



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

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

DEA Reference: 14/12/16/3/3/2/759

Enquiries: Ms Mmamohale Kabasa

Telephone: (012) 399 9420 E-mail: MKabasa@environment.gov.za

Ms Deidre Herbst
Eskom Holdings SOC Ltd
PO Box 1091
JOHANNESBURG
2000

Telephone number: (011) 800 3501
Email Address: HerbstDL@eskom.co.za

PER EMAIL / MAIL

Dear Ms Herbst

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998: GN R. 543/544/545/546 FOR THE PROPOSED 23.5MW ESKOM DUVHA POWER STATION PHOTOVOLTAIC SOLAR ENERGY FACILITY ON THE REMAINDER OF PORTION 0 OF THE FARM DUVHA KRAGSTASIE 337 JS SOUTH OF EMALAHLENI WITHIN THE EMALAHLENI LOCAL MUNICIPALITY IN THE MPUMALANGA PROVINCE

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

Please note that the following activities are not authorised as they are not triggered by the preferred alternative:

- Listing Notice 1, GN R. 544 of Regulations 2010: Activity 11: *"The construction of: (xi) infrastructure or structures covering 50 square metres or more where such construction occurs within a water course or within 32 metres of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line."*
- Listing Notice 1, GN R. 983 of Regulations 2014 : Activity 12: *"The development of: (xii) infrastructure or structures with a physical footprint of 100 square metres or more and c) where such development occurs if no development setback exists, within the 32 metre of a water course, measured from the edge of a watercourse"*
- Listing Notice 1, GN R. 544 of Regulations 2010: Activity 22: *"The construction of a road, outside urban areas, (ii) Where no reserve exists where the road is wider than 8 metres."* will not be authorised as the EAP indicated in the email dated 18 May 2016, that the proposed development will not trigger any construction of road activities.
- Listing Notice 1, GN R. 983 of Regulations 2014: Activity 56: *"The widening of a road by more than 6 metres, or the lengthening of a road by more than 1 kilometre- (ii) where no reserve exists, where the existing road is wider than 8 metres; excluding where widening or lengthening occur inside urban areas."* will not be authorised as the EAP indicated in the email dated 18 May 2016, that the proposed development will not trigger any construction of road activities.

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

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

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

By post: Private Bag X447,
Pretoria, 0001; or

By hand: Environment House
473 Steve Biko,
Arcadia,
Pretoria

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

Appeals must be submitted in writing to:

Mr. Z Hassam, Director: Appeals and Legal Review, of this Department at the above mentioned addresses. Mr Hassam can also be contacted at:

Tel: (012) 399 9356
Email: AppealsDirectorate@environment.gov.za

The authorised activities must not commence within twenty (20) days of the date of signature of the environmental authorisation. Further, please note that in terms of section 43(7) of the National Environmental Management Act, 1998, an appeal under section 43 of that Act will suspend the environmental authorisation or any provision or condition attached thereto. In the instance where an appeal is lodged, you may not commence with the activity until such time that the appeal is finalised.

Yours faithfully


Mr Sabelo Malaza
Chief Director: Integrated Environmental Authorisations
Department of Environmental Affairs
Date: 27/05/2016

cc:	T Calmeyer	ILISO Consulting (Pty) Ltd	Email: terry@iliso.com
	V Dlamini	Mpumalanga DEDET	Email: jmarakala@mpg.gov.za
	T van Vuuren	Emalahleni Local Municipality	Email: mbethefak@emalahleni.gov.za

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

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

NOTES:

1. **An appeal must be:-**
 - a) submitted in writing;
 - b) accompanied by:
 - a statement setting out the grounds of appeal;
 - supporting documentation which is referred to in the appeal; and
 - a statement that the appellant has complied with regulation 62 (2) or (3) together with copies of the notices referred to in regulation 62.



