



## environmental affairs

Department:  
Environmental Affairs  
**REPUBLIC OF SOUTH AFRICA**

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Mr. Julian Eslait  
Anglo Operations Limited  
P.O. Box 61587  
**MARHALLTOWN**  
2000

Fax no: (013) 691 5153

**PER FACSIMILE / MAIL**

Dear Mr Eslait

**APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 2010: GN R.544, GN R.545 AND GN R.546: CONSTRUCTION OF 450MW KHANYISA COAL FIRED POWER STATION IN EMALAHLENI, MPUMALANGA PROVINCE**

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

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

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

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

By facsimile: 0123207561;  
By post: Private Bag X447;  
Pretoria, 0001; or  
By hand: 2nd Floor, Fedsure Building, North Tower,  
Cnr. Lilian Ngoyi (Van der Walt) and Pretorius Streets,  
Pretoria.

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

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

**Appeals must be submitted in writing to:**

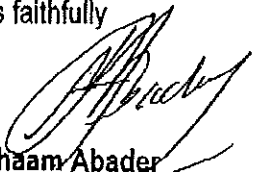
Mr Z Hassam Director: Appeals and Legal Review, of this Department at the above mentioned addresses or fax number. Mr Hassam can also be contacted at:

Tel: 012-310-3271

Email: [AppealsDirectorate@environment.gov.za](mailto:AppealsDirectorate@environment.gov.za)

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

Yours faithfully



**Mr Ishaam Abader**  
**Deputy Director-General: Legal, Authorisations, Compliance and Enforcement**  
**Department of Environmental Affairs**

Date: 31/10/2013

CC:	Leandri Joubert	Aurecon	Fax: 013 753 2116
	Mr T Motoane	Emalahleni Local Municipality	Fax: 013 753 2116
	Mr Noe	DWA	Fax: 012 323 0321

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

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

**NOTES:**

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



**environmental affairs**

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

Integrated Environmental Authorisation Issued in terms of

The National Environmental Management Act, 1998 and the Environmental Impact  
Assessment Regulations 2010

and

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

Construction of 450MW Khanyisa Coal-fired Power Station and associated infrastructure in  
Emalahleni, Mpumalanga Province

Emalahleni Local Municipality

<b>Authorisation register number:</b>	12/12/20/2067
<b>Last amended:</b>	First Issue
<b>Holder of integrated authorisation:</b>	Anglo Operations Limited
<b>Location of activities:</b>	MPUMALANGA PROVINCE: the Remaining Extent of the farm Groenfontein 331-JS Portions 7, 11 and the Remaining Extent of the Farm Klippan 332-JS,, within Emalahleni Local Municipality

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

## DECISION

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

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

### NEMA EIA AND NEMWA ACTIVITIES AUTHORISED

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

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

Notice number	Activity number	Activity description (as per the relevant notice)
GN R. 544	2	The construction of facilities or infrastructure for the storage of ore or coal that requires an atmospheric emissions license in terms of the National Environmental Management: Air Quality Act ( Act

		No.39 of 2004)
GN R. 544	9	<p>The construction of facilities or infrastructure exceeding 1000 metres in length for the bulk transportation of water, sewage or storm water-</p> <ul style="list-style-type: none"> <li>i. With an internal diameter of 0,36 metres or more; or</li> <li>ii. With a peak throughput of 120 litres per second or more,</li> </ul> <p>Excluding where:</p> <ul style="list-style-type: none"> <li>a. Such facilities or infrastructure are for bulk transportation of water, sewage or storm water or storm water drainage inside a road reserve; or</li> <li>b. Where such construction will occur within urban areas but further than 32 metres from a watercourse, measured from the edge of the watercourse</li> </ul>
GN R. 544	10	<p>The construction of facilities or infrastructure for the transmission and distribution of electricity --</p> <ul style="list-style-type: none"> <li>i. outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts; or</li> <li>ii. Inside urban areas or industrial complexes with a capacity of 275 kilovolts or more.</li> </ul>
GN R. 544	13	<p>The construction of facilities of infrastructure for the storage, or for the storage and handling, of dangerous goo, where such storage occurs in containers with a combined capacity of 80 but not exceeding 500 cubic metres.</p>
GN R. 544	22	<p>The construction of a road, outside urban areas,</p> <ul style="list-style-type: none"> <li>i. With a reserve wider than 13,5 meters or,</li> <li>ii. Where no reserve exists where the road is wider than 8 metres, or</li> <li>iii. For which an environmental authorisation was obtained for the route determination in terms of activity 5 in Government Notice 387 of 2006 or activity 18 in Notice 545 of 2010.</li> </ul>
GN R. 544	23	<p>The transformation of undeveloped, vacant or derelict land to –</p> <ul style="list-style-type: none"> <li>i. Residential, retail, commercial, recreational, industrial or institutional use, inside an urban area, and where the total area to be transformed is 5 hectares or more, but less than 20 hectares , or</li> </ul>

