

### APPLICATION FORM FOR AMENDMENT OF AN ENVIRONMENTAL AUTHORISATION

#### AMENDMENT APPLICATION FOR KENDAL POWER STATION ASH DISPOSAL FACILITY DEA REF: 14/12/16/3/3/3/63

File Reference Number: NEAS Reference Number: Date Received:	(For official use on DEA/EIA/	(v)	
Application for authorisation in terms of the National Enand the Environmental Impact Assessment (EIA) Regu	nvironmental Manag lations, 2014, as an	ement Act, Act No. 10 nended (the Regulation	7 of 1998, as amended ns)
PROJECT TITLE  APPLICATION FOR AN INTEGRATED FANGEON	13.47-5.179.41		
APPLICATION FOR AN INTEGRATED ENVIRON LICENCE IN TERMS OF THE NATIONAL ENV 1998) AS AMENDED AND THE ENVIRONMEN NATIONAL ENVIRONMENTAL MANAGEMENT: V NOTICE 718 OF 2009	IRONMENTAL MA TALIMPACT ASS	ANAGEMENT ACT,	1998 (ACT 107 OF
Indicate if the DRAFT report accompanies the application	n	Yes X No	
PRE-APPLICATION CONSULTATION			
Was a pre-application meeting held		Yes	Ma V
Date of the pre-application meeting		163	No X
Reference number of pre-application meeting held			
Was minutes compiled and submitted to the Department	for approval	Yes	No
A conv of the pre-application manufacture is a			

A copy of the pre-application meeting minutes must be appended to this application as APPENDIX 1.

#### Kindly note the following:

- 1. This form must be used to apply for the Amendment of an Environmental Authorisation where this Department is the Competent Authority. An amendment includes:
  - a) adding, substituting, removing or changing a condition or requirement of an Environmental Authorisation, or

b) updating or changing any details or correcting a technical error.

- 2. This form is current as of 01 September 2018. It is the responsibility of the Applicant / Environmental Assessment Practitioner (EAP) to ascertain whether subsequent versions of the form have been published or produced by the Competent Authority. The latest available Departmental templates available https://www.environment.gov.za/documents/forms.
- 3. An application fee is applicable (refer to Section 2). Proof of payment must accompany this application. The application will not be processed without proof of payment unless one of the exclusions provided for in the Fee Regulations is applicable AND such information in the exclusion section of this application form has been confirmed by this Department.
- 4. A cover letter on your company letterhead indicating the nature of this application must be appended to this form i.e. new application for Environmental Authorisation, updated application for Environmental Authorisation.

- 5. An electronic copy (in the form of a USB) of the signed application form must be submitted together with two hardcopies (one of which must contain the original signatures of both the Applicant and EAP).
- 6. This form must be marked "for Attention: Chief Director: Integrated Environmental Authorisations" and submitted to the Department at the postal or physical addresses contained in this form.
- 7. All documentation delivered to the physical address contained in this form must be delivered during the official Departmental Officer Hours which is visible on the Departmental gate.
- 8. All EIA related documents (includes application forms, reports or any EIA related submissions) that are faxed; emailed; delivered to Security or placed in the Departmental Tender Box will not be accepted, only hardcopy submissions are accepted.
- 9. The required information must be typed within the spaces provided in the form. The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided. Spaces are provided in tabular format and will extend automatically when each space is filled with typing. A legible font type and size must be used when completing the form. The font size should not be smaller than 10pt (e.g. Arial 10).
- 10. Where applicable black out the boxes that are not applicable in the form.
- 11. The use of the phrase "not applicable" in the form must be done with circumspection. Where it is used in respect of material information that is required by the Competent Authority for assessing the application, this may result in the rejection of the application as provided for in the Regulations.
- 12. Unless protected by law, all information contained in and attached to this application, will become public information on receipt by the Competent Authority. Upon request during any stage of the application process, the Applicant / EAP must provide any registered interested and affected party with the information contained in and attached to this
- 13. Should a specialist report or report on a specialised process be submitted at any stage for any part of this application, the terms of reference for such report and declaration of interest of the specialist must also be
- 14. Please note that this form must be copied to the relevant Provincial Environmental Department(s).
- 15. Certified copy/ies of the Environmental Authorisation and all subsequent Amendments thereto, if applicable must be attached to this application as APPENDIX 2. Should a certified copy/ies of the Environmental Authorisation and subsequent Amendments thereto not be available an original commissioned Affidavit/Affirmation under oath undertaken by the must be appended to this application form.
- 16. An application for Environmental Authorisation/Amendment lapses if the applicant fails to meet any of the timeframes prescribed in terms of the EIA Regulations, 2014, as amended.