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Environmental Authorisation

In terms of Regulation 36 of the Environmental Impact Assessment Regulations, 2010

The 23.5MW Eskom Duvha Power Station Photovoltaic Solar Energy Facility on the Remainder of Portion 0 of the Farm Duvha Kragstasie 337 JS, south of the town of Emalahleni within the Emalahleni Local Municipality in the Mpumalanga Province

Nkangala District Municipality

Authorisation register number:	<i>14/12/16/3/3/2/759</i>
Last amended:	<i>First issue</i>
Holder of authorisation:	<i>Eskom Holdings SOC Ltd</i>
Location of activity:	<i>The Remainder of Portion 0 of the Farm Duvha Kragstasie 337 JS Emalahleni Local Municipality Nkangala District Municipality Mpumalanga Province</i>

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

Decision

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

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

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, 2010 the Department hereby authorises –

ESKOM HOLDINGS SOC LTD

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

with the following contact details –

Ms D Herbst
PO Box 1091
JOHANNESBURG
2000

Telephone Number: (011) 800 3501
Fax Number: (086) 660 6092
Cell phone Number: (083) 660 1147
E-mail Address: HerbstDL@eskom.co.za

to undertake the following activities (hereafter referred to as "the activity") indicated in Listing Notices 1 and Listing Notice 2 (GN R. 544 and 545):

Activity number	Activity description
<p><u>GN R. 544: Activity 29:</u> <i>"The expansion of facilities for the generation of electricity where: (ii) regardless the increased output of the facility, the development footprint will be expanded by 1 hectare or more"</i></p>	<p>Alternative Site 1 has a footprint of 35.2 ha allowing for a projected power peak (electricity) of 23.5 MWp. This property is owned by Eskom Duvha Power Station. The electricity generated will result in an increase in Duvha Power Station's generation capacity.</p>
<p><u>GN R.545 Activity 1:</u> <i>"The construction of facilities or infrastructure for the generation of electricity where the electricity output is 20 megawatts or more."</i></p>	<p>Alternative Site 1 has a projected power peak (electricity) of 23.5 MWp. This property is owned by Eskom Duvha Power Station and falls outside the urban area.</p>
<p><u>GN R. 545:Activity 15:</u> <i>"Physical alteration of undeveloped, vacant or derelict land for residential, retail, commercial, recreational, industrial or institutional use where the total area to be transformed is 20 ha or more....."</i></p>	<p>The proposed site for the construction of the solar photovoltaic facility, within the Duvha Power Station is 35.2 ha. This property is owned by Eskom Duvha Power Station.</p>

The following listed activities as described in GN R 983 and GN R 984:

Activity number	Activity description
<p><u>GN R. 983: Activity 36:</u> <i>"The expansion of facilities or structures for the generation of electricity from a renewable resource where- (ii) regardless the increased output of the facility, the development footprint will be expanded by 1 hectare or more; excluding where such expansion of facilities or structures is for photovoltaic installations and occurs</i></p>	<p>Alternative Site 1 has a footprint of 35.2 ha allowing for a projected power peak (electricity) of 23.5 MWp. This property is owned by Eskom Duvha Power Station. The electricity generated will result in an increase in Duvha Power Station's generation capacity.</p>

<i>within an urban area."</i>	
<p><u>GN R. 984: Activity 1:</u> <i>"The development of facilities' or infrastructure for the generation of electricity from a renewable resource where the electricity output is 20 megawatts or more. Excluding where such development of facilities or infrastructure is for photovoltaic installations and occurs within the urban area."</i></p>	<p>Alternative Site 1 has a projected power peak (electricity) of 23.5 MWp. This property is owned by Eskom Duvha Power Station and falls outside the urban area.</p>
<p><u>GN R. 984: Activity 15:</u> <i>"The clearance of an area of 20 hectares or more of indigenous vegetation."</i></p>	<p>The proposed site for the construction of the solar photovoltaic facility, within the Duvha Power Station is 35.2 ha. This property is owned by Eskom Duvha Power Station.</p>

as described in the Environmental Impact Assessment Report (EIAR) dated January 2016 at:

Alternative 1 (preferred site)	Latitude	Longitude
D1A	25° 56.9982' S	29° 20.1430' E
D1B	25° 57.1065' S	29° 20.4067' E
D1C	25° 57.1048' S	29° 20.4934' E
D1D	25° 57.2847' S	29° 20.4215' E
D1E	25° 57.1598' S	29° 20.2352' E
D1F	25° 57.284' S	29° 20.0895' E
D1G	25° 57.3647' S	29° 20.0434' E
D1H	25° 57.4363' S	29° 19.9623' E
D1I	25° 57.4447' S	29° 19.8886' E
D1J	25° 57.2931' S	29° 19.8812' E

- for the proposed 23.5MW Eskom Duvha Power Station Photovoltaic Solar Energy Facility on the property of Eskom's Duvha Power Station which requires a footprint of 35.2 ha to generate the projected power peak of 23.5 MWp and its associated infrastructure, located approximately 15km east of Witbank on the Remainder of Portion 0 of the Farm Kragstasie 33JS in Mpumalanga and forms part of the Emalahleni Local Municipality in Mpumalanga, hereafter referred to as "the property".

The 23.5 MW Eskom Duvha Power Station Solar Photovoltaic Solar Energy Facility will comprise the following:

- Solar PV Panels;
- Photovoltaic modules (Polycrystalline (c-Si) technology and Thin Film (TF) technology);
- Mounting systems (fixed tilted mounting structure) for the PV arrays and related foundations. The mounting structure consists of steel posts which are used as structural support for the PV array. Tilt brackets are used to support the mounting structures and are placed at a 250 angle;
- Wiring to Inverters/Transformers;
- The stormwater infrastructure which will include but not limited to, V-Drains with energy dissipaters, detention areas and apron outlets;
- Internal roads;
- Electrical system;
- Lighting system;
- Ground system;
- A triple wire fencing;
- Buildings including a substation, an operation maintenance (O&M) building and a meteorological station; and
- Inverter Cabins. Approximately twenty four inverter cabins will be required with a footprint of 768 m².

Technical details for the facility:

Component	Description/ Dimensions
Location of the site	Eskom Duvha Power Station, located approximately 15km east of Witbank on the Remainder of Portion 0 of the Farm Kragstasie 33JS in Mpumalanga and forms part of the Emalahleni Local Municipality in Mpumalanga
PV Panel area	35.2 Ha
SG Codes	T0JS0000000033700000
Preferred Site access	Existing access roads will be upgraded and new internal roads will be constructed to gain access to the solar field and associated infrastructure.
Export capacity	23.5 MWp
Proposed technology	Photovoltaic panels
Height of installed panels from ground level	1.6 meters
Width and length of internal roads	3-5 m in width and cover a footprint of 57 500 m ²

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Conditions of this Environmental Authorisation

Scope of authorisation

1. The 23.5 MW Eskom Duvha Photovoltaic Solar Energy Facility and its associated infrastructure as described above is hereby approved.
2. Authorisation of the activity is subject to the conditions contained in this environmental authorisation, which form part of the environmental authorisation and are binding on the holder of the authorisation.
3. The holder of the environmental authorisation is responsible for ensuring compliance with the conditions contained in this environmental authorisation. This includes any person acting on the holder's behalf, including but not limited to, an agent, servant, contractor, sub-contractor, employee, consultant or person rendering a service to the holder of the environmental authorisation.
4. The activities authorised may only be carried out at the property as described above.
5. Any changes to, or deviations from, the project description set out in this environmental authorisation must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of the environmental authorisation to apply for further environmental authorisation in terms of the regulations.
6. This activity must commence within a period of five (05) years from the date of issue of this environmental authorisation. If commencement of the activity does not occur within that period, the environmental authorisation lapses and a new application for environmental authorisation must be made in order for the activity to be undertaken.
7. Commencement with one activity listed in terms of this environmental authorisation constitutes commencement of all authorised activities.
8. The holder of an environmental authorisation must apply for an amendment of environmental authorisation with the competent authority for any alienation, transfer or change of ownership rights in the property on which the activity is to take place.

