1989 (Act No. 73 of 1989), as well as any other appropriate legal mechanisms.
- 3.3.20 The applicant shall be responsible for all costs necessary to comply with the above conditions unless otherwise specified.

Any complaint from the public during construction must be attended to as soon as possible to the satisfaction of the parties concerned. A complaints register must be kept up to date and shall be produced upon request.

- 3.3.22 Departmental officials shall be given access to the properties earmarked for construction activities for the purpose of assessing and/or monitoring compliance with the conditions contained in this document at all reasonable times.

All outdoor advertising associated with this activity, whether on or off the property concerned, must comply with the South African Manual for Outdoor Advertising Control (SAMOAC) available from this Department.

3.4 DURATION OF AUTHORISATION

If the activity authorised by this letter does not commence within 4 (four) years from the date of signature of this letter, the authorisation will lapse and the applicant will need to reapply for exemption or authorisation in terms of the above legislation or any amendments thereto or any subsequent new legislation.

4. CONSEQUENCES OF NON-COMPLIANCE

The applicant must comply with the conditions set out in this letter. Failure to comply with any of the above conditions may result in, *inter alia*, the Department withdrawing the authorisation, issuing directives to address the non-compliance – including an order to cease the activity – as well as instituting criminal and/or civil proceedings to enforce compliance.

5. APPEALS

Appeals in respect of this decision must be lodged with the Minister of Environmental Affairs and Tourism within 30 (thirty) days of the date of this decision. Appeals can be submitted utilising one of the following methods:

By facsimile: (012) 322 0082
By post: Private Bag X447, Pretoria 0001
By hand: 2nd Floor, Fedsure Forum Building, North Tower, cor. Van der Walt and Pretorius Streets, Pretoria.

Appeals must comply with the provisions of Regulation 11 of Government Notice No. R. 1183 which reads as follows:

"An appeal to the Minister or provincial authority under section 35(3) of the Act must be done in writing within 30 days from the date on which the ROD was issued to the applicant in terms of regulation 10(1);

An appeal must set out all the facts as well as the grounds of appeal, and must be accompanied by all relevant documents or copies of them which are certified as true by a commissioner of oaths."

An appeal questionnaire may be used in the lodging of an appeal. It is obtainable from the Department's offices at tel. (012) 310 3590 or e-mail: cveeden@deat.gov.za.

Should the applicant wish to appeal any aspect of this decision, the applicant must notify and furnish copies of the appeal which will be submitted to the Minister, to all registered interested and affected parties. Proof of such notification must be submitted to the Minister with the appeal. Failure to comply with this provision may result in the Minister refusing to consider the appeal.

6. APPLICANT:

Eskom Holdings Limited: Generation Division
P O Box 1091
JOHANNESBURG
2000

Contact person: Ms Deirdre Herbst

Tel: (011) 800 3501

Fax: (011) 800 5140

7. CONSULTANT:

Bohlweki Environmental (Pty) Ltd
P O Box 11784
VORNA VALLEY
1686

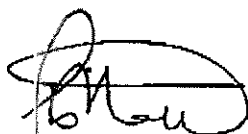
Contact person: Ms Ashlea Strong

Tel: (011) 466 3841

Fax: (011) 466 3849

8. SITE VISIT

A site visit was undertaken by Mr Vincent Matabane and Mr Ndhivhuwo Netshilaphala from the department, Eskom personnel and the consultant on 6th April 2005.



M: Pam Yako
Director – General
Department of Environmental Affairs and Tourism

Date: 21/09/06



environment & tourism

Department:
Environmental Affairs and Tourism
REPUBLIC OF SOUTH AFRICA

Environmental Authorisation

Authorisation register number: 12/12/20/1139

Last amended:

Holder of authorisation: Eskom Holdings Limited

Location of activity: Farm Kuipersbult 511 LQ, Farm Naauw
Ontkomen 509 LQ, Hanglip 508 LQ and
Grootestryd 465 LQ, Lephalale Local
Municipality, Limpopo Province

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27/10/2008

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 activity specified below.

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, 2006 the Department hereby authorises –

Eskom Holdings Limited

with the following contact details –

Mr. Deidre Herbst

Eskom Holdings Limited

P. O. Box 1091

JOHANNESBURG

2000

Tel: (011) 800 3501

Fax: (011) 800 2559

[Handwritten signature]
27/10/2008

to undertake the following activity-

- R. 386 (1) *"The construction of facilities or infrastructure, including associated structures or infrastructure, for –*
- (k) *the bulk transportation of sewage and water, including storm water, in pipelines with -*
 - (i) *an internal diameter of 0,36 metres or more; or*
 - (ii) *a peak throughput of 120 liters per second or more;*
 - (n) *the off-stream storage of water, including dams and reservoirs, with a capacity of 50 000 cubic metres or more, unless such storage falls within the ambit of the activity listed in item 6 of Government Notice No. R. 387 of 2006;*
 - (p) *the temporary storage of hazardous waste."*
- (7) *"The above ground storage of a dangerous good, including petrol, diesel, liquid petroleum gas or paraffin, in containers with a combined capacity of more than 30 cubic metres but less than 1 000 cubic metres at any one location or site."*
- (15) *"The construction of a road that is wider than 4 metres or that has a reserve wider than 6 metres, excluding roads that fall within the ambit of another listed activity or which are access roads of less than 30 metres long."*


for the construction of a raw water reservoir and associated pipelines for Medupi Power Station, near Lephalale as described in the Basic Assessment Report (BAR) dated July 2008 page 9 which fall within the jurisdiction of *Lephalale Local Municipality* of the *Limpopo Province*, hereafter referred to as "the property".

The granting of this environmental authorisation is subject to the conditions set out below.

Conditions

Scope of authorisation

- 1.1 Authorisation of the activity is subject to the conditions contained in this authorisation, which conditions form part of the environmental authorisation and are binding on the holder of the authorisation.

 27/10/2008

- 1.2 The holder of the authorisation shall be responsible for ensuring compliance with the conditions by any person acting on his or her behalf, including but not limited to, an agent, sub-contractor, employee or person rendering a service to the holder of the authorisation.
- 1.3 The activity authorised may only be carried out at the site as per map in Appendix A1 of the BAR dated July 2008.
- 1.4 Any changes to, or deviations from, the project description set out in this 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 authorisation in terms of the regulations.
- 1.5 This activity must commence within a period of two (2) years from the date of issue. 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.
- 1.6 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.
 - 1.6.1 Relevant legislation that must be complied with by the holder of this authorisation includes but is not limited to:
 - Compliance with the requirements of Section 38(1), (3) and (7) of the National Heritage Resources Act, Act 25 of 1999, including the comments and recommendations of the relevant heritage resources authority responsible for the area in which the development is proposed. Should any heritage resources be exposed during excavation for the purpose of construction, construction in the vicinity of the finding must be stopped. 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. The relevant heritage resource agency must be informed about the finding.
 - National Water Act, 1998 (Act 36 of 1998).

- Occupational Health and Safety Act, 1993 (Act 85 of 1993).
- National Environment Management: Biodiversity Act, 2004 (Act 10 of 2004).

Appeal of authorisation

- 1.7 The holder of the authorisation must notify every registered interested and affected party, in writing and within ten (10) calendar days, of receiving notice of the Department's decision to authorise the activity.
- 1.8 The notification referred to in 1.8.1 must –
- 1.8.1 specify the date on which the authorisation was issued;
 - 1.8.2 inform the interested and affected parties of the appeal procedure provided for in Chapter 7 of the regulations; and
 - 1.8.3 advise the interested and affected parties that a copy of the authorisation and reasons for the decision will be furnished on request.

Management of the activity

- 1.9 The construction of the reservoir and its associated pipelines must be implemented according to a construction Environmental Management Plan (EMP) to adequately mitigate and manage the low to moderate impacts the construction activities will affect. Management measures and auditing procedures as detailed within Eskom's existing EMP for Medupi Power Station (as well as revisions to include the raw water reservoir and pipeline) must be implemented.
- 1.10 The construction activities and relevant rehabilitation of disturbed areas must be monitored against the approved EMP, Environmental Authorisation and all other relevant environmental legislation.

Recording and reporting to the Department

- 1.11 The holder of the authorisation must submit an environmental audit report to the Department upon completion of the construction and rehabilitation activities. The environmental audit report must –

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27/10/2008

- 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 EMP.
- This report must include:
 - Detail of the rehabilitation measures which must be compiled with by an Independent Environmental Auditor.
 - Detail of all incidents and mitigation measures implemented to address such incidents.
 - All measures which require follow-up.

Commencement

- 1.12 The construction of the authorised activities may not commence within thirty (30) days of date of signature of this authorisation.
- 1.13 Should you be notified by the minister of a suspension of the authorisation pending any appeals decision on the authorised activities, you may not commence with the activities unless authorised by the minister in writing.
- 1.14 Thirty (30) 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

Site closure and decommissioning

- 1.15 Should the use of the facility 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.

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27/10/2008

Specific conditions

- 1.16 The applicant must place barriers and warning signs around excavations on sites and wherever there is a hazard to workers, the public and animals.
- 1.17 The applicant must take note that no temporary site camps will be allowed outside the footprint of the development area as the establishment of such structures might trigger a listed activity as defined in the NEMA Regulations, Government Notice 386 and 387 of 2006.
- 1.18 Changes in the proposal resulting in significant environmental impacts are only permissible if approved in writing by the Department.
- 1.19 An integrated waste management approach that is based on waste minimisation must be used and must incorporate reduction, recycling, re-use and disposal where appropriate. Any solid waste shall be disposed of at a waste disposal facility permitted in terms of Section 20 of the Environment Conservation Act, 1989 (Act No. 73 of 1989).
- 1.20 Chemical ablution facilities must be available for the use of construction staff at all times during the construction period. These facilities must be removed from the site when the construction phase is completed as well as associated waste to be disposed of at a registered waste site.
- 1.21 The activities and movement of construction vehicles and personnel during the construction phase must be restricted to help prevent the wanton destruction of natural vegetation that could play an important role in the long term mitigation of visual impacts.
- 1.22 The applicant must train safety representatives, managers and workers in workplace safety. Enforce all applicable safety standards and regulations, including for subcontractors.
- 1.23 The removal of natural vegetation must be limited to the minimum and must not be undertaken without proper planning and delineation.
- 1.24 The stockpiled material must be located away from potentially sensitive areas (such as the Afguns road and / or the rocky outcrop, watercourse and dam area).
- 1.25 The applicant must identify and mark all protected tree species during the final walkthrough.