#### Departmental Details

#### Postal address:

Department of Environmental Affairs

Attention: Chief Director: Integrated Environmental Authorisations

Private Bag X447

Pretoria

0001

#### Physical address:

Department of Environmental Affairs

Attention: Chief Director: Integrated Environmental Authorisations

**Environment House** 

473 Steve Biko Road

Arcadia

Queries must be directed to the Directorate: Coordination, Strategic Planning and Support at:

Email: EIAAdmin@environment.gov.za

#### 1. **COMPETENT AUTHORITY**

Identified Competent Authority to consider the application:

Department of Environmental Affairs (DEA)

Reason(s) in terms of S24C of NEMA:

The applicant, Eskom Holdings SOC Limited, is a state-owned enterprise/organ of state.

#### 2. **FEES**

Applicants are required to tick the appropriate box below to indicate that either proof of payment is attached or that, in the applicant's view, an exclusion applies. Proof of payment or a motivation for exclusions must be attached as APPENDIX 3 of this application form.

Proof of payment	·———	
Exclusion applies		
	X	

An applicant is excluded from paying fees if:

- The activity is a community based project funded by a government grant; or
- The applicant is an organ of state.

TYPE OF EXCLUSION  The activity is a community based project funded by a government grant  The applicant is an organ of state	Tick where applicable. Proper motivation must be attached to the application
The applicant is an organi of state	X .

FE	EE AMOUNT	Fee	
Ap	oplication for an Amendment of an Environmental Authorisation	R2 000	

Department of Environmental Affairs' banking details for the payment of application fees:

Payment Enquiries:

Email: eiafee@environment.gov.za

Banking details:

ABSA Bank

Branch code: 632005

Account number: 1044 2400 72

Current account

Reference number : Reference number to be provided in the specific format indicating centre point coordinates of site in decimal degrees to 5 or 6 decimal places: latitude/longitude

eg -33.918861/18.423300

Status: Tax exempted

#### 3. GENERAL INFORMATION

Name of the Applican	t: Eskom Holdings SOC Ltd (Kendal	Power Static	on Project)	
RSA Identity/ Passpor	t			
Number	·			
Name of contact person fo				
applicant (if other)				
RSA Identity/ Passpor				
Number				
Responsible position, e.g Director, CEO, etc.				
Company/ Trading name (in				
any):				
Company Registration				
Number:				
BBBEE status:	<u> </u>			
Physical address:		Sunninghi		
Postal address:	Eskom Holding SOC Ltd	, our mingri		
	P.O. Box 1091			
	JOHANNESBURG			
Postal code:	2000	Cell:	083 660 1147	
Telephone:	011 800 3501/ 3725	Fax:	086 660 6092	
E-mail:	HerbstDL@eskom.co.za			
Name of the landowner:	Eskom Holdings SOC Ltd - Kendal P	ower Statio	n	
Name of contact person for	General Manager - Tshepo Molabe			
landowner (if other):				ľ
Postal address:	Private Bag X 7272, Emalahleni			
Postal code:	1035	Cell:		
Telephone:	013) 647 5250	Fax:		
E-mail:	molabeTN@eskom.co.za			
Name of Person in control	The applicant is the leaders			
of the land:	The applicant is the landowner as about	ve.		1
Name of contact person for				
person in control of the land:				ļ
Postal address:				
Postal code:		Cell:		
Telephone:		Fax:		
E-mail:		i CIA		
_				

In instances where there is more than one landowner, please attach a list of those landowners with their contact details as APPENDIX 4.