Notification of authorisation and right to appeal

9. The holder of the authorisation must notify every registered interested and affected party, in writing and within 12 (twelve) calendar days of the date of this environmental authorisation, of the decision to authorise the activity.
10. The notification referred to must –
 - 10.1. specify the date on which the environmental authorisation was issued;
 - 10.2. inform the interested and affected party of the appeal procedure provided for in Chapter 7 of the Environmental Impact Assessment Regulations, 2010;
 - 10.3. advise the interested and affected party that a copy of the environmental authorisation will be furnished on request; and
 - 10.4. give the reasons of the competent authority for the decision.
11. The holder of the authorisation must publish a notice –
 - 11.1. informing interested and affected parties of the decision;
 - 11.2. informing interested and affected parties where the decision can be accessed; and
 - 11.3. drawing the attention of interested and affected parties to the fact that an appeal may be lodged against this decision in the newspaper(s) contemplated and used in terms of regulation 54(2)(c) and (d) and which newspaper was used for the placing of advertisements as part of the public participation process.

Management of the activity

12. The preferred layout plan titled "Indicative Duvha PV Plant footprint", (Reference drawing number L1-01 drawn by C. Rapican, undated) is hereby approved.
13. The Environmental Management Programme (EMPr) submitted as part of the application for EA is hereby approved. This EMPr must be implemented and adhered to.
14. The EMPr must be implemented and strictly enforced during all phases of the project. It must be seen as a dynamic document and must be included in all contract documentation for all phases of the development when approved.
15. Should the holder of this environmental authorisation propose any changes to the EMPr, the holder of this environmental authorisation must undertake the required actions as prescribed by legislation at the time and comply with all relevant legal requirements administered by any relevant and competent authority at that time.

16. The Department reserves the right to amend the approved EMPr should any impacts that were not anticipated or covered in the EIAr be discovered.
17. A shapefile of the development layout/footprint must be submitted to this Department within two months from the date of this decision. The shapefile must be created using the Hartebeesthoek 94 Datum and the data should be in Decimal Degree Format using the WGS 84 Spheroid. The shapefile must include at a minimum the following extensions i.e. .shp; .shx; .dbf; .prj; and, .xml (Metadata file). If specific symbology was assigned to the file, then the .avl and/or the .lyr file must also be included. Data must be mapped at a scale of 1:10 000 or specify if an alternative scale was used. The metadata must include a description of the base data used for digitizing. The shapefile must be submitted in a zip file using the EIA application reference number as the title. The shape file must be submitted to:

Postal Address:

Department of Environmental Affairs
Private Bag X447
Pretoria
0001

Physical address:

Department of Environmental Affairs
Environment House
473 Steve Biko
Arcadia
Pretoria

For Attention: Mr Muhammad Essop
Integrated Environmental Authorisations
Strategic Infrastructure Developments
Telephone Number: (012) 399 9406
Email Address: MEssop@environment.gov.za

Environmental Control Officer (ECO) and duties

18. The holder of this authorisation must appoint an independent and qualified Environmental Control Officer (ECO) with experience or expertise in undertaking ECO functions. The ECO will have the
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responsibility to ensure that the conditions referred to in this environmental authorisation are implemented and to ensure compliance with the provisions of the approved EMPr.