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- 1.26 The applicant must obtain relevant permits for removal or cutting of protected tree species.
- 1.27 The applicant must implement rescue operations in areas where Red Data species / protected trees are present.
- 1.28 The applicant must transplant selected trees to adjacent areas where possible.
- 1.29 The soil must be exposed for the minimum time possible once cleared of vegetation to avoid prolonged exposure to wind and water erosion and to minimise dust generation.
- 1.30 The dust may be generated from stockpile material must be minimised through the implementation of appropriate dust suppression techniques, until such time that this material has been used during the rehabilitation process.
- 1.31 After the construction, affected areas must be re-vegetated with indigenous vegetation. This must be undertaken in terms of Eskom's standard practices in this regard.
- 1.32 No construction activities must take place in the vicinity of the non-perennial stream and dam.

General

- 1.33 A copy of this authorisation must be kept at the property where the activity will be undertaken. The authorisation must be produced 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 authorisation who works or undertakes work at the property.
- 1.34 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 applicant knows the new details.
- 1.35 The holder of the authorisation must notify the Department, in writing and within 24 (twenty four) hours, if any condition of this 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 authorisation may result in

S 27/10/2008

criminal prosecution or other actions provided for in the National Environmental Management Act, 1998 and the regulations.

- 1.36 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 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 authorisation as set out in this document or any other subsequent document emanating from these conditions of authorisation.

Date of environmental authorisation: 27 October 2008



Ms Nosipho Ngcaba

Director – General

Department of Environmental Affairs and Tourism

Letter signed by: Ms Lize McCourt

Designation: Chief Director: Environmental Impact Management

Annexure 1: Reasons for Decision

1. Background

The applicant, Eskom Holdings Limited, applied for authorisation to carry out the following activity –

R. 386 (1) *"The construction of facilities or infrastructure, including associated structures or infrastructure, for –*

(k) *the bulk transportation of sewage and water, including storm water, in pipelines with-*

(i) *an internal diameter of 0,36 metres or more; or*

(ii) *a peak throughput of 120 liters per second or more;*

(n) *the off-stream storage of water, including dams and reservoirs, with a capacity of 50 000 cubic metres or more, unless such storage falls within the ambit of the activity listed in item 6 of Government Notice No. R. 387 of 2006;*

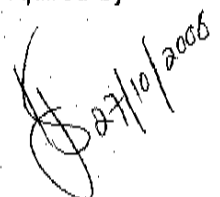
(p) *the temporary storage of hazardous waste."*

(7) *"The above ground storage of a dangerous good, including petrol, diesel, liquid petroleum gas or paraffin, in containers with a combined capacity of more than 30 cubic metres but less than 1 000 cubic metres at any one location or site."*

(15) *"The construction of a road that is wider than 4 metres or that has a reserve wider than 6 metres, excluding roads that fall within the ambit of another listed activity or which are access roads of less than 30 metres long."*

for the construction of a raw water reservoir and associated pipelines for Medupi Power Station, Near Lephalale as described in the Basic Assessment Report (BAR) dated July 2008.

The applicant appointed Savanna Environmental (Pty) Ltd to undertake a Basic Assessment process and to compile a Basic Assessment Report (BAR) as required by regulation R. 385.

 27/10/2008

2. 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 July 2008.
- b) Additional information received on the 25th of August 2008.
- c) Comments were received from Department of Water Affairs and Forestry and Lephalale Local Municipality.
- d) The consent given by the landowners.
- 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. 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 significance are set out below.

- a) The applicant, Eskom Holdings Limited proposes the construction of a raw water reservoir and associated pipelines for Medupi Power Station, near Lephalale, Limpopo Province.
- b) Four site alternatives were investigated and Alternative 1 was selected as the preferred alternative.
- c) Alternative 1 (preferred site and pipeline alternative): The raw water reservoir and pipeline preferred site alternative (with a footprint area within the perimeter fence of $\pm 124\,200\text{m}^2$) is situated on the farm Kuipersbult 511 LQ (1 081 ha in extent), approximately 1 600m south west of the Medupi Power Station that is currently under construction. The entire farm is currently being purchased by Eskom.
- d) A sufficient public participation process was undertaken and the consultant has satisfied the minimum requirements as prescribed in the EIA regulations, 2006 for public involvement.
- e) As part of the EIA process, Savannah Environmental (Pty) Ltd, being the principal consultancy, identified potential environmental impacts associated with the

 27/10/2008


proposed construction works and proposed feasible mitigation measures to mitigate the identified impacts.

4. Findings

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

- The BAR includes the identification and assessment of impacts.
- The procedure followed for the impact assessment seems to be adequate for the decision-making process based on the size of the project and affected area. The assessing officer is of the opinion that the assessment is adequate and comprehensive enough and that possible impacts have been assessed correctly.
- All legal and procedural requirements have been met.
- There has been sufficient consultation with I&AP's apart from the landowner.
- Comments were received from the provincial authority or local authority.
- The proposed development is compatible with the proposed site for the development.

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

 27/10/2008



environment & tourism

Department
Environmental Affairs and Tourism
REPUBLIC OF SOUTH AFRICA

Environmental Authorisation

Authorisation register number: 12/12/20/1228
Last amended:
Holder of authorisation: Eskom Holdings Limited
Location of activity: Farm Naauw Ontkomen 509
LQ, Lephalale Local
Municipality, Limpopo Province

[Handwritten signature]
18/9/2008

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 activity specified below.

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, 2006 the Department hereby authorises –

Eskom Holdings Limited

with the following contact details –

Mr. Deidre Herbst
Eskom Holdings Limited
P. O. Box 1091
JOHANNESBURG
2000

Tel: (011) 800 3501

Fax: (011) 800 2559

to undertake the following activity-

R. 386 (14)

"The construction of masts of any material or type and of any height, including those used for telecommunication broadcasting and radio transmission, but excluding-

[Signature]
18/9/2008

- a) *masts of 15 metres and lower exclusively used*
 - (i) *by radio amateurs*
 - (ii) *for lighting purposes*
- b) *flag poles; and*
- c) *lightning conductor poles”.*

for the construction of a telecommunications mast for Medupi Power Station, Near Lephalale as described in the Basic Assessment Report (BAR) dated August 2008 page 6

at 23° 41'48" S and 27° 34'06" E, which fall within the jurisdiction of Lephalale Local Municipality of the Limpopo Province, hereafter referred to as “the property”.

The granting of this environmental authorisation is subject to the conditions set out below.

Conditions

Scope of authorisation

- 1.1 Authorisation of the activity is subject to the conditions contained in this authorisation, which conditions form part of the environmental authorisation and are binding on the holder of the authorisation.
- 1.2 The holder of the authorisation shall be responsible for ensuring compliance with the conditions by any person acting on his or her behalf, including but not limited to, an agent, sub-contractor, employee or person rendering a service to the holder of the authorisation.
- 1.3 The activity authorised may only be carried out at the property indicated above.
- 1.4 Any changes to, or deviations from, the project description set out in this 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 authorisation in terms of the regulations.
- 1.5 This activity must commence within a period of two (2) years from the date of issue. If commencement of the activity does not occur within that period, the authorisation


18/9/2008

- 1.8.3 advise the interested and affected parties that a copy of the authorisation and reasons for the decision will be furnished on request.

Management of the activity

- 1.9 An Environmental Management Plan ("EMP") for construction which fulfills the requirements of this authorisation must be compiled and submitted to the Department for approval before the construction process commence. The EMP must be compliant to regulation 34 of the regulations and include–
- 1.9.1 Measures for waste avoidance, minimisation and disposal of waste at an appropriate facility.
 - 1.9.2 Siting, demarcation and management of material storage areas used by the contractor.
 - 1.9.3 Measures for storm water management since construction might take place during the rainy season.
 - 1.9.4 All work areas must be supplied with proper sanitation facilities.
 - 1.9.5 Measures for the rehabilitation of all areas disturbed during the construction phase of the project excluding those areas where permanent structures are erected.
 - 1.9.6 Measures for the management of heritage resources if such are exposed during construction. Should any heritage resources be exposed during excavation for the purpose of construction, construction in the vicinity of the finding must be stopped. 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. The relevant heritage resource agency must be informed about the findings.
 - 1.9.7 All mitigation measures as proposed in the BAR must be implemented as part of the EMP.
- 1.10 Once accepted by DEAT, the construction EMP will be seen as a dynamic document. However, any changes to the EMP must be submitted to the authorities for acceptance before such changes could be affected.

Monitoring

 18/7/2026

lapses and a new application for environmental authorisation must be made in order for the activity to be undertaken.

1.6 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.

1.6.1 Relevant legislation that must be complied with by the holder of this authorisation includes but is not limited to:

- Compliance with the requirements of Section 38(1), (3) and (7) of the National Heritage Resources Act, Act 25 of 1999, including the comments and recommendations of the relevant heritage resources authority responsible for the area in which the development is proposed. Should any heritage resources be exposed during excavation for the purpose of construction, construction in the vicinity of the finding must be stopped. 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. The relevant heritage resource agency must be informed about the finding.
- National Water Act, 1998 (Act 36 of 1998).
- Occupational Health and Safety Act, 1993 (Act 85 of 1993).
- National Environment Management: Biodiversity Act, 2004 (Act 10 of 2004).

Appeal of authorisation

1.7 The holder of the authorisation must notify every registered interested and affected party, in writing and within 7 (SEVEN) calendar days, of receiving notice of the Department's decision to authorise the activity.

1.8 The notification referred to in 1.8.1 must –

1.8.1 specify the date on which the authorisation was issued;

1.8.2 inform the interested and affected parties of the appeal procedure provided for in Chapter 7 of the regulations; and

J. 18/9/2005

- 1.11 The applicant must appoint an Environmental Control Officer (ECO) that will have the responsibility of implementing the approved EMP.
- The ECO must be appointed before the start of the construction and the authorities must be notified of such an appointment for communication purposes.
 - The ECO must remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed and the site is handed over to Eskom by the contractor for operation.

Recording and reporting to the Department

- 1.12 The holder of the authorisation must submit an environmental audit report to the Department upon completion of the construction and rehabilitation activities. The environmental audit report 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 EMP.
 - This report must include:
 - Detail of the rehabilitation measures which must be compiled with by an Independent Environmental Auditor.
 - Detail of all incidents and mitigation measures implemented to address such incidents.
 - All measures which require follow-up.

Commencement

- 1.13 The authorised activity / activities may not commence within thirty (30) days of the date of signature of the authorisation.
- 1.14 Should you be notified by the minister of a suspension of the authorisation pending appeal procedures, you may not commence with the activity / activities unless authorised by the minister in writing.

J. 15/9/2008

Notification to authorities

- 1.15 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 1.13.
- 1.16 Fourteen (14) days written notice must be given to the Department that the operational phase of the activity will commence.

Site closure and decommissioning

- 1.17 Should the use of the facility 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.