Certified copy/ies of the Environmental Authorisation and subsequent Amendments thereto, if applicable must be attached to this application as **APPENDIX 2**. Should a certified copy/ies of the Environmental Authorisation and subsequent Amendments thereto not be available an original commissioned Affidavit/Affirmation under oath undertaken by the must be appended to this application form

Provincial Environmental Authority:	
Name of contact person: Postal address: Postal code: Telephone: E-mail:	Mr Selby Hlatswayo           Private Bag X11215, Mbombela           1200         Ceil: 072 281 1751           013 759 4079         Fax: -           SHlatshwayo@mpg.gov.za         -
Local Municipality: Name of contact person in (Environmental Section) Postal address: Postal code: Telephone: E-mail:	Emalahleni Local Municipality  Erald Nkabinde  P.O. Box 3, Emalahleni  1035 Cell: 082 729 7488  013 690 6353 Fax: -  Nkabindeei@emalahleni.gov.za

In instances where there is more than one Local/Provincial Authority involved, please attach a list of those Local/Provincial Authorities with their contact details as Error! Reference source not found..

### 4. ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP) INFORMATION

Company of Environmental Assessment Practitioner:	Zitholele Consulting (Pty) Ltd		
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)	2	Percentage Procurement
EAP name:	Dr. Mathys Vosioo		recognition
EAP Qualifications:			
Professional	SACNASP: Pr.Sci.Nat. (Ecolog	ical Caianas	Don'the 100 tooks
affiliation/registration:	IAIAsa Member, Membership N	lo : 37/12	), Reg No.: 400136/12
Physical address:	Building 1. Maxwell Office Park	Magua Cr	escent West, Waterfall City, Midrand, 1685
Postal address:	PO Box 6002, Halfway House	, iviagvva Cit	scent west, waterfall City, Midrand, 1685
Postal code:	1685	Cell:	0047400040
Telephone:	011 207 2079	Fax:	0017400010
E-mail:	mathysv@zitholele.co.za	<u> </u> Fax.	086 674 6121

The appointed EAP must meet the requirements of Regulation 13 of GN R982 of 04 December 2014, as amended.

If appointed, the declaration of independence of the EAP and undertaking under oath or affirmation that all the information submitted or to be submitted for the purposes of the application is true and correct must be submitted as APPENDIX 5.

### 5. DETAILS OF IMPLEMENTATION OF PREVIOUS ENVIRONMENTAL AUTHORISATION

Was the activity commenced with during the validity period of the environmental authorisation? If yes, please describe the implementation of the previous environmental authorisation to date:	I YES	
The construction of phase 1 of the 10 years Ash Dump commenced on the 28 February 2013 and soperation started on the 04 October 2016.	ubsequently	the

### 6. AMENDMENTS APPLIED FOR AND RELATED INFORMATION

Please indicate which of the following is relevant:

6.1. The holder of an environmental authorisation may at any time apply to the relevant Competent Authority for the amendment of the authorisation if:

(a)	there is a material change in the circumstances which existed at the time of the granting of the environmental authorisation;	YES	
Ĺ	there has been a change of ownership in the property and transfer of rights and obligations must be provided for; or	80 2000 DIS	NO
(c)	any detail contained in the environmental authorisation must be amended, added, substituted, corrected, removed or updated.	YES	

Describe the amendments that are being applied for:

#### **IEA Condition 17.3.1**

"Construction and further development within the proposed waste disposal site must be carried out under the supervision of a Registered Professional Engineer. Any development on the site must adhere to a class C containment barrier design as described in regulation 636, National Norms and Standards for disposal of waste to landfill, dated 23 August 2013..."

Request for a change from the condition 17.3.1 of a Class C barrier system to a Class D barrier system for the Kendal ash disposal facility (ADF).