		<p>ii. Residential, retail, commercial, recreational, industrial or institutional use, outside an urban area and where the total area to be transformed is bigger than 1 hectare but less than 20 hectares;-</p> <p>Except where such transformation takes place for linear activities.</p>
GN R. 545	1	The construction of facilities or infrastructure for the generation of electricity where the electricity output is 20 megawatts or more.
GN R. 545	5	The construction of facilities or infrastructure for any process or activity which requires a permit or license in terms of national or provincial legislation governing the generation or release of emissions, pollution or effluent and which is not identified in Notice No. 544 of 2010 or included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case that Act will apply.
GN R. 545	6	The construction of facilities or infrastructure for the bulk transportation of dangerous goods- In solid form, outside an industrial complex, using funiculars or conveyors with a throughput capacity for more than 50 tons day.
GN R. 545	8	The construction of facilities or infrastructure for the transmission and distribution of electricity with a capacity of 275 Kilovolts or more, outside an urban area or industrial complex.
GN R. 545	15	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 hectares or more; Except where such physical alteration takes place for: <ul style="list-style-type: none"> <li>i. Linear development activities; or</li> <li>ii. Agricultural or afforestation where activity 16 in this Schedule will apply.</li> </ul>
GN R. 545	18	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 03 July 2006 and which have not been authorised by a competent authority in terms of the Environmental Impact Assessment Regulations, 2006 or 2009, made under section 24(5) of the Act and published in Government Notice No. R.385 of 2006.

		<p>i. It is a national road as defined in section 40 of the South African National Roads Agency Limited and National Roads Act, 1998 ( Act No. 7 of 1998)</p> <p>ii. It is a road administered by a provincial authority</p> <p>iii. The road reserve is wider than 30 metres; or</p> <p>iv. The road will cater for more than one lane of traffic in both directions.</p>
GN R. 718	Category A 1	The storage, including the temporary storage, of general waste at a facility that has the capacity to store in excess of 100m <sup>3</sup> of general waste at any time, excluding the storage of waste in lagoons.
GN R.718	Category A 2	The storage including the temporary storage of hazardous waste at a facility that has the capacity to store in excess of 35 m <sup>3</sup> of hazardous waste at any one time, excluding the storage of hazardous waste in lagoons.
GN R.718	Category A 18	The construction of facilities for activities listed in Category A of this Schedule (not in isolation to associated activity).
GN R.718	Category B 7	The treatment of effluent, wastewater or sewage with an annual throughput capacity of 15 000 cubic metres or more.
GN R.718	Category B 9	The disposal of any quantity of hazardous waste to land
GN R.718	Category B 11	The construction of facilities for activities listed in Category B of this Schedule (not in isolation to associated activity)

as described in the Environmental Impact Report (EIR) dated March 2012 at:

Alternative S1	Latitude	Longitude
Site	25° 58' 14.96"S	29° 13' 32.09"E

- for the construction of 450MW Khanyisa Coal Fired Power Station, which includes the design, construction, commissioning, operation and decommissioning of discard coal fired power station using fluidised bed technologies and its associated infrastructure in Emalahleni, Mpumalanga Province hereafter referred to as "the property".