Specific conditions


- 1.18 The applicant must place barriers and warning signs around excavations on sites and wherever there is a hazard to workers, the public and animals.
- 1.19 The applicant must take note that no temporary site camps will be allowed outside the footprint of the development area as the establishment of such structures might trigger a listed activity as defined in the NEMA Regulations, Government Notice 386 and 387 of 2006.
- 1.20 Changes in the proposal resulting in significant environmental impacts are only permissible if approved in writing by the Department.
- 1.21 An integrated waste management approach must be used that is based on waste minimisation and must incorporate reduction, recycling, re-use and disposal where appropriate. Any solid waste shall be disposed of at a waste disposal facility permitted in terms of Section 20 of the Environment Conservation Act, 1989 (Act No. 73 of 1989).
- 1.22 Refuse must be disposed of into scavenger and waterproof bins

J. 18/9/2008

- 1.23 Chemical ablution facilities must be available for the use of construction staff at all times during the construction period. These facilities must be removed from the site when the construction phase is completed as well as associated waste to be disposed of at a registered waste site.
- 1.24 The removal of natural vegetation must be limited to the minimum and must not be undertaken without proper planning and delineation. Individual vegetation communities must be identified and earmarked as visual absorption buffer zones especially between the northern boundary of the power station site and the Steenbokpan Road.
- 1.25 The activities and movement of construction vehicles and personnel during the construction phase must be restricted to help prevent the reckless destruction of natural vegetation that could play an important role in the long term mitigation of visual impacts.
- 1.26 The applicant must train safety representatives, managers and workers in workplace safety. Enforce all applicable physical safety standards and regulations, including for subcontractors.

General

- 1.27 A copy of this authorisation must be kept at the property where the activity will be undertaken. The authorisation must be produced 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 authorisation who works or undertakes work at the property.
- 1.28 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 applicant knows the new details.
- 1.29 The holder of the authorisation must notify the Department, in writing and within 24 (twenty four) hours, if any condition of this 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 authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, 1998 and the regulations.

 18/9/2008

1.30 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 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 authorisation as set out in this document or any other subsequent document emanating from these conditions of authorisation.

Date of environmental authorisation: 18/9/2008



Ms Nosipho Ngcaba

Director – General

Department of Environmental Affairs and Tourism

Letter signed by: Ms Lize McCourt

Designation: Chief Director: Environmental Impact Management

Annexure 1: Reasons for Decision

1. Background

The applicant, Eskom Holdings Limited, applied for authorisation to carry out the following activity –

R. 386 (14) *"The construction of masts of any material or type and of any height, including those used for telecommunication broadcasting and radio transmission, but excluding-*

a) masts of 15 metres and lower exclusively used

(i) by radio amateurs

(ii) for lighting purposes

b) flag poles; and

d) lightning conductor poles".

for the construction of a telecommunications mast for Medupi Power Station, Near Lephalale as described in the Basic Assessment Report (BAR) dated August 2008.

The applicant appointed Savanna Environmental (Pty) Ltd to undertake a Basic Assessment process and to compile a Basic Assessment Report (BAR) as required by regulation R. 385.

2. 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 August 2008.
- b) Comments from the Limpopo Department of Economic Development, Environment and Tourism.
- c) The consent given by the landowners.
- d) 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).

18/9/2008

3. 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 significance are set out below.

- a) The applicant, Eskom Holdings Limited proposes the construction of a telecommunications mast for Medupi Power Station, near Lephalale, Limpopo Province.
- b) Four site alternatives were investigated and Alternative 1 was selected as the preferred alternative:
- c) Alternative 1 (preferred site alternative): The preferred site alternative is located at the north east of the core power station building, adjacent to the large vehicles staging area. The site is approximately 700m away from the location of the helipad. This site is south of the Steenbokpan Road. This site forms part of the Medupi Power Station complex construction footprint.

The proposed footprint for the proposed telecommunications mast is north east of the primary terraced area for the power station. The site has a clear line of sight to Matimba Power Station and Paulskloof's radio tower's which is considered essential for approved and reliable communication (in terms of maximising functionality of the telecommunication mast).

- d) A sufficient public participation process was undertaken and the consultant has satisfied the minimum requirements as prescribed in the EIA regulations, 2006 for public involvement.
- e) As part of the EIA process, Savannah Environmental (Pty) Ltd, being the principal consultancy, identified potential environmental impacts associated with the proposed construction works and proposed feasible mitigation measures to mitigate the identified impacts.

4. Findings

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

- The BAR includes the identification and assessment of impacts.

J. 18/12/2008

- The procedure followed for the impact assessment seems to be adequate for the decision-making process based on the size of the project and affected area. The assessing officer is of the opinion that the assessment is adequate and comprehensive enough and that possible impacts have been assessed correctly.
- All legal and procedural requirements have been met.
- There has been sufficient consultation with I&AP's apart from the landowner.
- Comments were received from the provincial authority or local authority.
- The proposed development is compatible with the proposed site for the development.

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

J 18/9/2008



environment & tourism

Department:
Environmental Affairs and Tourism
REPUBLIC OF SOUTH AFRICA

Environmental Authorisation

Authorisation register number: 12/12/20/1079
Last amended:
Holder of authorisation: ESKOM HOLDINGS LIMITED
Location of activity: LEPHALALE

[Handwritten signature]
6/11/08

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 activity specified below.

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, 2006 the Department hereby authorises –

ESKOM HOLDINGS LIMITED

with the following contact details –

Mr Tyrone Singleton
P O Box 1091
JOHANNESBURG
2000

Tel: 011 800 4309

Fax: 011 800 5140

to undertake the following activity/ activities (hereafter referred to as "the activity")

R. 386:

7: The above ground storage of a dangerous good, including petrol, diesel, liquid petroleum, gas or paraffin, in containers with a combined capacity of more than 30 cubic metres but less than 100 cubic metres at any one location or site.



15: The construction of a road that is wider than 4 metres or that has a reserve wider than 6 metres, excluding roads that fall within the ambit of another listed activity or which are access roads of less than 30 metres.

R.387

5: The route determination of roads and design of associated physical infrastructure, including roads that have not yet been built for which routes have been determined before the publication of this notice and which has not been authorised by a competent authority in terms of the Environmental Impact Assessment Regulations, 2006 made under section 24(5) of the Act and published in Government Notice No. R. 385 of 2006, where –

- (a)
- (b) it is a road administered by a provincial authority;
- (c) the road reserve is wider than 30 metres; or
- (d)

for the purpose of the proposed re-alignment and construction of a portion of the Afguns road (Provincial road D2001) close to the new Medupi power station near Lephalale, as described in the final environmental impact assessment report (EIAR), dated September 2008 and submitted to the Department on 29 September 2008, page 22, and include:

- Re-aligning of the road for approximately 700 metres to avoid an acute angle at the intersection with the Steenbokpan road and to intersect at 90 degrees.
- Construction of the new aligned portion of the road as a single-carriage way to Provincial road construction specifications in a reserve of 30 metres.
- Providing the road with an asphalt surface, and
- Provision of necessary roads safety markings and signage;

Near Medupi power station which fall within the jurisdiction of *Lephalale Local Municipality of the Limpopo Province*, hereafter referred to as "the property".

The granting of this environmental authorisation is subject to the conditions set out below.



Conditions

Scope of authorisation

- 1.1 Authorisation of the activity is subject to the conditions contained in this authorisation, which conditions form part of the environmental authorisation and are binding on the holder of the authorisation.
- 1.2 The holder of the authorisation shall be responsible for ensuring compliance with the conditions by any person acting on his or her behalf, including but not limited to, an agent, sub-contractor, employee or person rendering a service to the holder of the authorisation.
- 1.3 The activity authorised may only be carried out at the property indicated above and as shown in the site plans (0.84/117 Rev 2.6) in Appendix A of the EIAR, dated September 2008 and submitted to the Department on 29 September 2008.
 - 1.3.1 The construction of the deviated road infrastructure must accommodate the existing access of commuters and mitigate the nuisance factor of traffic disruption through careful planning of construction activities.
 - 1.3.2 Signboards must be erected that convey the start and end dates of construction and other relevant information to road users.
 - 1.3.3 The construction process must be compliant with all safety and health measures as prescribed by the relevant act as mentioned in section 1.6.
 - 1.3.4 The design of the facilities must take into consideration the local environmental attributes, especially where crossing streams and watercourses and must ensure the free flow of water and movement of fauna in the drainage lines at all times during construction and operation.
 - 1.3.5 All construction activities must be confined to as small a footprint as possible and construction damage to embankments at watercourses must be limited.
 - 1.3.6 Construction at areas crossing streams or watercourses must start at the upstream side and move to the downstream side to assist the process of rehabilitation without further disturbance from upstream construction.
 - 1.3.7 All mitigation measures and recommendations of the EIAR forms part of this authorisation and must be implemented by the applicant.



Handwritten signature and date: 6/11/08

- 1.4 Any changes to, or deviations from, the project description set out on page 22 of the EIA, dated September 2008 and submitted to the Department on 29 September 2008, and authorised under this 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 authorisation in terms of the regulations.
- 1.5 This activity must commence within a period of four (4) years from the date of issue. 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.
- 1.6 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.
- 1.6.1 Relevant legislation that must be complied with by the holder of this authorisation include but is not limited to:
- Compliance with the requirements of Section 38 of the National Heritage Resources Act, Act 25 of 1999, including the comments and recommendations of the relevant heritage resources authority responsible for the area in which the development is proposed. Should any heritage resources be exposed during excavation for the purpose of construction, construction in the vicinity of the finding must be stopped. 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. The relevant heritage resource agency must be informed about the finding.
 - All provisions of the Occupational Health and Safety Act, 1993 (Act 85 of 1993).
 - Provisions of the National Water Act, 1998 (Act 36 of 1998). Siting, demarcation and management of material storage and vehicle servicing areas used by the contractor which must be outside of the 1:50 year flood line or at least 100 meters away from watercourses.

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- Provisions of the Explosives Act, Act 26 of 1956 if any blasting activities is required.
- 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 28 of 2002) administered by the Department of Minerals and Energy. No excavation for infill materials may be done in identified sensitive areas, watercourses and 1:100 year flood lines.
- Relevant local authority bylaws and regulations.
- The applicant is hereby limited to storage of bituminous products to a threshold below 30 000 litres on site. Should the Applicant wish to exceed this capacity, a separate application for environmental authorisation must be made in terms of R. 386 (7) of 2006.

Appeal of authorisation

- 1.7 The holder of the authorisation must notify every registered interested and affected party (IAP), in writing and within 10 (TEN) calendar days, of receiving notice of the Department's decision to authorise the activity.
- 1.8 The notification referred to in 1.7 must –
- 1.8.1 Specify the date on which the authorisation was issued;
 - 1.8.2 Inform the interested and affected party of the appeal procedure provided for in Chapter 7 of the regulations;
 - 1.8.3 Advise the interested and affected party that a copy of the authorisation will be furnished on request; and
 - 1.8.4 Give the reasons for the decision.