### Please provide the reasons and/or a motivation for the application for amendment:

Eskom Holdings SOC Ltd commissioned a Source-Pathway Receptor (SPR) Study to investigate site-specific conditions at the Kendal Power Station ADF site offered sufficient protection against pollution from the identified pollution source, i.e. the ADF itself, to allow consideration of alternative barrier system designs for implementation that could provide sufficient protection against pollution to the receiving environment. The SPR study focused on the characteristics of the ash body (source), the underlying geology and aquifer systems and proximity and nature of sensitive human and environmental receptors that may be impacted.

Zitholele Consulting and the appointed groundwater specialist, GHES, completed the SPR study and numerical groundwater investigation for the Continuous Ash Disposal Facility of the Kendal Power Station. The assessment considered alternative liner systems and the level of protection these liners offer by acting as a physical barrier between the identified Contaminants of Concern (CoCs) emanating from the pollution source, i.e. Kendal Continuous ADF, and the underlying groundwater resources. The degree of protection a specific liner system offer is related to the component layers making up the whole.

Five alternative liner systems (Class C liner, 2 variations to the Class C liner, an intermediate liner and Class D liner) were modelled with simulations run over a 5, 10 and 40-year period after the ADF is decommissioned.

The main difference between the alternative liner systems is the composition of the liner systems, cost associated with each composite liner system and associated leakage rate as calculated from literature (Giroud & Touze-Foltz, 2005). The liner alternatives that were simulated were considered against the findings of the SPR study in the sections below.

### Consideration of appropriate liner alternative

The assessment of alternative liner systems largely hinges on the level of protection these liners offer by acting as a physical barrier between the ash body and CoCs and the underlying groundwater resources. The degree of protection a specific liner system offer is related to the component layers making up the whole. Five alternative liner systems (Class C liner, 2 variations to the Class C liner, an intermediate liner and Class D liner) were modelled with simulations run over a 5, 10 and 40-year period after the ADF is decommissioned.

The main difference between the alternative liner systems is the composition of the liner systems, cost associated with each composite liner system and associated leakage rate as calculated from literature (Giroud & Touze-Foltz, 2005). The liner alternatives that were simulated were considered against the findings of the SPR study in the sections below.

### a. Class C liner and variations alternatives

The Class C liner system has been authorised for installation for the Continuous ADF in terms of Kendal Power Station's Environmental Authorisation (EA) and Water Use Licence (WUL). It therefore represents the default liner system against which the other liner alternatives has been considered. It is furthermore also the costliest liner system of the 5 alternative liner systems to implement at an expected unit price of R424/m<sup>2</sup>.

When the simulated leakage rates were considered, it was evident that when the pollution plume is simulated at a 40-year period after completion of the Continuous ADF the pollution plume would have migrated north-westward across the 2-dimentional footprint of the Schoongezicht Spruit tributary. It is unclear whether the groundwater pollution plume would interact with the surface water carried by the tributary, however the simulated SO<sub>4</sub> concentrations, which is in the range of 1.5 – 2 mg/l at the 2-D interface with the Schoongezicht Spruit, is well below the SANS, SAWQG and WQPLs stipulated for the Wilge catchment. The pollution plume does not extend across the 2-dimentional interface of the Leeuwfontein Spruit located to the south-west of the Continuous ADF.

The simulation furthermore calculated that the SO<sub>4</sub> concentration does not reach borehole FBB56, which is the privately-owned borehole.

The Class C variation 1 and 2 liners offer the same protection as the Class C liner system. However, these two variations demonstrate minor differences in liner component make-up which is reflected in the differences in unit cost per liner alternative. The Class C liner, including the 2 variations to the Class C liner, is therefore effective in providing sufficient protection to the groundwater resources.

#### b. Intermediate liner

The intermediate Class C liner alternative represents a reduction in the Class C liner requirements, but does introduce a cuspated sheet layer, which together with the geomembrane layers effectively increases the permeability of the composite liner system. The removal of some of the Class C layers reduces the unit cost for the composite liner by approximately 35% to R278.22/m², while furthermore decreasing the anticipated leakage rate to approximately 7

litres/ha/day.