19. The ECO must be appointed before commencement of any authorised activity.
20. Once appointed, the name and contact details of the ECO must be submitted to the Director: Compliance Monitoring of this Department.
21. The ECO must meet with the contractors to discuss the conditions of the EA and the contents of the EMPr prior to any site clearing occurring.
22. The ECO must remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed and the site is ready for operation.
23. Records relating to monitoring and auditing must be kept on site and made available for inspection to the competent authority in respect of this development.
24. The duties of the ECO must include the following:
 - 24.1. Keeping record of all activities on site, problems identified, transgressions noted and a schedule of tasks undertaken by the ECO.
 - 24.2. Keeping and maintaining a detailed incident (including spillage of bitumen, fuels, chemicals, or any other material) and complaint register on site indicating how these issues were addressed, what rehabilitation measures were taken and what preventative measures were implemented to avoid re-occurrence of incidents/complaints.
 - 24.3. Keeping and maintaining a daily site diary.
 - 24.4. Keeping copies of all reports submitted to the Department.
 - 24.5. Keeping and maintaining a schedule of current site activities including the monitoring of such activities.
 - 24.6. Obtaining and keeping record of all documentation, permits, licences and authorisations such as waste disposal certificates, hazardous waste landfill site licences etc. required by this facility.
 - 24.7. Compiling a monthly monitoring report.

Recording and reporting to the Department

25. The holder of this environmental authorisation must keep all records relating to monitoring and auditing on site and make them available for inspection to any relevant and competent authority in respect of this development.
26. All documentation e.g. audit/monitoring/compliance reports and notifications, required to be submitted to the Department in terms of this environmental authorisation, must be submitted to the Director: Compliance Monitoring at this Department.

Environmental audit report

27. The holder of this environmental authorisation must submit an environmental audit report to the Department within 30 days of completion of the construction phase (i.e. within 30 days of site handover) and within 30 days of completion of rehabilitation activities.
28. The environmental audit report must:
 - 28.1. Be compiled by an independent environmental auditor;
 - 28.2. Indicate the date of the audit, the name of the auditor and the outcome of the audit;
 - 28.3. Evaluate compliance with the requirements of the approved EMPr and this environmental authorisation;
 - 28.4. Include measures to be implemented to attend to any non-compliances or degradation noted;
 - 28.5. Include copies of any approvals granted by other authorities relevant to the development for the reporting period;
 - 28.6. Highlight any outstanding environmental issues that must be addressed, along with recommendations for ensuring these issues are addressed;
 - 28.7. Include a copy of this environmental authorisation and the approved EMPr;
 - 28.8. Include all documentation such as waste disposal certificates, hazardous waste landfill site licences etc. pertaining to this environmental authorisation; and
 - 28.9. Include evidence of adherence to the conditions of this environmental authorisation and the approved EMPr where relevant such as training records and attendance records.

Commencement of the activity

29. The authorised activity shall not commence within twenty (20) days of the date of signature of the environmental authorisation.

Notification to authorities

30. A written notification of commencement must be given to the Department no later than fourteen (14) days prior to the commencement of the activity. Commencement for the purposes of this condition includes site preparation. The notice must include a date on which it is anticipated that the activity will commence. This notification period may coincide with the Notice of Intent to Appeal period.

Operation of the activity

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

Site closure and decommissioning

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

Specific conditions

33. Should any heritage resources of archaeological or paleontological significance be discovered during construction activities, construction must cease and a Phase 2 rescue operation must be undertaken by a qualified specialist. The findings must be submitted to SAHRA and should they have implications to the layout or mitigation measures, these must be submitted to this Department with SAHRA's recommendations for review and consideration.
34. The footprint of the development must be limited to the areas required for actual construction works and operational activities. Vegetation clearing must be limited to the required footprint.
35. Areas outside of the development footprint, including sensitive areas and buffer areas, must be clearly demarcated (using fencing and signage) before construction commences and must be regarded as "no-go" areas. Contractors and construction workers must be clearly informed of the no-go areas.
36. The holder of this authorisation must train safety representatives, managers and workers on workplace safety. The construction process must be compliant with all safety and health measures as prescribed by the relevant act.
37. All areas of disturbed soil must be reclaimed using only indigenous grass and shrubs.
38. Topsoil from all excavations and construction activities must be salvaged and reapplied during reclamation.
39. Watercourses and associated buffer outside the approved footprint/layout must be treated as "no-go" areas and demarcated as such. No vehicles, machinery, personnel, construction material, fuel, oil, bitumen or waste must be allowed into these areas without the express permission of and supervision by the ECO, except for rehabilitation work in these areas.
40. Anti-erosion measures such as silt fences must be installed in disturbed areas.