The proposed project will consist of the following:

- Coal silo and sorbent stock yard;
- Coal, ash, sorbent and gypsum conveyors;
- A high voltage (HV) yard within the power station precinct;
- Water and wastewater treatment facilities;
- Ash and spent sorbent disposal systems and dump site;
- Gypsum (sorbent) storage facility;
- Access roads (temporary and permanent, and external and internal roads);
- Maintenance, medical, administration, services, control buildings;
- Water supply pipeline for construction and operation phase;
- Raw water pipeline and reservoirs;
- Dams for storage of "clean" and "dirty" water;
- Power supply for the construction phase;
- Communication mast/ telecommunication facilities;
- General and hazardous waste storage and handling facilities ( temporary and permanent);
- Batching plant (including concrete and asphalt); and' Construction accommodation.

## SCOPE OF AUTHORISATION

1. The 450MW Khanyisa Coal Fired Power Station, with coordinates indicated above, which includes the design, construction, commissioning, operation and decommissioning of discard coal fired power station using fluidised bed technologies and its associated infrastructure is hereby approved.
2. The Department shall by written notice to the holder of an environmental authorisation suspend with immediate effect an environmental authorisation if suspension of the authorisation is necessary to prevent harm or further harm to the environment.
3. The activities must commence within a period of five (5) years from the date of issue. If commencement of the activity does not occur within that period, the environmental authorisation lapses and a new application for an environmental authorisation must be made for the activities to be undertaken. Commencement with one activity listed in terms of this authorisation constitutes commencement of all authorised activities.
4. The holder of the environmental authorisation shall be responsible for ensuring compliance with the conditions contained in this environmental authorisation. This includes any person acting on the

holder's behalf, including but not limited to, an agent, servant, contractor, sub-contractor, employee, consultant or person rendering a service to the holder of the authorisation.

5. Any changes to, or deviations from, the project description set out in this authorisation must follow the amendment processes as prescribed in Chapter 4 (Parts 1-3) of the NEMA EIA Regulations, 2010 and 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.

### **Management of the activity**

6. The Environmental Management Programme (EMPr) integrated as part of the application for EA is hereby approved. This EMPr must be implemented and adhered to.
  - 6.1. The approved EMP and operational EMP for the power station must be implemented and strictly enforced during all phases of the project. It shall be seen as a dynamic document and shall be included in all contract documentation for all phases of the development when approved.
7. Changes to the EMP and the operational EMP for the power station which are environmentally defensible, shall be submitted to this Department for acceptance before such changes could be effected.
8. The Department reserves the right to request amendments to the EMP and the operational EMP for the power station should any impacts that were not anticipated or covered in the EIR be discovered.
9. The provisions of the approved EMP and the operation EMP for the power station including the mitigation measures identified in the EIR and specialist' studies shall be an extension of the conditions of this EA and therefore noncompliance with them would constitute noncompliance with the EA.
10. The power station must be managed and operated:
  - 10.1. In accordance with an Environmental Management System (EMS), that inter alia identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents and non-conformances and those drawn to the attention of the holder of the environmental authorisation as a result of complaints;
  - 10.2. By sufficient persons who are competent in respect of the responsibilities to be undertaken by them in connection with the operation of the activities.

### **Environmental Control Officer**

11. The holder of this authorisation must appoint an independent Environmental Control Officer (ECO) with experience or expertise in the field for the construction phase of the development. The ECO will have the responsibility to ensure that the conditions referred to in this authorisation are implemented and to ensure compliance with the provisions of the EMPr.
12. The ECO must be appointed before commencement of any authorised activity.
13. Once appointed, the name and contact details of the ECO must be submitted to the Director: Compliance Monitoring of the Department.
14. 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.
  - 14.1. The ECO must:
  - 14.2. Keep record of all activities on site, problems identified, transgressions noted and a schedule of tasks undertaken by the ECO.
  - 14.3. Keep and maintain 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.
  - 14.4. Keep and maintain a daily site diary.
  - 14.5. Keep copies of all reports submitted to the Department.
  - 14.6. Keep and maintain a schedule of current site activities including the monitoring of such activities.
  - 14.7. Obtain and keep record of all documentation, permits, licences and authorisations such as waste disposal certificates, hazardous waste landfill site licences etc. required by this facility.
  - 14.8. Compile a monthly monitoring report.