When the simulated leakage rates are considered, it is evident that the plume formation pattern is very similar to that Class C liner plume. When the pollution plume is simulated at a 40-year period after completion of the Continuous ADF the pollution plume would have migrated north-westward across the 2-dimentional footprint of the Schoongezicht Spruit tributary as in the case with the Class C liner plume. It is unclear whether the groundwater pollution plume would interact with the surface water carried by the tributary, however as in the case of the Class C Liner, the simulated SO<sub>4</sub> concentrations, which is in the range of 0.6 mg/l at the 2-D interface with the Schoongezicht Spruit, is well below the SANS, SAWQG and WQPLs stipulated for the Wilge catchment. The pollution plume does not extend across the 2-dimentional interface of the Leeuwfontein Spruit located to the south-west of the Continuous ADF. The simulation calculated that the SO<sub>4</sub> concentration also does not reach borehole FBB56.

The Intermediate Class C liner alternative is therefore also effective in providing sufficient protection to the groundwater resources.

#### c. Class D liner

The Class D liner alternative has the lowest liner component requirements and largely represent rip and decompaction of a base preparation layer. This alternative is also the least costly alternative with a unit cost of R10.61/m².

The simulated SO<sub>4</sub> plume for the Class D liner alternative is more pronounced than those of the other liner alternatives. Even within 5 years the pollution plume would reach the 2-dimentional footprint of the Schoongezicht Spruit and Leeuwfontein Spruit, albeit at concentrations in the range of  $0.5-5 \, \text{mg/l}$ .

When the pollution plume is simulated at a 40-year post-closure period the pollution plume would have migrated north-westward and westward across the 2-dimentional footprint of the Schoongezicht Spruit and Leeuwfontein Spruit. As with the Class C and Intermediate liner, it is unclear whether the groundwater pollution plume would interact with the surface water carried by the tributary.

It is also clear that the simulated pollution plume will reach the privately-owned borehole FBB56 within 40 years. The simulated data therefore suggest that the implementation of the Class D liner alternative is expected to result in CoCs migrating through the groundwater pathway to reach the identified receptors, but levels of the CoCs will be within acceptable limits. It is therefore argued that based on the SPR study and underlying geological conditions the Class D liner can be implemented without exceeding the set water quality limits of the SANS, SAWQG and WQPLs stipulated for the Wilge catchment.

### Critical factors considered in reaching the SPR Report recommendations

The following critical factors were considered in the conclusions and recommendations reached in the SPR Report attached as Appendix B:

- A high-level human health risk assessment undertaken by Golder Associates, (2016, as referenced in the SPR Report), for Eskom's pulverised coal-fired fly ash in 2016 concluded that concentrations of all CoCs in groundwater of an on-site borehole will be within acceptable levels, i.e. less than South African Water Quality Guidelines for Domestic use, even after a simulated period of 100 years.
- When the dynamics and characteristics of the ash body itself was considered (see Chapter 2), it is evident that when ash deposited on the ADF comes into contact with water for extended periods of time, the pozzolanic

properties of the ash would create a cementitious effect, hardening the ash body and thereby making it less permeable. Therefore, it is expected that the exposure of the ash body to water would result in a less permeable ash body thereby resulting in less water accumulating at the base of the ADF.

- The operational and maintenance philosophy underpinning the management of the ADF structures results in the ash body being reshaped to appropriate angles that will allow drainage of storm water to the natural environment, therefore limiting the infiltration of water into the ash body beneath.
- Kendal Power Station's existing ADF was not lined with any barrier system at the time the power station
  commenced operations. The main geological features (lithology) encountered during drilling on at the
  Continuous ADF site consisted of clay, granites and dolerites of the Karoo Supergroup. This clay layer will
  therefore tend to form a natural impermeable barrier that could help explain why no significant impacts from
  the operation of the existing unlined ADF has not picked up in routine surface and groundwater monitoring.
- The wetland study conducted by Wetland Consulting Services (Wetland Consulting Services, 2014) in October 2014, for the continuous ADF do not suggest any clear dependence of the local wetlands on shallow saturated groundwater flow. Surface runoff inflow and interflow inflow are likely to be the main hydrological drivers supporting the overall wetness within a wetland.
- Feasible mitigation measures have been identified to monitor and reduce any groundwater pollution to acceptable limits.