41. Cleared alien vegetation must be temporarily stored in a demarcated area. Once clearing is completed, they must be moved to a licenced waste disposal facility.
42. Signs must be placed along construction roads to identify speed limits, travel restrictions, and other standard traffic control information.
43. Roads must be designed so that changes to surface water runoff are avoided and erosion is not initiated.
44. Should abnormal loads have to be transported by road to the site, a permit must be obtained from the relevant Provincial and National Transport Authority.
45. Leakage of fuel must be avoided at all times and if spillage occurs, it must be remedied immediately. Spill kits must be made available on-site for the clean-up of spills.
46. No dumping or temporary storage of any materials may take place outside designated and demarcated laydown areas, and these must all be located within areas of low environmental sensitivity.
47. Hazardous substances must be stored in a bunded and designated area to avoid accidental leakage into the environment.
48. An integrated waste management approach must be implemented that is based on waste minimisation. Where waste is disposed of, such disposal shall only occur at a landfill licensed in terms of the National Environment Management Waste Act, 2008 (Act 59 of 2008).
49. The holder of this authorisation 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 Environmental Impact Assessment Regulations.
50. Foundations and trenches must be backfilled with originally excavated materials as much as possible. Excess excavation materials must be disposed of only in approved areas or, if suitable, stockpiled for use in reclamation activities.
51. Borrow materials must be obtained only from authorised and permitted sites. Permits must be kept on site by the ECO.
52. Dust suppression techniques must be implemented on all exposed surfaces during the construction phase. Such measures may include wet suppression, chemical stabilisation, the use of a wind fence, covering surfaces with straw chippings and re-vegetation of open areas.
53. The holder of this authorisation must reduce visual impacts during construction by minimising areas of surface disturbance, controlling erosion, using dust suppression techniques and restoring exposed soil as closely as possible to their original contour and vegetation.
54. Any vegetation clearing that needs to take place as part of maintenance activities (during the operational phase of the approved development), must be done in accordance to the approved EMPr.

55. Monitoring for erosion must take place to ensure that no erosion problems are occurring at the site as a result of the roads and other infrastructure. All erosion problems observed must be rectified as soon as possible as outlined in the erosion management plan within the EMPr.
56. Kerbs and stormwater channels must be designed in such a way that they can allow small animals and reptiles to move freely.
57. The holder of the authorisation must comply with the Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983) Articles 7.1 and (3) b of Regulation 9238.
58. Top soil and subsoil must be stockpiled separately and replaced according to the correct profile i.e. topsoil replaced last. Stockpiles must not be situated such that they obstruct natural water pathways and drainage channels.
59. Top soil stockpiles must not exceed 2m in height, stockpiles older than 6 months must be enriched before they can be used to ensure the effectiveness of the topsoil.
60. Any fauna directly threatened by the construction activities must be removed to a safe location by a qualified person.
61. All new powerlines must be marked with bird flight diverters along their entire length. To create a net benefit, where possible, the new lines must run parallel to existing marked lines so as to reduce the collision risk posed by the older lines. The poles must be fitted with bird perches on top of the poles to draw birds, particularly vultures away from the potentially risky insulators. All pylons to be constructed must make use of "bird friendly" structures, fitted with a bird perch, as per Eskom standard guidelines.
62. The recommendations of the EAP in the EIAR dated January 2016 and the specialist studies attached must be adhered to. In the event of any conflicting mitigation measures and conditions of the Environmental Authorisation, the specific condition of this Environmental Authorisation will take preference.