Management of the activity

- 1.9 The Environmental Management Plan ("EMP") for construction submitted to the Department for approval as part of the EIAR is hereby approved for implementation.
- 1.10 The construction EMP will be seen as a dynamic document. However, any changes to the EMP must be submitted to the authorities for approval before such changes could be effected.

A handwritten signature in black ink, followed by the date "6/11/08".

Monitoring

1.11 The applicant must appoint a suitably qualified and responsible person that will act as an Environmental Control Officer (ECO) that will have the responsibility of implementing the approved EMP.

- The ECO must be appointed before the commencement of the activity and the authorities must be notified of such an appointment for communication purposes.
- The ECO must inform all contractor staff via induction training of the conditions of this authorisation and the requirements of the approved EMP.
- The ECO must continuously monitor compliance with the conditions of this authorisation and the requirements of the approved EMP and keep a record of such monitoring.
- The ECO must submit a quarterly environmental compliance report, in writing, to The Director: Environmental Impact Evaluation and copy the Applicant with such report. This report shall include a description of all activities on site, problems identified, transgressions noted and remedial action implemented. The report must reflect the DEAT reference number of the project on the cover page.
- The ECO shall maintain the following on site:
 - Copies of all reports submitted to the Department.
 - A complaints register of all public complaints and the remedies applied to such complaints.
- The ECO must remain employed until all construction activities and rehabilitation measures as well as site clean-up are completed and the site is handed over to ESKOM by the contractor for operation.

Recording and reporting to the Department

1.12 The holder of the authorisation must submit an environmental compliance audit report to the Department upon completion of the construction and rehabilitation activities. The environmental audit report must –



- 1.12.1 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 EMP.
- 1.12.2 Records relating to compliance monitoring must be kept on site and made available for inspection to any relevant and competent authority in respect of this development.

Commencement of the activity

- 1.13 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.

Operation of the activity

- 1.14 Fourteen (14) days written notice must be given to the Department that the activity operational phase will commence.
- 1.15 The applicant must inform the Department in writing of the date on which the development and this authorisation is transferred to the Provincial roads department for operational purposes.

Site closure and decommissioning

- 1.16 Should the use of the facilities installed as part of this authorisation ever cease or become redundant, the holder of the authorisation 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.

General

- 1.17 A copy of this authorisation must be kept at the site office where the activity will be undertaken. The authorisation must be produced to any authorised official of the Department who requests to see it and must be made available for inspection by any

A handwritten signature in black ink, followed by the date '6/11/08' written vertically.

employee or agent of the holder of the authorisation who works or undertakes work at the property.

- 1.18 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.
- 1.19 The holder of the authorisation must notify the Department, in writing and within 48 (fourty eight) hours, if any condition of this 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 authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, 1998 and the regulations.
- 1.20 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 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 authorisation as set out in this document or any other subsequent document emanating from these conditions of authorisation.

Date of environmental authorisation: 6 November 2008



Ms Nosipho Ngcaba

Director – General

Department of Environmental Affairs and Tourism

Letter signed by: L McCourt

Designation: Chief Director: Environmental Impact Management

Annexure 1: Reasons for Decision

1. Background

The applicant, ESKOM, applied for authorisation to carry out the following activities –

R. 386:

7: The above ground storage of a dangerous good, including petrol, diesel, liquid petroleum, gas or paraffin, in containers with a combined capacity of more than 30 cubic metres but less than 100 cubic metres at any one location or site.

15: The construction of a road that is wider than 4 metres or that has a reserve wider than 6 metres, excluding roads that fall within the ambit of another listed activity or which are access roads of less than 30 metres.

R.387

5: The route determination of roads and design of associated physical infrastructure, including roads that have not yet been built for which routes have been determined before the publication of this notice and which has not been authorised by a competent authority in terms of the Environmental Impact Assessment Regulations, 2006 made under section 24(5) of the Act and published in Government Notice No. R. 385 of 2006, where –

- (a)
- (b) it is a road administered by a provincial authority;
- (c) the road reserve is wider than 30 metres; or
- (d)

for the purpose of the proposed re-alignment and construction of a portion of the Afguns road (Provincial road D2001) close to the new Medupi power station near Lephalale, as described in the final environmental impact assessment report (EIAR), dated September 2008 and submitted to the Department on 29 September 2008, page 22.

The Applicant appointed Savannah Environmental to undertake an assessment process and obtain Environmental Authorisation. The consultant compiled an environmental

 6/11/08

impact assessment report (EIAR). The proposed construction activities were advertised in the media and a public involvement process compliant with the requirements of the Regulations, 2006 were followed. No significant environmental impacts are predicted or expected. The only impact that may affect third parties is use of the road during construction, but this is deemed insignificant and ESKOM will implement measures to accommodate users and to ensure the free flow of traffic.

2. 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 EIAR, dated September 2008 and submitted on 29 September 2002;
- b) The information contained in the specialist study on bio-diversity;
- c) The comments received from various Government Departments and Local Authorities;
- d) Comments received from various Interested and Affected parties (IAPs) as included in the EIAR; 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. 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 requirement for the re-alignment and construction of a 700 metre portion of the Afguns road (D2001) to ensure a safe intersection with the newly re-aligned Steenbokpan road is clearly understood
- b) The re-alignment is required to ensure continued service delivery to the existing users of the road.
- c) No alternative sites were investigated as this was not feasible in the context of the existing road alignment.



- d) A sufficient public participation process was undertaken and the consultant has satisfied the minimum requirements as prescribed in the EIA Regulations, 2006 for public involvement.
- e) As part of the EIA process Savannah Environmental, being the principal consultancy, appointed Bathusi Environmental Consultancy to undertake a bio-diversity assessment and propose feasible mitigation measures to mitigate the identified possible impacts in the new road alignment.

4. Findings

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

- It is a detailed EIAR in support of the application for authorisation that includes adequate identification and assessment of impacts for the decision-making process.
- There has been sufficient consultation with IAPs.
- The area proposed for the placement of the proposed infrastructure is deemed moderately sensitive from a bio-diversity perspective but the loss of 700 metres of habitat will not have a significant impact on the ecological environment; therefore the proposed development is compatible with the proposed site for the development.
- No heritage Impacts are foreseen as there are no known heritage sites in the area.
- A construction EMP, which address all identified impacts was submitted to the Department for approval with the EIAR, and will be implemented to manage the identified environmental issues.

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

Handwritten signature and date: 6/11/08



environment & tourism

Department:
Environmental Affairs and Tourism
REPUBLIC OF SOUTH AFRICA

Private Bag X447, Pretoria, 0001 • Fedsure Building, 315 Pretorius Street, Pretoria, 0002. Tel: (+27 12) 310 3911 Fax: (+27 12) 322 2682

Reference: 12/12/20/695

Enquiries: Ms. M Ntene

Telephone: (012) 310 3031 **Fax:** (012) 320 7539 Email: mntene@deat.go.za

Mr Nico Gewers
Eskom Holdings Limited: Generation Division
P O Box 1091
JOHANNESBURG
2000

Fax no: (011) 800 3501

Dear Mr Gewers

APPLICATION FOR AMENDMENT OF THE RECORD OF DECISION FOR THE CONSTRUCTION OF MEDUPI POWER STATION: COAL SUPPLY CONVEYOR ALIGNMENT NEAR LEPHALALE, LIMPOPO.

With reference to the abovementioned application, the Department, in terms of the powers vested in it by regulation 43 of Environmental Impact Assessment Regulations, 2006, has decided to amend the environmental authorisation as follows –

The description of the activity in the record of decision (ROD) dated 21 September 2006, Section 1:

- The construction of a conveyor belt for the supply of coal on the eastern alignment,

is hereby replaced with the following description:

- The construction of a conveyor belt for the supply of coal on the western alignment.

This amendment authorisation must be read in conjunction with the ROD for project reference 12/12/20/695 dated 21 September 2006.

In terms of regulation 10(2) of the Environmental Impact Assessment Regulations, 2006, you are instructed to notify all registered interested and affected parties (IAPs), in writing and within seven (7) calendar days of the date of this letter, of the Department's decision in respect of your application as well as the provisions regarding the making of appeals that are provided for in the regulations.

Your attention is drawn to Chapter 7 of the Regulations which regulates appeal procedures. Attached please find a simplified copy of the appeals procedure to be followed. Kindly include a copy of this procedure with the letter of notification to IAPs.

A copy of the official appeal form can be obtained from:
Mr PKM Retief, Appeals Administrator, Tel: 012 310 3705, pretief@deat.gov.za; or
Mr H Grové, Appeals Administrator, Tel: 012 310 3070, hgrove@deat.gov.za, at the
Department.

Should you wish to appeal any aspect of the decision, you must, *inter alia*, lodge a notice of intention to appeal with the Minister, within 10 days of receiving notice of the decision, 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 Forum Building, North Tower, cor. Van der Walt and Pretorius Streets, Pretoria.

Should the applicant decide to appeal, the applicant must serve a copy of its notice of Intention to appeal on all registered IAPs as well as a notice indicating where, and for what period, the appeal submission will be available for inspection.

Please include the Department, attention of the Director: Environmental Impact Evaluation, in the list of IAPs, notified through your notification letter of the decision, for record purposes.

The authorised activity may not commence within thirty (30) days of the date of signature of the amendment authorisation. Please further note that the Minister may, on receipt of appeals against this amendment authorisation or conditions thereof suspend the amendment authorisation pending the outcome of the appeals procedure.

Yours sincerely


Ms Nontso Ngcaba
Director - General
Department of Environmental Affairs and Tourism
Letter signed by: Ms. Lize McCourt
Designation: Chief - Director: Environmental Impact Management
Date: 21/8/2006

CC: Ms Karen Jodas Savannah Fax: 086 684 0547
Mr Herman Grové DEAT

APPEALS PROCEDURE IN TERMS OF CHAPTER 7 OF R. 385 OF 2006 TO BE FOLLOWED BY THE APPLICANT AND INTERESTED AND AFFECTED PARTIES UPON RECEIPT OF NOTIFICATION OF AN ENVIRONMENTAL AUTHORISATION

APPLICANT	INTERESTED AND AFFECTED PARTIES (IAPs)
1. Receive notice of Environmental Authorisation from the relevant Competent Authority	1. Receive notice of Environmental Authorisation from Applicant/Consultant
2. Within 10 days of receipt of notification, notify the relevant Competent Authority and all IAPs of intention to appeal	2. Within 10 days of receipt of notification, notify the relevant Competent Authority of intention to appeal
3. Notification served by the Applicant must include: 3.1. A copy of the notice of intention to appeal; and 3.2. A notice indicating where and for what period the appeal submission will be available for inspection by all IAPs	3. Appellant must serve on the Applicant 3.1. A copy of the notice of intention to appeal 3.2. A notice indicating where and for what period the appeal submission will be available for inspection by the applicant
4. The appeal must be submitted to the relevant Competent Authority or delegated organ of State within 30 days of lodging of the notice of intention to appeal	4. The appeal must be submitted to the relevant Competent Authority or delegated organ of State within 30 days of lodging of the notice of intention to appeal
5. A person or organ of state that receives notice of an appeal may submit a responding statement to the relevant Competent Authority or delegated organ of state within 30 days from the date that the appeal submission was made available for inspection by the appellant	5. An Applicant that receives notice of an appeal may submit a responding statement to the relevant Competent Authority or delegated organ of State within 30 days from the date the appeal submission was made available for inspection by the appellant

NOTES:

1. An appeal against a decision must be lodged with:-

- a) the Minister if the decision was issued by the Director- General (or another official) acting in his/ her capacity as the delegated Competent Authority
- b) the MEC if the decision was issued by the Head of Department (or another official) acting in his/ her capacity as the delegated Competent Authority
- c) the delegated organ of state where relevant.