#### Conclusion

Based on the assessment of the above mentioned liners, the following conclusions were reached:

- The continuous ADF with its associated dirty water management infrastructures constitutes the potential sources of contaminants which are specifically associated with this SPR study. The potential contaminants of concern include Mn, SO<sub>4</sub>, Fe, and F;
- Local groundwater is one of the potential pathways for the migration of the contaminants to receptors (borehole
  water users and receiving surface water). Potential contamination from ground surface will mostly impact on the
  shallow weathered and fractured aquifer system;
- The thickness of the local shallow aquifer was estimated to be between 5 and 25 m, and consists mainly of clay, granites and dolerites of the Karoo Supergroup;
- The thickness and the geometry of local sill and lineaments in the area are expected to control the groundwater flow and possible pollution emanating from ground surface;
- One privately owned borehole (Kendal2/ FBB56) is located within less than 1 km to the north-west of the Continuous ADF site, and risks to be impacted by potential contaminants from the project.
- The wetland study conducted by Wetland Consulting Services for the Kendal Continuous ADF suggest that surface runoff inflow and interflow inflow are likely to be the main hydrological drivers supporting the overall wetness within a wetland, and that minor dependence of the local wetlands on shallow saturated groundwater flow may be expected.
- The increases in the concentrations of sulphate in the local aquifer were simulated for each alternative over 40 years after closure using a finite element numerical model. Intermediate Class C is preferred above the other alternatives if only the migration of contaminants into the aquifer is considered since the induced increase of sulphate's concentration after 40 years of simulation at FBB56, is less than 0.01 mg/l, compare to an increase of 0.02 mg/l and 22 mg/l, respectively, for "Class C" and "Class D".
- However, when characteristics of the underlying lithology, geology and aquifer are considered, the implementation
  of the Class D liner will not result in contaminant levels in groundwater quality at identified receptors above
  the legislated standards of SANS 241-2:2015, SAWQG and WQPLs. From this perspective implementation of the
  Class D liner is recommended.

Should the amendment being requested result due to <b>6.1 (b)</b> above, you are required to furnish the Department with a written undertaking that the new holder of the environmental authorisation is willing and able to assume responsibility of the environmental authorisation issued. Provide a short motivation and explanation below:  N/A	
N/A	7
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#### 7. ENVIRONMENTAL IMPACTS

Describe any negative environmental impacts that may occur if the application for amendment is granted, amongst others information on any increases in air emissions, waste generation, discharges to water and impacts of the natural or cultural environment must be included.

There are no negative environmental impacts that will result from this proposed amendment as the revised liner has been designed to avoid/minimise seepage into groundwater and surface water resources. Leakage detection and management will be in accordance with the drawings and are the same as per the previously approved Class A liner design. Furthermore, the Ash Disposal Facility has been designed to drain any leachate into the Ash Dump Dirty Dam, the dirty water is then recycled back to the Ash Disposal Facility for dust suppression.

Describe any neg	ative environmental impacts that may occur if the application for amendment is not granted.
None.	ment is not granted.

Describe any positive environmental impacts that may occur if the application for amendment is granted, amongst others information on any reduction in the ecological footprint, air emissions, waste generation and discharges to water must be included.

The Ash Disposal Facility will be constructed within the approved existing ecological footprint.

### 8. AUTHORISATION FROM OTHER GOVERNMENT DEPARTMENTS

Are any permission, licenses or other authorisations required from any other departments before the requested amendments can be effected?	YES	
		624.255

If yes, please complete the table below.