### **Waste Management Control Officer**

15. The applicant must designate a Waste Management Control Officer (WMCO), who will monitor and ensure compliance and correct implementation of all conditions and provisions as stipulated in the environmental authorisation and approved EMP related to the power station.
16. The WMCO must report any non-compliance with any environmental authorisation conditions or requirements or provisions of NEMWA to the Department through the means reasonably available.

17. The duties and responsibility of the WMCO should not be seen as exempting the holder of the environmental authorisation from the legal obligations in terms of the NEMWA.

#### **Recording and reporting to the department**

18. The holder of this authorisation must keep all records relating to monitoring and auditing on site and make it available for inspection to any relevant and competent authority in respect of this development.
19. All records and/or reports required or resulting from activities relating to this environmental authorisation must:
- 19.1. be legible;
  - 19.2. be submitted as required and must form part of the external audit report;
  - 19.3. if amended, the record and/or report must be amended in such a way that the original and any subsequent amendments remain legible and are easily retrievable; and
  - 19.4. be retained in accordance with documented procedures which are approved by the Department.
20. All documentation e.g. audit/monitoring/compliance reports and notifications, required to be submitted to the Department in terms of this authorisation, must be submitted to the Director: Compliance Monitoring at the Department.
21. The holder of the environmental authorisation must keep records and update all the information referred to in Annexure II and submit this information to the Department on an annual basis.

#### **Environmental audit report for construction**

22. The holder of the 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.
23. The environmental audit report must:
- 23.1. Be compiled by an independent environmental auditor;
  - 23.2. Indicate the date of the audit, the name of the auditor and the outcome of the audit;
  - 23.3. Evaluate compliance with the requirements of the approved EMP and this environmental authorisation;
  - 23.4. Include measures to be implemented to attend to any non-compliances or degradation noted;
  - 23.5. Include copies of any approvals granted by other authorities relevant to the development for the reporting period;

- 23.6. Highlight any outstanding environmental issues that must be addressed, along with recommendations for ensuring these issues are appropriately addressed;
- 23.7. Include a copy of this authorisation and the approved EMP
- 23.8. Include all documentation such as waste disposal certificates, hazardous waste landfill site licences etc. pertaining to this authorisation; and
- 23.9. Include evidence of adherence to the conditions of this authorisation and the EMP where relevant such as training records and attendance records.

#### **Commencement of activities**

24. The authorised activity shall not commence within twenty (20) days of the date of signature of the authorisation.
25. An appeal under section 43 of the National Environmental Management Act (NEMA), Act 107 of 1998 (as amended), does not suspend an environmental authorisation or exemption, or any provisions or conditions attached thereto, or any directive, unless the Minister, MEC or delegated organ of state directs otherwise.
26. Should you be notified by the Minister of a suspension of the authorisation pending appeal procedures, you may not commence with the activity until such time that the Minister allows you to commence with such an activity in writing.
27. The holder of this authorisation must obtain a Water Use Licence from the Department of Water Affairs (DWA) prior to the commencement of the project should the holder impact on any wetland or water resource. A copy of the license must be submitted to the Director: Environmental Impact Evaluation at the Department.
28. The holder of this authorisation must obtain the appropriate permits from the Department of Agriculture, Forestry and Fisheries (DAFF) for the removal of plants listed in the National Forest Act and from the relevant provincial department for the destruction of species protected in terms of the specific provincial legislation. Copies of any such permits obtained must be included in the first audit submitted to the Department.

#### **Notification to authorities**

29. 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 Notice of Intent to Appeal period, within which construction may not commence.

#### **Operation of the activity**

30. Fourteen (14) days written notice must be given to the Department that the activity operational phase will commence.
31. The holder of this authorisation must compile an operational EMPr for the operational phase of the activity or alternatively, if the holder has an existing operational environmental management system, it must be amended to include the operation of the authorised activity.

#### **Site closure and decommissioning**

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

#### **Leasing and alienation of the site**

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

#### **Transfer of environmental authorisation**

34. Should the holder of the environmental authorisation transfer holdership of this environmental authorisation due to a change of ownership [as provided for in terms of S24E(c) of NEMA], he/she must apply in terms of Section 52 of NEMWA.
35. Should the transfer of holder ship of this environmental authorisation mentioned above be for any reason other than the change of ownership in the property, the holder of this environmental authorisation must inform the Department of any change in ownership in the property and must request an amendment to this environmental authorisation to reflect such change in ownership.