General

63. In terms of Section 43(7), an appeal under Section 43 of the National Environmental Management Act, 1998 will suspend the environmental authorisation or any provision or condition attached thereto. In the instance where an appeal is lodged you may not commence with the activity until such time that the appeal has been finalised.
 64. A copy of this authorisation and the approved EMPr must be kept at the property where the activity will be undertaken. The environmental authorisation and approved EMPr 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 undertakes work at the property.
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65. National government, provincial government, local authorities or committees appointed in terms of the conditions of this authorisation or any other public authority shall not be held responsible for any damages or losses suffered by the holder of the authorisation or his/her successor in title in any instance where construction or operation subsequent to construction be temporarily or permanently stopped for reasons of non-compliance by the holder of the authorisation with the conditions of environmental authorisation as set out in this document or any other subsequent document emanating from these conditions of environmental authorisation.

Date of environmental authorisation: 29/05/2016


Mr Sabelo Malaza

Chief Director: Integrated Environmental Authorisations
Department of Environmental Affairs

Annexure 1: Reasons for Decision

1. Information considered in making the decision

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

- a) The listed activities as applied for in the amended application form received on 05 January 2015;
- b) The information contained in the EIAr dated January 2016;
- c) The comments received from organs of state and interested and affected parties as included in the EIAr dated January 2016;
- d) Mitigation measures as proposed in the EIAr dated January 2016 and the draft EMPr;
- e) The information contained in the specialist studies contained in the EIAr dated January 2016 and as appears below:

Title	Prepared by	Date
Cultural Heritage Assessment for the proposed construction of a photovoltaic power plant at Duvha Power Station, Mpumalanga Province	J van Schalkwyk	December 2014
Floral Assessment	E. van der Westhuizen of Scientific Aquatic Services CC	May 2015
Faunal Assessment	C. Hooton and H. de Beer of Scientific Aquatic Services CC	May 2015
Wetland Assessment	E. van der Westhuizen of Scientific Aquatic Services CC	May 2015
Soils and Agricultural Potential	ARC-Institute for Soil Climate and Water (DG Paterson)	April 2015
Social Impact Assessment for the Installation of Solar Photovoltaic Power Plant at Duvha Coal fired Power Station	Kayamandi Development Services	January 2015
Draft EMPr	ILISO Consulting (SJ Narain and T Calmeyer)	July 2015

- f) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act 107 of 1998).

2. Key factors considered in making the decision

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

- a) Details provided of the qualifications of the Environmental Assessment Practitioner (EAP).
- b) The findings of all the specialist studies conducted and their recommended mitigation measures.
- c) The need for the proposed project stems from the provision of electricity to the power station and national grid.
- d) The EIAr dated January 2016 identified all legislation and guidelines that have been considered in the preparation of the EIAr.
- e) The description of the environment that may be affected by the activity and the manner in which the physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed activity.
- f) The methodology used in assessing the potential impacts identified in the EIAr dated January 2016 and the specialist studies have been adequately indicated.
- g) A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA Regulations, 2010 for public involvement.

3. Findings

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

- a) The identification and assessment of impacts are detailed in the EIAr and sufficient assessment of the key identified issues and impacts have been completed.
- b) The procedure followed for impact assessment is adequate for the decision-making process.
- c) The proposed mitigation of impacts identified and assessed adequately curtails the identified impacts.
- d) The manner in which concerns raised were dealt with is sufficient for the decision-making process.
- e) The information contained in the EIAr is deemed to be accurate and credible.

- f) EMPr measures for the pre-construction, construction and rehabilitation phases of the development were proposed and included in the EIAr and will be implemented to manage the identified environmental impacts during the construction process.

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