Name of department and contact person	Authorisation required	Authorisation
1		applied for
		(Yes/No)
Department of Water and Sanitation	WULA for the Kendal Continuous ADF issued on 18 December 2015: Licence No: 04/B20E/ABCEGI/3888 File No: 27/2/2/B520/13/9	Yes-WUL issued
	An amendment of the above WULA thus needs to be applied for, which is in process.	No – WUL amendment in progress

#### 9. RIGHTS OR INTERESTS OF OTHER PARTIES

In your opinion, will this proposed amendment adversely affect the rights and interests of other parties?	NO

Please provide a detailed motivation of your opinion.

The Source-Pathway-Receptor (SPR) study that was undertaken was specifically designed to identify the pollution source, likely pathway any pollution would follow and potential impacts on identified receptors. As part of this process leakage of contaminants from the ash waste body was identified as the pollution source, while the underlying groundwater aquifer was identified as the pollution pathway. Receptors that may be impacted by the pollution source was identified and included two boreholes from which local farmers pump groundwater, as well as potential wetland and aquatic systems which could be contaminated. During the SPR study a groundwater specialist was appointed to undertake detailed numerical groundwater modelling in order to investigate the movement of a potential pollution plume.

Results from the simulations that was run on the numerical groundwater model indicated that even with the calculated leakage of contaminants associated with a Class D barrier system, movement of the simulated pollution plume would be limited over the simulation period, but indicated that the 2-dimensional simulated sub-surface pollution plume would overlap slightly with surface water resources to the northwest, west and southwest of the Continuous Ash Disposal Facility (ADF). Although this 2-dimensional overlap was observed, it could not be confirmed whether any surface water-groundwater interaction would result in pollution impact on surface water resources.

The numerical groundwater model further investigated the possible extent of concentrations of pollutants that may be transported via the groundwater pathway and whether dilution of such contaminants would result in impacts on identified receptors. For these simulations of the concentrations of sulphate were used as a proxy for dissolved contaminants in the numerical groundwater model simulations run. The simulated increase in concentrations of sulphate at a privately owned borehole (FBB56) after the simulated 40 year period for the liner alternatives investigated are provided in the Table 1 below.

Table 1: Simulated increase in concentrations of sulphate at FBB56 after 40 years

llu-ta	Current Background concentration @FBB56	Increase in concentration @FBB56	Increase in concentration @Source	SAWQG TWQR for domestic use (DWAF, 1996)	SANS 241- 2: 2015 Limit	WQPLs for Wilge catchment (DWS, 2018a)
Units Class C, including	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)
Class C variations		0.02	10.6			
Intermediate Class C	0.41	<0.01	1.80	≤ 200	≤ 500	≤70
Class D		22	125			

The results from the simulations (Table 1) indicate that SO<sub>4</sub> concentrations at the borehole receptor after 40 years would still be below the South African National Standard (SANS): Drinking Water Standard, South African Water Quality Guidelines (SAWQG) for domestic use and the recent Water Quality Planning Limits (WQPLs) set for the Olifants WMA, Wilge sub-catchment.

The simulated data therefore suggest that the implementation of the Class D liner alternative is expected to result in Contaminants of Concern (CoCs) migrating through the groundwater pathway to reach the identified receptors, but levels of the CoCs will be within the acceptable limits of the water quality guidelines applicable to the sub-catchment. It is therefore argued that based on the SPR study and underlying geological conditions the Class D liner can be implemented without exceeding the set water quality limits of the SANS, SAWQG and WQPLs stipulated for the Wilge catchment.

It is therefore concluded that the proposed amendment will not adversely affect the rights and interests of other parties.

A motivational report accompanying this EA Amendment application is attached to the application Part 2.

NOTE: The Department is entitled to request further information if it believes it is necessary for the consideration of the application. If the application is for a substantive amendment or if the rights or interests of other parties are likely to be adversely affected, the Department will instruct the applicant to conduct a public participation process and to conduct any investigations and assessments that it deems necessary.