2. An appeal lodged with:-

- a) the Minister must be submitted to the Department of Environmental Affairs and Tourism
- b) the MEC must be submitted to the provincial department responsible for environmental affairs
- c) the delegated organ of state, where relevant, must be submitted to the delegated organ of state

3. An appeal must be:-

- a) on an official form obtainable or published by the relevant department
- b) accompanied by:
 - a statement setting out the grounds of appeal
 - supporting documentation which is referred to in the appeal and is not available to the relevant Competent Authority
 - a statement that the appellant has complied with regulation 62 (2) or (3) together with copies of the notices referred to in regulation 62
 - the prescribed appeal fee, if any.

4. A copy of the official appeal form can be obtained from:

See authorisation cover letter.



environment & tourism

Department:
Environmental Affairs and Tourism
REPUBLIC OF SOUTH AFRICA

Private Bag X447, Pretoria, 0001 • Fedura Building, 315 Pretorius Street, Pretoria, 0002. Tel: (+27 12) 310 3911 Fax: (+27 12) 322 2682

Ref: 12/12/20/695

Tel: (012) 310 3087 **Fax:** (012) 320 7539 **e-mail:** lgrobbelaar@deat.gov.za

Enquiries: Ms Lenè Grobbelaar

Ms Deidre Herbst
Eskom Holdings Limited: Generation Division
PO Box 1091
JOHANNESBURG
2000

Fax: (011) 800 3501

Dear Ms Herbst

REQUEST FOR AMENDMENT OF RECORD OF DECISION FOR THE MEDUPI POWER STATION NEAR LEPHALALE TO REMOVE THE REQUIREMENT FOR CARBON MONOXIDE MONITORING.

With reference to the abovementioned application, the Department, in terms of powers vested in it by Regulation 43 of the Environmental Impact regulations, 2006, has decided to amend the Record of Decision dated 21 September 2006 for Medupi power station condition 3.2.1.1, by removing the requirement for monitoring of the ambient carbon monoxide levels in the Marapong Township.

This amendment authorisation must be read in conjunction with the ROD dated 21 September 2006 project reference 12/12/20/695, condition 3.2.1.1.

In terms of regulation 10(2) of the Environmental Impact Assessment Regulations, 2006, you are instructed to notify all registered interested and affected parties (IAPs), in writing and within ten (10) calendar days of the date of this letter, of the Department's decision in respect of your application as well as the provisions regarding the lodging of appeals that are provided for in the regulations.

Your attention is drawn to Chapter 7 of the Regulations which regulates appeal procedures. Attached please find a simplified copy of the appeals procedure to be followed. Kindly include a copy of this procedure with the letter of notification to IAPs.

A copy of the official appeal form can be obtained from:

Mr PKM Retief, Appeals Administrator, Tel: 012 310 3705, pretief@deat.gov.za; or
Mr H Grovè, Appeals Administrator, Tel: 012 310 3070, hgrove@deat.gov.za, at the Department.

Should you wish to appeal any aspect of the decision, you must, *inter alia*, lodge a notice of intention to appeal with the Minister, within 10 days of receiving notice of the decision, 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 Form Building, North Tower, cor. Van der Walt and Pretorius Streets, Pretoria.

Should the applicant decide to appeal, the applicant must serve a copy of its notice of intention to appeal on all registered IAPs as well as a notice indicating where, and for what period, the appeal submission will be available for inspection.

Please include the Department, attention of the Director: Environmental Impact Evaluation, in the list of IAPs, notified through your notification letter of the decision, for record purposes.

Please further note that the Minister may, on receipt of appeals against the amendment authorisation or conditions thereof suspend the amendment authorisation pending the outcome of the appeals procedure.

Yours sincerely



Ms Nosipho Ngcaba
Director – General
Department of Environmental Affairs and Tourism
Letter signed by: L. McCourt
Designation: Chief-Director, Environmental Impact Management

Date: 26/1/07

CC: Ms Jo-Anne Thomas Savannah Environmental Fax: 086 684 0547

Copy to: Mr Herman Grove DEAT

APPEALS PROCEDURE IN TERMS OF CHAPTER 7 OF R. 385 OF 2006 TO BE FOLLOWED BY THE APPLICANT AND INTERESTED AND AFFECTED PARTIES UPON RECEIPT OF NOTIFICATION OF AN ENVIRONMENTAL AUTHORISATION

APPLICANT	INTERESTED AND AFFECTED PARTIES (IAPs)
1. Receive notice of Environmental Authorisation from the relevant Competent Authority	1. Receive notice of Environmental Authorisation from Applicant/Consultant
2. Within 10 days of receipt of notification, notify the relevant Competent Authority and all IAPs of intention to appeal	2. Within 10 days of receipt of notification, notify the relevant Competent Authority of intention to appeal
3. Notification served by the Applicant must include: 3.1. A copy of the notice of intention to appeal; and 3.2. A notice indicating where and for what period the appeal submission will be available for inspection by all IAPs	3. Appellant must serve on the Applicant 3.1. A copy of the notice of intention to appeal 3.2. A notice indicating where and for what period the appeal submission will be available for inspection by the applicant
4. The appeal must be submitted to the relevant Competent Authority or delegated organ of State within 30 days of lodging of the notice of intention to appeal	4. The appeal must be submitted to the relevant Competent Authority or delegated organ of State within 30 days of lodging of the notice of intention to appeal
5. A person or organ of state that receives notice of an appeal may submit a responding statement to the relevant Competent Authority or delegated organ of state within 30 days from the date that the appeal submission was made available for inspection by the appellant	5. An Applicant that receives notice of an appeal may submit a responding statement to the relevant Competent Authority or delegated organ of State within 30 days from the date the appeal submission was made available for inspection by the appellant

NOTES:

1. An appeal against a decision must be lodged with:-

- a) the Minister if the decision was issued by the Director- General (or another official) acting in his/ her capacity as the delegated Competent Authority
- b) the MEC if the decision was issued by the Head of Department (or another official) acting in his/ her capacity as the delegated Competent Authority
- c) the delegated organ of state where relevant.

2. An appeal lodged with:-

- a) the Minister must be submitted to the Department of Environmental Affairs and Tourism
- b) the MEC must be submitted to the provincial department responsible for environmental affairs
- c) the delegated organ of state, where relevant, must be submitted to the delegated organ of state

3. An appeal must be:-

- a) on an official form obtainable or published by the relevant department
- b) accompanied by:
 - a statement setting out the grounds of appeal
 - supporting documentation which is referred to in the appeal and is not available to the relevant Competent Authority
 - a statement that the appellant has complied with regulation 62 (2) or (3) together with copies of the notices referred to in regulation 62
 - the prescribed appeal fee, if any.

4. A copy of the official appeal form can be obtained from: See Authorisation Cover Letter



water & forestry

Department:
Water Affairs and Forestry
REPUBLIC OF SOUTH AFRICA

DW 6/1

I, *Deborah Gabaakelwe Mochotlhi*, in my capacity as Chief Director: Water Use in the Department of Water Affairs and Forestry (hereinafter referred to as the Department) by the powers delegated to me by the Minister of Water Affairs and Forestry hereby authorise the following water uses in respect of this licence.

SIGNED:

DATE: 13/02/2009

LICENCE NUMBER: 27086983

1. **Water User (Licensee):** Medupi Power Station Eskom (Pty) Ltd
- Postal Address of applicant:** P.O box 1091
Johannesburg
2000

2. **Water Uses**

This licence is issued for the following water uses in terms of the National Water Act, 1998 (Act 36 of 1998) (hereinafter referred to as the Act) for industrial purposes on the properties mentioned in paragraph 3(a), subject to the conditions set in Annexures I, II and III of this licence.

- 2.1 Section 21(a) of the Act: Taking of water from a water resource, subject to the conditions set out in Annexures I and II.
- 2.2 Section 21(b) of the Act: Storage of water, subject to the conditions set out in Appendices I and III.
- 2.3 Section 21(c) of the Act: Impeding or diverting the flow of water in a watercourse, subject to the conditions set out in Appendices I and IV.
- 2.4 Section 21(e) of the Act: Engaging in a controlled activity, subject to the conditions set out in Appendices I and V.
- 2.5 Section 21(f) of the Act: Discharging waste or water containing waste into a water resource, subject to the conditions set out in Appendices I and VI.
- 2.6 Section 21(g) of the Act: Disposing of waste in a manner which may detrimentally impact on a water resource, subject to the conditions as set out in Appendices I and VII.

Viva water pure and clean ! • Viva forests rich and green !

3. (a) Properties on which the use will be exercised

The farm Eenzaamheid 687, in extent 936, 548 0 ha, district of Ellirras Province of Limpopo; and

The farm Naauwontkomen 509, in extent 883, 478 5 ha, district of Ellirras Province of Limpopo

(b) Allocated quantity of water:

The taking of a maximum quantity of 25 000 m³/a and the disposal of a maximum quantity of 40 500 m³/a in respect of the property mentioned in paragraph 3(a)

(c) Registered owner of the Properties:

Eskom Holdings Ltd

(d) Water Resource

Limpopo River is a water resource as defined by section 1(1) (xxvii) of the Act

4. (a) Licence Period

This licence is valid for a period of twenty (20) years from the date of issuance.

(b) Review Period

This licence is subject to a review period of 5 years

5. Definitions

Any terms, words and expressions as defined in the National Water Act, 1998 (Act 36 of 1998) must bear the same meaning when used in this licence.

"Report" refers to the report entitled Generation Primary Energy: Water: Medupi Power Station Integrated Water Use License Application Technical Report dated September 2007 for Eskom as compiled by Eskom Generation for Eskom Holdings as well as all other related documentations and communication (emails, letters, verbal, etc) related thereto.