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

### **Investigations**

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

### **SPECIFIC CONDITIONS**

#### **38. Permissible waste**

- 38.1 Any portion of the Site which has been constructed or developed according to condition 2 of this Licence, may only be used for the storage and disposal of Hazardous Waste in terms of the National Environmental Management: Waste Act, 2008 (Act 59 of 2008).
- 38.2 The classification, acceptance and treatment criteria as listed in the latest edition of the document "Minimum Requirements of Handling, Classification and Disposal of Hazardous Waste, Waste Management Series, Department of Water Affairs and Forestry", must be conformed to.

#### **39. Construction**

- 39.1 The construction and further development within the Site must be in accordance with the drawings 289348-SHF-012 Stormwater system and drainage layout, 289348-SHF-013 Stormwater system and drainage details; 289348-SHF-020 to 289348-SHF-034 Ash disposal liner, site plans, cells, earthworks and the agreed amendments indicated in the letter from the Department of Water Affairs Engineer dated 11 June 2013.
- 39.2 The construction may not commence before the agreed amendment design for the proposed Khanyisa Coal Power Station, indicated in the letter from the Department of Water Affairs Engineer dated 11 June 2013, is approved by the Director: Licensing.

39.3 Construction and further development within the Site must be carried out under the supervision of a Professional Civil Engineer, registered under the Engineering Profession of South Africa Act, 1990.

39.4 After construction of the Site or further development within the Site, the Licence Holder shall notify the Responsible Authority thereof and the person referred to in condition 39.3 shall submit a certificate or alternatively a letter to the Responsible Authority that the construction of the Site or further development within the Site, as proposed by the Licence Holder and approved by the Responsible Authority, is in accordance with recognised civil engineering practice and the requirements in this Licence, before disposal may commence on the Site. If the Responsible Authority is satisfied with the construction of the Site or any further development within the Site and has given written permission, the Licence Holder may use the Site or any further development within the Site for the disposal of waste.

39.5 The Site must be constructed in accordance with recognised civil engineering practice.

#### **40. Runoff Management**

40.1 All runoff water (storm water) arising as a result of precipitation on land adjacent to the Site must be prevented from coming into contact with 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, including leachate and must be diverted and drained from the Site, by means of works constructed by the holder of the environmental authorisation in accordance with condition 39.

40.2 All runoff water (stormwater) arising as a result of precipitation on the Site, must be prevented from coming into contact with any substance, as enumerated in condition 40.1 and must be diverted and drained from the Site and working face of the Site, by means of works constructed by the holder of the environmental authorisation in accordance with condition 39.

40.3 In the event that runoff water referred to in conditions 40.1 and 40.2 becomes contaminated, it must be regarded as leachate and must be dealt with according to condition 41 in this License.

40.4 Runoff water arising from operational actions, for example the washing of vehicles and containers, must be regarded as contaminated runoff and shall be treated according to condition 40.3.

40.5 Uncontaminated runoff water must under no circumstances be used to dilute leachate emanating from the Site but must be diverted to and discharged into the nearest stormwater channel.

40.6 The Holder of the environmental authorisation must ensure that contaminated water is not used for dust suppression on any unlined area.



#### **41. Leachate Management**

41.1 All leachate from the Site, including contaminated runoff water, must be -

- i. treated in works constructed according to condition 39 to comply with the quality requirements of the General and Special Standard, as published in Government Notice 991 of 18 May 1984 or with such quality requirements as may from time to time be determined by the Responsible Authority; and/or
- ii. discharged into any convenient sewer only if accepted in writing by the authority in control of the sewer.

#### **42. Water quality monitoring**

42.1 Monitoring of groundwater, surface water and leachate must be conducted at the locations specified in conditions 43 and 44 at any other location or locations that may from time to time be specified by the Responsible Authority.