6. Acronyms used in licence

CARA	Conservation of Agricultural Resources Act, 1983 (Act No 4 of 1983)
IWWMP	Integrated Water and Waste Management Plan


CD: WU

RSIP	Rehabilitation Strategy and Implementation Programme
RQO	Resource Quality Objective
SABS	South African Bureau of Standards
WC	Water Conservation

ANNEXURE I

CONDITIONS FOR ALL WATER USES

1. The responsibility for complying with the provisions of the license is vested in the licensee and not any other person or body.
2. The licensee shall immediately inform the Chief Director: Limpopo of any change of name, address, premises and/or legal status.
3. If a water user association is established in the area to manage the resource, membership of the licensee to this association is compulsory and rules, regulations and water management stipulations of the association must be adhered to.
4. The licensee shall be responsible for any water use charges or levies imposed from time to time by a responsible authority or Department in terms of the Raw Water Pricing Strategy, Waste Discharge Charges, Water Resource Management Charge of the Department, or any other water charge or levies that might be imposed in terms of the appropriate legislation.
5. The licence shall not be construed as exempting the licensee from compliance with the any other applicable Act, Ordinance, Regulation or By-law.
6. Any incident that causes or may cause water pollution must immediately be reported to the Chief Director: Limpopo or his or her representative. The licensee must keep an incident report and complaints register, which must be made available to the Chief Director: Limpopo upon request.
7. The licence is subject to all the conditions contained in the Act.
8. Any contravention of or failure to comply with any condition of a licence constitutes an offence.
9. The Minister and any person authorised by him in writing may at any time enter upon the premises of the licensee to perform the functions contemplated in the Act.
10. Any person who has timeously lodged a written objection against the application of the licence may appeal to the Water Tribunal and the Tribunal may confirm, amend or withdraw the licence or make any other order as it deems appropriate.
11. The licensee must inform the Chief Director of any change of name, address and / or premises and legal status within 60 days from the date of change.
12. If the properties mentioned in paragraph 3 above are subdivided, sold or consolidated this department must be notified within 60 days.

13. If the water uses authorised in terms of this licence cannot be carried out and completed in accordance with the relevant provisions of this Licence, the licensee must -
 - a. take steps necessary to prevent the pollution of the water resources, including groundwater, or if the water resource has already been polluted, from being further polluted;
 - b. take steps necessary to prevent the damaging of the environment, including the riparian zone, or if the environment has already been damaged, from being further damaged;
 - c. report the matter to the Chief Director: Limpopo within 24 (twenty four) hours by telephone and facsimile and within 48 hours in writing, describing the impact and measures that have been taken to remedy the pollution; and
 - d. submit to the Chief Director: Limpopo within an agreed time period, a proposal, with time schedule for implementation, to execute the activities referred to in above and to rehabilitate the area disturbed.
13. This licence and the amendment of this licence are also subject to all the applicable procedural requirements and other applicable provisions of the Act, as amended from time to time
14. Monitoring network should be set up as an early warning system to detect any polluted seepage that might occur from the dams.
15. The licensee is subject to compliance with any future Resource Quality Objectives to be determined for the Waterval Catchment and its tributaries.

ANNEXURE II

Section 21(a) of the Act: Taking water from a water resource

1. This licence authorises the taking of a maximum quantity of two million nine hundred thousand cubic meters (2 900 000 m³) of water per annum from Mokolo dam via the Exxaro pipeline located on the geographic location S 23°39' 50" and E 27° 36' 55" for industrial purposes.
2. This licence does not authorises the taking of a maximum quantity of twelve million cubic meters (m³) of water per annum from government scheme as stipulated in the report for industrial purposes. When the scheme is function, the licensee will be required to apply for this abstraction.
3. The quantity of water authorized to be taken in terms of this licence may not be exceeded without prior authorization by the Chief Director: Limpopo.
4. This licence does not imply any guarantee that the said quantities and qualities of water will be available at present or at any time in the future.
6. The abovementioned volume may be reduced when the licence is reviewed.
7. The licensee must continually investigate new and emerging technologies and put into practice water efficient devices or apply technique for the re-use of water containing waste, in an Endeavour to conserve water at all times.
8. The Department accepts no liability for any damage, loss or inconvenience, of whatever nature, suffered as a result of-
 - 8.1 shortage of water;
 - 8.2 inundations or flood;
 - 8.3 siltation of the resource; and
 - 8.4 required reserve releases.
9. The licensee must establish and implement a continual process of raising awareness amongst itself, its workers and stakeholders for the need to for Water Conservation and Water Demand Management.
10. The licensee must ensure that all measuring devices are properly maintained and in good working order and must be easily accessible. This must include a programme of checking, calibration, and/or renewal of measuring devices.
11. The licensee must establish a programme of formal Information Management System, which maintains a database on water supply, distribution and delivery infrastructure.

12. All water taken from the resource must be measured as follows:
 - 12.1 The daily quantity of water taken must be metered or gauged and the total recorded at the last day of each month; and
 - 12.2 The license must keep record of all water taken and a copy of the records must be forwarded to the Chief Director: Limpopo on or before 25 January and 25 July of each year.
13. No water taken may be pumped, stored, diverted, or alienated for purposes other than intended in this licence, without written approval by the Chief Director: Limpopo or his/her delegated nominee.
14. The licensee must install and monitor appropriate water measuring to measure the amount of water abstracted, received and/or consumed, as applicable to the infrastructure.

ANNEXURE III

Section 21(c) the Act: Impending or diverting the flow of water

- 1.1 The licensee must submit the following information to the Department by June 2009:
 - 1.1.1 Consideration of alternatives regarding the placement of coal stock yard to avoid diversion or any impacts on the water resource,
 - 1.1.2 A map of appropriate scale indicating placement of coal stock yard in relation to affected watercourse,
 - 1.1.3 Duration of diversion (temporary or permanent)
 - 1.1.4 An indication of diversion or length of river to be diverted, and
 - 1.1.5 Methodology of diversion.
- 1.2 The licensee must carry out and complete all the activities according to the following:
 - 1.2.1 Conditions of this licence; and
 - 1.2.2 Any other written direction issued by the Chief Director: Limpopo in relation to this licence.
- 1.3 The licensee must submit a set of as-built drawings (not schematic layouts) to the Chief Director: Limpopo of all river diversions, road crossings and weirs.
- 1.4 The conditions of the authorization must be brought to the attention of all persons (employees, sub-consultants, contractors etc.) associated with the undertaking of this activity and the applicant must take measures that are necessary to bind such persons to the conditions of this licence.
- 1.5 Construction activities must not take place within the 1:100 year flood-line or within a horizontal distance of 100 meters from any watercourse, estuary, borehole or well, whichever is the greatest, unless authorized by this licence.
- 1.6 Compensation measures for damage to and or mitigation measures must be recommended if avoidance or minimization of the impacts of the proposed development is not possible or if mitigation measures fail to adequately protect the in-stream and riparian habitat.
- 1.7 No material with pollution generating potential will be used in any construction activities.
- 1.8 Necessary erosion prevention mechanisms must be employed to ensure the sustainability of all structures.


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- 1.9 The licensee must ensure that structures such as the river diversions, river road crossings, weirs and the culverts are not be damaged excessively by floods exceeding the magnitude of floods occurring on average once in every 100 years.
- 1.10 The structure of temporary crossings must be non-erosive, structurally stable and must not induce any flooding or safety hazard. Temporary crossings must be inspected regularly for accumulation of debris, blockage, erosion of abutments and overflow areas. Debris must be removed and damages must be repaired and reinforced immediately to prevent further damage.
- 1.11 Construction activities must start up-stream and proceed into a down-stream direction, so that the recovery processes can start immediately, without further disturbance from upstream construction works.
- 1.12 Construction activities must be scheduled to take place during dry seasons when flows are lowest.
- 1.13 The natural migration of aquatic biota and upstream movement of fish must not be disturbed.
- 1.14 Vehicles and other machinery must be serviced well above the 1:100 year flood line or within a horizontal distance of 100 meters from any watercourse or estuary. Oils and other potential pollutants must be disposed off at an appropriate licensed site, with the necessary agreement from the owner of such a site.
- 1.15 All reagent storage tanks and reaction units must be supplied with a bunded area built to the capacity of the facility and provided with sumps and pumps return the spilled material back into the system.
- 1.18 The system must be maintained in a state of good repair and standby pumps must be provided.
- 1.19 Any hazardous substances must be handled according to the relevant legislation relating to transport, storage and use of the substance.
- 1.20 Pollution caused by spills from the conveyances must be prevented through proper maintenance and effective protective measures especially near all stream crossings.


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2. Storm-water Management

- 2.1 Storm-water must be diverted from the construction works and roads must be managed in such a manner as to disperse runoff and to prevent the concentration of storm-water flow.
- 2.2 Where necessary works must be constructed to attenuate the velocity of the storm-water discharge and to protect the banks of the watercourse.
- 2.3 Storm-water control works must be constructed, operated and maintained in a sustainable manner throughout the project.
- 2.4 Increased runoff due to vegetation clearance and/or soil compaction must be managed, and steps must be taken to ensure that storm-water does not lead to bank instability and excessive levels of silt entering the watercourse.
- 2.5 Storm-water leaving the licensee's premises must in no way be contaminated by any substance, whether such substance is a solid, liquid, vapour or gas or a combination thereof which is produced, used, stored, dumped or spilled on the premises.

3. Water Quality and Quantity

- 3.1 The in-stream water quality must be analysed on weekly basis during the construction of the activities of the river diversion, at the monitoring points for both upstream and downstream of the activities for the river diversion for the following variables: pH, Electrical conductivity (mS/M), suspended solids (mg/l), and total dissolved solids (mg/l). Monitoring must continue on monthly basis for three months after the cessation of the activities.
- 3.2 Activities such as maintenance that lead to elevated levels of turbidity of any watercourse must be minimised.
- 3.3 The licensee must ensure that the quantity of the water to downstream water users does not decrease because of the existence of the river diversions, river crossings, culverts and associated maintenance of road crossings.

4. General Specifications

- 4.1 A suitably qualified person, appointed by the licensee, and approved, in writing, by the Chief Director: Limpopo, must be responsible for ensuring that the structures are maintained in line with the design specifications.
- 4.2 The licensee must have a full time Civil Engineer Supervisor on the site during construction of river diversions, river crossings and culverts. The contractor must have an approved Site Agent on the site during construction.


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- 4.3 Necessary erosion prevention mechanisms must be employed to ensure the sustainability of all the structures.
- 4.5 The licensee must ensure the placement of advertisements of the alteration activities in local newspapers and one Chief newspaper as required by the M1.0 Operational Guideline for the control over the alteration of a watercourse.