42.2 The Holder of the environmental authorisation must conduct kinetic leach testing separately on fly ash and coal ash to determine what will leach out, also do a geochemical study to determine what will leach from the combined material. The Kinetic Leach test report and the Geochemical modeling results and report must be submitted within eight months from the date of this license to the Director: Licensing.

#### **43. Groundwater quality monitoring network**

43.1 A monitoring borehole network for the Site must be maintained by the holder of the environmental authorisation as stipulated in the Anglo American Khanyisa Power Station project: EIA Geohydrological Evaluation for the Environmental Impact Assessment pages 61-62 dated August 2011 compiled by Aurecon.

43.2 Monitoring boreholes must be equipped with lockable caps. The Responsible Authority reserves the right to take water samples at any time and to analyse these samples, or to have them taken and analysed.

**44. Surface water quality monitoring network**

44.1 Surface water monitoring shall be performed in all stormwater drains on and adjacent to the Site at locations selected in conjunction with the Responsible Authority and at such a frequency as determined by Responsible Authority.

44.2 Stormwater monitoring shall be conducted after each rainfall event.

**45. Background monitoring**

45.1 Samples from the borehole where the groundwater in the borehole is at an expected higher hydraulic pressure level than the hydraulic pressure level of the ground water under the Site, shall be considered as background monitoring.

45.2 Background groundwater monitoring must be conducted during each monitoring occasion in terms of conditions 46 and 48 for the water quality variables listed in Annexure III.

**46. Detection monitoring: frequency of water quality monitoring and variables for analysis**

46.1 Monitoring for surface and groundwater quality must be conducted for variables listed in Annexure III quarterly at locations specified in conditions 43.1 and 44.1.

46.2 Monitoring of leachate must be conducted monthly for the water quality variables listed in Annexure III if there is a leachate dam.

**47. Leak and failure detection monitoring**

47.1 Inspection of liners, where liners are accessible, must be performed monthly.

47.2 Liners must be repaired when possible, or replaced when necessary, when inspection tests show deterioration, or leaking and these corrective actions shall be performed to the satisfaction of the Responsible Authority.

47.3 Should a leak or failure be suspected or detected during monitoring or tests performed in accordance with conditions 47.2, or at any other time, it must be regarded as an incident and be reported to the Director: Licensing.

**48. Investigative monitoring**

48.1 If, in the opinion of the Responsible Authority, a water quality variable at any monitoring point listed under the detection monitoring programme, as referred to in condition 46, shows an increasing trend, the Holder of the environmental authorisation shall initiate a monthly monitoring programme for the water quality variables listed in Annexure III.

**49. Further Investigations**

49.1 If, in the opinion of the Responsible Authority, groundwater and/or surface water pollution have occurred or may possibly occur, the Holder of the environmental authorisation must conduct and/or appoint specialists to conduct the necessary investigations and implement additional monitoring and rehabilitation measures to the satisfaction of the Responsible Authority.

**50. Analysis of samples**

50.1 The Holder of the environmental authorisation must ensure that all samples taken in accordance with condition 4, are analysed by a laboratory accredited by the South African Bureau of Standards (SABS); and

50.2 According to the methods prescribed in terms of Government Notice 991 of 18 May 1984, or another method of analysis for which written approval has been obtained from the Responsible Authority.

**51. Audits and inspection**

51.1 The Responsible Authority reserves the right to audit and/or inspect the Site at any time and at such a frequency as the Responsible Authority may decide, or to have the Site audited or inspected.

51.2 The Holder of the environmental authorisation must make any records or documentation available to the Responsible Authority upon request, as well as any other information the Responsible Authority may require.

## 52. Reporting of incidents

52.1 The Holder of the environmental authorisation must, within 24 hours, notify the Responsible Authority of the occurrence or detection of any incident on the Site, or incidental to the operation of the Site, which has the potential to cause, or has caused water pollution.

52.2 The Holder of the environmental authorisation must, within 14 days, or a shorter period of time, if specified by the Responsible Authority, from the occurrence or detection of any incident referred to in condition 52.1, submit an action plan, which must include a detailed time schedule, to the satisfaction of the Responsible Authority of measures taken to -

- i. correct the impact resulting from the incident;
- ii. prevent the incident from causing any further impact; and
- iii. prevent a recurrence of a similar incident.