5. Protective Measures

- 5.1 The diversion structures may not restrict river flows by reducing the overall river width or obstructing river flow.
- 5.2 Operation and storage of equipment within the riparian zone must be limited as far as possible.
- 5.3 All activities within the riparian zone must be restricted as far as possible.
- 5.4 Any material removed from the in stream or riparian habitat, may not be stored within the riparian zone, and may not be stored in such a way that will cause damming of water or wash-away.
- 5.5 Alien vegetation must not be allowed to further colonise the area, and all new alien vegetation recruitment must be eradicated or controlled, using standard methods approved by the Department.
- 5.6 Soils that have become compacted through the activities of the development must be loosened to an appropriate depth to allow seed germination.
- 5.7 Increased runoff due to vegetation clearance and/or soil compaction must be managed and steps must be taken to ensure that storm-water does not lead to bank instability and excessive levels of silt entering the stream.
- 5.8 Riparian vegetation, including dead trees, may not be removed from the area. In particular, snags (fallen trees and branches) in the river must be protected (i.e. not collected for firewood or any other purpose).
- 5.9 All reasonable steps must be made to minimise noise and mechanical vibrations in the vicinity of the river.

6. Rehabilitation

- 6.1 All disturbed areas must be re-vegetated with an indigenous seed mix in consultation with an indigenous plant expert, ensuring that during rehabilitation only indigenous shrubs, trees and grasses are used in restoring the biodiversity.
- 6.2 The vegetation of the surrounding catchment must also be managed to prevent erosion and siltation of the water course.
- 6.3 The licensee must take steps necessary to allow movement of aquatic species, including migratory species during the rehabilitation programme.


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- 6.4 The licensee must embark on a systematic long-term rehabilitation programme to restore natural watercourses to environmentally acceptable and sustainable conditions after construction, which must include, but not be limited to:
- 6.4.1 The rehabilitation of disturbed and degraded riparian areas to restore and upgrade the riparian habitat integrity to sustain a bio-diverse riparian ecosystem; and
 - 6.4.2 Annually assess the habitat to monitor the sustainability of the diversions and compliance with these conditions. Action must be taken to rectify any negative impacts.
- 6.5 The licensee must ensure that the volume of flow is not reduced except for natural evaporative losses and the authorized attenuation volumes.
- 7. General Surface Water Design Requirements and Criteria**
- 7.1 The licensee must determine flood lines (1:50 and 1:100 year) prior to construction to ensure risks are adequately managed. Flood lines must be clearly indicated on the layout plans.
- 7.2 The licensee must schedule construction activities at or close to river crossings, streams or wetlands to take place during low flow periods.
- 7.3 The licensee must clearly indicate all wetlands boundaries within the project area on layout plans.
- 7.4 Design and planning of all proposed construction activities adjacent to or in the vicinity of rivers, streams and wetlands must consider the following measures:
- 7.4.1 Impact of alignment on springs and wetlands must be investigated and monitored and ensure their continued functioning.
 - 7.4.2 Where appropriate, large individual indigenous riparian trees must be avoided during construction and must be clearly marked on site.
 - 7.4.3 All construction roads in or adjacent to the riparian zone must be minimized and if required, must be aligned and managed so as to minimize disturbance of the riparian zone and in-stream habitats.
- 7.5 The licensee must do bio-monitoring to determine the impact, change, deterioration and improvement of the aquatic system associated with the activities that of impeding, altering or diverting the water resource.

ANNEXURE IV

Section 21 (e) of the Act: Engaging in a controlled activity; irrigation of any land with waste or water containing waste

1. QUANTITY OF WATER CONTAINING WASTE FOR IRRIGATION

- 1.1 This licence authorises the disposal to irrigated land with a maximum quantity of seven hundred and thirty thousand cubic meters (730 000 m³) of water containing waste per annum, based on an average of six hundred and twenty thousand cubic meters (62 000m³) per month.
- 1.2 The quantity of wastewater authorised to be irrigated in terms of this licence may not be exceeded.

2. CROP TYPE AND AREA IRRIGATED

- 2.1 This licence authorises to irrigate a total surface area of 85 ha of natural vegetation, for rehabilitation on the properties according to agreement.

3. QUALITY OF WATER CONTAINING WASTE

The quality of the water containing waste to irrigate may not exceed the following non-exceedance values or range:

Variable	Limit
pH	5.5-7.5
Electrical Conductivity	50 mS/m
Ammonia	2 mg/l
Nitrate	15 mg/l
Chlorine	0.25mg/l
Manganese	0.1 mg/l
Chemical oxygen demand (COD)	30 mg/l
Faecal Coliforms per 100ml	0
Suspended solids	10 mg/l

4. MONITORING

- 4.1 The quantity of water containing waste irrigated must be metered and recorded daily.
- 4.2 Monitoring for the quantity of the water containing waste for irrigation must be done at the point where the effluent is piped into the irrigation dam.
- 4.3 Flow metering, recording and integrating devices must be maintained in a sound state of repair and calibrated by a competent person at intervals of not more than two years. Calibration certificates must be available for inspection by the Chief Director: Limpopo or his representative upon request.


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- 4.4 The monitoring point/s must not be changed without prior notification to and written approval by the Chief Director: Limpopo.
- 4.5 A monitoring program to determine compliance with the ground water quality reserve on the property/properties must be designed in consultation with the affected parties.

5. REPORTING

- 5.1 The information required in terms of condition 3 must be submitted monthly to the Chief Director: Limpopo, under reference 16/2/7/A600/B22/1, within one month of the close of the period concerned.

6. METHODS OF ANALYSIS

- 6.1 Analysis must be carried out in accordance with methods prescribed by and obtainable from the South African Bureau of Standards (SABS), in terms of the Standards Act, Act 30 of 1982.
- 6.2 The methods of analysis must not be changed without prior notification to and written approval by the Chief Director: Limpopo.

7. GENERAL IRRIGATION PRACTICES

- 7.1 Irrigation must be practiced in accordance with the guidelines prescribed in the document titled "*Guide: Permissible Utilisation and Disposal of Treated Sewage Effluent*", issued by the former Department of Health under reference 11/2/5/3 and dated 30 May 1978, or in accordance with any relevant regulations promulgated under section 26 of the Act.
- 7.2. Irrigation with waste must be practiced in a systematic manner and precautions must be taken so as to prevent -
 - 7.2.1 Water logging and pooling of waste in any location
 - 7.2.2 Pollution of underground water or surface water due to seepage or otherwise
 - 7.2.3 Fly breeding, public health hazard, odour or secondary pollution
 - 7.2.4 Runoff from the irrigation area because of wet weather or any other conditions whatsoever and
 - 7.2.5 The site of the irrigation area must be adequately fenced to prevent the entry of animals and unauthorised persons.
- 7.3 Notices manufactured of durable weatherproof material prohibiting unauthorised entry and warning against the use of water containing waste for drinking and washing purposes must be displayed at prominent places along the fence and at entrance gates. Such notices must be worded in the official languages applicable in the area.



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8. PIPELINES

- 8.1 The pipelines used for the conveyance of waste must be painted in a conspicuous colour or manufactured of a coloured material distinctly different from the colour of the pipelines in which drinking water is flowing to avoid the possibility of any cross-connections of the different pipelines.
- 8.2 All stop-valves and taps on the pipelines conveying the effluent must be of a type that can be opened and closed by means of a loose wrench. This wrench must be in the safekeeping of a responsible member of the staff to prevent unauthorised use thereof.
- 8.3 Notices manufactured of a durable weatherproof material warning against the use of water containing waste for drinking and washing purposes must be displayed at prominent places where the waste is being reused and at all taps. Such notices must be worded in the official languages applicable in the area.

ANNEXURE V

- Section 21 (f) of the Act:** Discharging waste or water containing waste into a water resource
Section 21 (g) of the Act: Disposing of waste in a manner which may detrimentally impact on a water resource

1. CONSTRUCTION AND OPERATION

- 1.1 The licensee must carry out and complete all the activities, including the construction and operation of the Coal Stock pile, Solid waste disposal, dirty and clean water dams, clean and dirty storm water dams and ash dump, according to the Report.
- 1.2 All recovery dams, Coal stockpile, effluent control dams, solid waste disposal, dirty water dams, ash dump, storm water dirty dams and sewerage treatment plant, must be lined according to minimum requirements, second edition 1998 to prevent water resource impact, by September 2010. Proposed Liner design must be submitted to the Department before construction take place, for approval.
- 1.3 The licensee must obtain a permit from the Department of Environmental Affairs before waste disposal is constructed.
- 1.4 The Final plans for facilities in condition 1.2 must be submitted for approved by the Chief Director: Limpopo before constructions take place.
- 1.5 The construction of the facilities in condition 1.1 must be carried out under the supervision of a professional Civil Engineer, registered under the Engineering Profession of South Africa Act, 1990 (Act 114 of 1990), as approved by the designer.
- 1.6 Within 30 days after the completion of the activities referred here in accordance with the relevant provisions of this licence, the licensee must in writing, under reference 16/2/7A600/B22/1, inform the Chief Director: Limpopo thereof. This must be accompanied by a signature of approval from the designer referred to above that the construction was done according to the design plans referred to in the Report.
- 1.7 The licensee must ensure that the operation and maintenance of the system are done according to the provisions in the Report.
- 1.8 The licensee must as well submit a set of as-built drawings to the Chief Director: Limpopo after the completion of the facilities in condition.
- 1.9 The facilities must be operated and maintained to have a minimum freeboard of 0.8 meters above full supply level and all other water systems related thereto must be operated in such a manner that it is at all times capable of handling the 1:50 year flood-event on top of its mean operating level.
- 1.10 The licensee must use acknowledged methods for sampling and the date, time and sampler must be indicated for each sample.


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- 1.11 Flow metering devices must be maintained in a sound state of repair and calibrated by a competent person at intervals of not more than once in two years. Calibration certificates must be available for inspection by the Chief Director: Limpopo or his representative upon request.

2. STORAGE OF WATER CONTAINING WASTE

- 2.1 The licensee is authorised to discharge domestic waste water of a maximum quantity of six thousand two hundred cubic meters (62 000 m³) of domestic wastewater per month into the Mokolo River on the farm Naauwontkomen.
- 2.2 No treated sewage effluent must be released to the natural stream.
- 2.3 The licensee is authorised to dispose industrial waste water of a maximum quantity of thirty thousand cubic meters (30 000 m³) of runoff water captured around ash dump per month into the storm-water dam on the farm Naauwontkomen.
- 2.4 The licensee is authorised to dispose industrial ash deposit of a maximum quantity of five million tons per annual into the ash dump on the farm Eenzaamheid.
- 2.5 The licensee is authorised to dispose industrial waste water of a maximum quantity of one hundred and forty five thousand cubic meters (145 000 m³/a) of station drain consisting floor washing, air heater washings, demin water drains from the boiler per annum into the dirty storm-water dam on the farm Naauwontkomen.
- 2.6 The licensee is authorised to dispose industrial waste water of a maximum quantity of one hundred and ten thousand cubic meters (110 000m³/a) of runoff water captured around clean areas per month into the clean storm-water dam on the farm Naauwontkomen.

3. QUALITY OF WASTE WATER TO BE DISPOSED AND DISCHARGE

- 3.1 The quality of treated waste water discharge into the Mokolo River must not exceed the following limits as specified in Table 1 below:

Table 1: Quality Standard for discharge and disposed

Substance/parameter	Limit
pH	5.5 – 9.5
Electrical Conductivity	70 mS/m above intake to a maximum of 150 mS/m
Nitrate (as N)	15 mg/l
Ammonia (as N)	1,0 mg/l
Chemical oxygen demand(COD)	75 mg/l after removal of algae
Faecal coliform units (FCU)	0 per 100 ml
Orthophosphate (as P)	1 mg/l


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4. MONITORING

- 4.1 The licensee must monitor water resources at both upstream and downstream and where domestic wastewater is discharge of Mokolo to determine the impact of the facility and other activities on the water quality by taking samples.
- 4.2 The date, time and monitoring point in respect of each sample taken must be recorded together with the results of the analysis.
- 4.3 Monitoring points must not be changed prior to notification to and written approval by the Chief Director: Limpopo.
- 4.4 Monitoring for quality and flow must only be carried out at the monitoring points listed below:
- 4.4.1 At the inlet point of the sewage works; and at the waste discharge point.
 - 4.4.2 Monitoring points for quality:
 - 4.4.3 At the outlet point of the sewage works where the waste is discharged into the Mokolo River; and
 - 4.4.4 In the Mokolo River at points upstream and downstream of the discharge point at monitoring points identified in consultation and approved by the Chief Director: Limpopo.
- 4.5 A monitoring network must be set up as an early warning system to detect any polluted seepage that might occur from the infrastructure.
- 4.6 The quality of the waste must be monitored by taking grab samples every week at the monitoring points described in condition 4.4. Each sample must be analysed according to the following variables:

pH	
EC	in mS/m
Chemical oxygen demand	in mg/l
Ammonia (as N)	in mg/l
Orthophosphate (as P)	in mg/l
Nitrate (as N)	in mg/l
Chloride (as Cl)	in mg/l
Suspended solids	in mg/l
Faecal coliforms	in counts per 100ml

And/or any other variable as may be required from time to time by the Chief Director: Limpopo.

- 4.7 The date, time and monitoring point in respect of each sample taken must be recorded together with the results of the analysis.



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- 4.8 An Aquatic Scientist approved by the Chief Director: Limpopo must establish a monitoring programme for the following indices: Invertebrate Habitat Assessment System (IHAS) and the latest SASS (South African Scoring System). Sampling must be done once during the summer season and once during the winter season, annually, to reflect the status of the river upstream and downstream of the mining activities.
- 4.9 Toxicity testing must be performed on the Ash dumps on a quarterly basis in order to determine the risks to the receiving environment. The data gathered in the investigation must be reported annually during March of each year to the Chief Director: Limpopo. If any toxicity levels as specified is exceeded, the licensee must institute an investigation to determine the cause of toxicity.
- 4.10 The licensee must participate in any initiative such as Direct Estimation of Ecological Effect Potential (DEEEP) to determine the toxicity of complex tailings waste discharges. Both acute and chronic toxicity must be addressed and at least three taxonomic groups must be present when toxicity tests are performed.
- 4.11 Analysis must be carried out in accordance with methods prescribed by and obtainable from the South African Bureau of Standards (SABS), in terms of the Standards Act, 1982 (Act 30 of 1982).
- 4.12 The methods of analysis must not be changed without prior notification to and written approval by the Chief Director: Limpopo.
- 4.13 The licensee must set especially around the possible impacting areas groundwater monitoring network as proposed in the report. Groundwater monitoring network must be submitted to Chief Director: Limpopo for approval.
- 4.15 The licensee must monitor the quality of all boreholes in the ground water quality network initially for a period of one (1) hydrological year cycle i.e. from October to September then quarterly.

5. WATER RESOURCE PROTECTION

- 5.1 The impact of the activities of the industry on the Mokolo River must not exceed the in-stream water quality objectives detailed for the variable in Table 5.1.
- 5.2 The Licensee must comply with the Resource Quality Objectives as will be future stipulated.

Table 5.1: in-stream water quality objectives

Variable	Standard
pH	>6.5 & <9
Electrical conductivity (EC) in mS/m	Not more than 75 above that of intake water
Chemical Oxygen Demand (COD) in mg/l	70
Sodium (Na) in mg/l	Not more than 90 above that of intake water



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Variable	Standard
Ammonia (NH ₄ as N) in mg/l	1.5
Dissolved Oxygen (DO) in mg/l	>3
Fluoride (F) in mg/l	1
Iron (Fe – dissolved) in mg/l	1
Phosphate (PO ₄ as P) in mg/l	2
Suspended Solids (SS) in mg/l	25

- 5.3 All Eskom operational areas where there is a possibility of ground- and surface water impacts must be provided with bunding and containment infrastructure. All uncontrolled leakages from the plant must be investigated and mitigation measures must be proposed and implemented.
- 5.4 All temporary hazardous storage area must have bunded wall-built to capacity of the plant and be provided with sumps and pumps to return the spilled material back into the system, within acceptable safety and health practices.
- 5.5 The dirty dam level must be monitored at 3.5 m measured from the dam wall surface.
- 5.6 Storm water cut off drains must be built around the edge of the coal stockpile area to prevent seepage during rainy seasons.

6. REPORTING

- a. The licensee must update the water balance annually and calculate the loads of waste emanating from the activities. The licensee must determine the contribution of their activities to the mass balance for the water resource and must furthermore co-operate with other water users in the catchment to determine the mass balance for the water resource reserve compliance point.
- b. The licensee must submit the results of analysis for the monitoring requirements to the Chief Director: Limpopo on a monthly basis under Reference number 16/2/7/A600/B22/1.

7. STORM WATER MANAGEMENT

- 7.1 Storm-water leaving the licensee's premises must in no way be contaminated by any substance, whether such substance is a solid, liquid, vapour or gas or a combination thereof which is produced, used, stored, dumped or spilled on the premises.
- 7.2 Increase runoff due to vegetation clearance and/or soil compaction must be managed, and steps must be taken to ensure that storm water does not lead to bank instability and excessive levels of silt entering the stream.
- 7.3 Clean Storm-water must be diverted upstream and around the foot of the dump and released into the catchment.

- 7.4 Where necessary works must be constructed in such a way as to attenuate the velocity of the storm-water discharge and to protect the banks of the watercourses.
- 7.5 Storm-water control works must be constructed, operated and maintained in a sustainable manner throughout the impacted area.
- 7.6 Increased runoff due to vegetation clearance and/or soil compaction must be managed, and steps must be taken to ensure that storm-water does not lead to bank instability and excessive levels of silt entering the streams.
- 7.7 All storm-water that would naturally run across the pollution areas must be diverted via channels and trapezoidal drains designed to contain the 1:50 year flood.
- 7.8 The polluted storm water system must be designed and implemented to provide suitable routing and pumping capacity for contaminated storm water from the individual facilities to the respective storm water dams in accordance with the design specifications as contained in the Report.
- 7.9 The polluted storm water captured in the storm water control dams must be pumped to the process water treatment plant for reuse and recycling.

8. PLANT AREAS AND CONVEYANCES

- 8.1 Pollution caused by spills from the conveyances must be prevented through proper maintenance and effective protective measures especially near all stream crossings.
- 8.2 All reagent storage tanks and reaction units must be supplied with a bunded area built to the capacity of the facility and provided with sumps and pumps to return the spilled material back into the system. The system must be maintained in a state of good repair and standby pumps must be provided.
- 8.3 Any hazardous substances must be handled according to the relevant legislation relating to the transport, storage and use of the substance.
- 8.4 Any access roads or temporary crossings must be:
 - 8.4.1 non-erosive, structurally stable and must not induce any flooding or safety hazard and
 - 8.4.2 repaired immediately to prevent further damage.

9. ACCESS CONTROL

- 9.1 Strict access procedures must be followed in order to gain access to the property.
- 9.2 Notices prohibiting unauthorised persons from entering the controlled access areas as well as internationally acceptable signs indicating the risks involved in case of an unauthorised entry must be displayed along the boundary fence of these areas.


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10. CONTINGENCIES

- 10.1 Accurate and up-to-date records must be kept of all system malfunctions resulting in non-compliance with the requirements of this licence. The records must be available for inspection by the Chief Director: Limpopo upon request. Such malfunctions must be tabulated under the following headings with a full explanation of all the contributory circumstances:
- 10.1.1 operating errors
 - 10.1.2 mechanical failures (including design, installation or maintenance)
 - 10.1.3 environmental factors (e.g. flood)
 - 10.1.4 loss of supply services (e.g. power failure) and
 - 10.1.5 Other causes.
- 10.2 The licensee must, within 24 hours, notify the Chief Director: Limpopo of the occurrence or potential occurrence of any incident which has the potential to cause, or has caused water pollution, pollution of the environment, health risks or which is a contravention of the licence conditions.
- 10.3 The licensee must, within 14 days, or a shorter period of time, as specified by the Chief Director: Limpopo, from the occurrence or detection of any incident referred above, submit an action plan which must include a detailed time schedule, to the satisfaction of the Chief Director: Limpopo of measures taken to:
- 10.3.1 correct the impacts resulting from the incident
 - 10.3.2 prevent the incident from causing any further impacts and
 - 10.3.3 Prevent a recurrence of a similar incident.

11. AUDITING

- 11.1 The licensee must conduct an annual internal audit on compliance with the conditions of this licence. A report on the audit must be submitted to the Chief Director: Limpopo within one month of finalisation of the report, and must be made available to an external auditor should the need arise.
- 11.2 The licensee must appoint an independent external auditor to conduct an annual audit on compliance with the conditions of this licence. The first audit must be conducted within 3 (three) months from the date this licence was issued and a report on the audit must be submitted to the Chief Director: Limpopo within one month of finalisation of the report.

12. INTEGRATED WATER AND WASTE MANAGEMENT

- 12.1 The licensee must prepare an *Integrated Water and Waste Management Plan (IWWMP)*, which must together with the *Rehabilitation Strategy and Implementation Programme (RSIP)*, be submitted to the Chief Director: Limpopo for approval within one (1) year from the date of issuance of this licence. Thereafter the IWWMP and RSIP must be updated and submitted to the Chief Director: Limpopo for approval, annually.


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- 12.2 The licensee must, at least 180 days prior to the intended closure of any facility, or any portion thereof, notify the Chief Director: Limpopo of such intention and submit any final amendments to the IWWMP and RSIP as well as a final *Closure Plan*, for approval.
- 12.3 The licensee must make full financial provision for all investigations, designs, construction, operation and maintenance for a water treatment plant should it become a requirement as a long-term water management strategy.
- 12.4 Ash pit plan including leach studies must be submitted to this Department for approval on the 1 of December 2009.
- 12.5 Groundwater mitigation measures to prevent pollution from the ash dump at Medupi must be submitted to the Chief Director: Limpopo by September 2010.

END OF THE LICENCE