52.3 The Holder of the environmental authorisation shall, within 48 hours, notify the Responsible Authority of any sporadic leachate generated on account of unusual circumstances on the Site.

52.4 In the event that measures have not been implemented within 21 days of the incident to address impacts caused by the incident referred to in condition 52.1, or measures which have been implemented are inadequate, the Responsible Authority may implement the necessary measures at the cost and risk of the Holder of the environmental authorisation.

52.5 The Holder of the environmental authorisation must keep an incident report and complaints register, which must be made available to both external and the Responsible Authority auditors for the purpose of their audits.

## 53. Other reports

53.1 The information required in terms of condition 4 must be reported to the Responsible Authority in a yearly report. The information must also be included into a trend report, which must contain a graphical presentation of all results obtained previously at any specific point, as well as an interpretation and discussion of the results of each monitoring occasion.

Date of environmental authorisation: 31 OCTOBER 2013

  
Mr Isham Abader

Deputy Director General: Legal, Authorisations, Compliance & Enforcement  
Department of Environmental Affairs

## Annexure I: Reasons for Decision

### 1. Key factors considered in making the decision

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

- a) The information contained in the EIR dated March 2012;
- b) The mitigation measures included in the EIR dated March 2012 and the EMP;
- c) The information contained in the specialist studies contained within EIR dated March 2012;
- d) The comments received from the Directorate: Licensing, Chief Directorate: Air Quality and comments from interested and affected parties as included in the EIR dated March 2012;
- e) The ROD from Department of Water Affairs; and
- f) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998).

### 2. Findings

After consideration of the information and factors listed above the Department reached the following conclusions:

- a) The identification and assessment of impacts are detailed in the EIR dated March 2012 and sufficient assessment of the key identified issues and impacts have been completed.
- b) A waste product that is going to provide the power generation in the form of discard coal.
- c) The proposed plant will utilise reclaimed and treated mine water from the Emalahleni Waste Water Treatment Works.
- d) At peak construction time which is going to be a period of six to eight months approximately 1200 people will be employed with approximately 900 people during the construction period and approximately 120 people will be employed during operation.
- e) The procedure followed for impact assessment is adequate for the decision-making process.
- f) The proposed mitigation of impacts identified and assessed adequately curtails the identified impacts.

- g) A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA regulations, 2006, for public involvement.

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

**ANNEXURE II**

**INFORMATION WHICH SHALL BE SUBMITTED ON AN ANNUAL BASIS IN ACCORDANCE WITH THE  
"RECORDING AND REPORTING TO THE DEPARTMENT" ABOVE**

\* = Indicate with an X. Please print legibly.

NAME OF SITE: _____	DATE OF REPORT: _____ (y/m/d)
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**1. Registered owner(s) of property on which the power station is situated:**

Name	Telephone	
Postal Address	Fax	
	Postal Code	

**2. Operator in control of the power station:**

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

**3. Indicate the type of waste and approximate quantities disposed of during the year:**

<b>TOTAL</b>		

**4. Indicate the type of waste and approximate quantities transferred for reuse, recycling, or treatment of during the year:**

<b>TOTAL</b>		

I, the undersigned, declare that the information stated above is to my knowledge a true reflection of the status at the \_\_\_\_\_ waste management facility.

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Capacity: \_\_\_\_\_

Place: \_\_\_\_\_ Date \_\_\_\_\_

*This form may be obtained electronically from the Department.*

**ANNEXURE III**

**WATER QUALITY VARIABLES THAT MUST BE MONITORED: CONDITION 45; 46 & 48**

pH  
Calcium (Ca)  
Chlorides (Cl)  
Manganese (Mn)  
Alkalinity (Al)  
Electrical Conductivity (EC)  
Magnesium (Mg)  
Potassium (K)  
Sulphate (SO<sub>4</sub>)  
Iron (Fe)  
Boron (B)  
Total Petroleum Hydrocarbons (TPH)  
Total Chrome (Cr<sup>+</sup>)  
Copper (Cu)  
Cadmium (Cd)  
Chrome VI (Cr<sup>+6</sup>)  
Arsenic (As)  
Lead (Pb)  
Zinc (Zn)  
Sodium (Na)