#### 10. LIST OF APPENDICES

		SUBM	TTED
APPENDIX 1	Copy of the pre-application meeting minutes. <i>Pre-application meeting to be undertaken during the PPP period.</i>	YES	NO
APPENDIX 2	Certified copy/ies of the Environmental Authorisation and all subsequent Amendments thereto or original commissioned Affidavit/Affirmation under oath	YES	
APPENDIX 3	Proof of Payment / Motivation for exclusion	YES	
APPENDIX 4	List of land owners (with contact details)	YES	
APPENDIX 5	Declaration of independence of the EAP and undertaking under oath or affirmation, if appointed	YES	

### AMENDMENT APPLICATION FOR KENDAL POWER STATION ASH DISPOSAL FACILITY DEA REF: 14/12/16/3/3/3/63

11.	DECLARATION
I, <u>Deidr</u> informat	e Herbst, declare that will comply with all my legal obligations in terms of this application and provide accurate tion to everyone concerned in respect to this application.
Signatur	Applicant:
	Holdings SOC Ltd  Company or Organisation:
Q . \ Date:	11. Zois

## APPENDIX 1 COPY OF THE PRE-APPLICATION MEETING MINUTES

#### **APPENDIX 2**

CERTIFIED COPY/IES OF THE ENVIRONMENTAL AUTHORISATION AND ALL SUBSEQUENT AMENDMENTS THERETO OR ORIGINAL COMMISSIONED AFFIDAVIT/AFFIRMATION UNDER OATH



### 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

NEAS Reference: DEA/EIA/0001508/2012 DEA Reference: 14/12/16/3/3/3/63 Enquiries: Masina Litsoane

Telephone: 012-399-9375 E-mail: MLitsoane@environment.gov.za

Ms Deidre Herbst Eskom Holding SOC Limited P.O. Box 1091 JOHANNESBURG 2000

Fax No: 086-660-6092 Tel No: 011-800-3501

E-Mail HerbstDL@eskom.co.za

PER FACSIMILE / MAIL

Dear Ms Herbst

APPLICATION FOR INTEGRATED ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998: GN R. 543 AND NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 GOVERNMENT NOTICE 921: CONTINUOUS DISPOSAL OF ASH AT THE EXISTING ASH DISPOSAL FACILITIES AT KENDAL POWER STATION, MPUMALANGA PROVINCE

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

In terms of regulation 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

I certify that the document is a true copy of the original.
I have personally scrutinised and according to my
observations the original has in no way been altered.

O9/11/2018
DATE
COMMISSIONER OF OATHS

SECURITY

MEGAWATT PARK

MAXWELL DRIVE, SANDTON

REPUBLIC OF SOUTH AFRICA

MI

By hand:

**Environment House** 

473 Steve Biko,

Arcadia.

Pretoria, 0083

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 or fax number. Mr Hassam can also be contacted at:

Tel:

(012) 399 9356

Email: 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 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

Chief Director: Integrated Environmental Authorisations

Department of Environmental Affairs

Date: 28/7/2015

	CC: Ms S Douglas Mrs P Fenyane	Zitholele Consulting sharonm@zitholele.co.za	Tel: 011-207-2073	Fax: 086-676-9950
ŀ	I Iviis I Perivarie	Emalahleni Local Municipality	Tel: 013-690-6318	Fax: 086-585-9685

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)

		_	<u> </u>
1.	APPLICANT	$\neg$	INTERESTED AND AFFECTION
L	Department of Environmental Affairs (DEA)		Receive EA from Applicant/Consultant.
2.	within 12 days of date of the EA notify all IAPs of the E and draw their attention to their right to appeal against the EA in terms of Chapter 7 of the Regulations	-	2. N/A.
3. 4.	in 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). 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.		<ol> <li>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).</li> <li>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.</li> </ol>
	The Applicant must also serve on each (AP:  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,  a notice indicating where and for what period the appeal submission will be available for inspection by the applicant.
	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.
N	Any IAP who received a notice of intention to appeal nay submit a responding statement to that appeal to the flinister within 30 days from the date that the appeal ubmission was lodged with the Minister.		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.
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#### NOTES:

#### 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



### 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 921 of 2013

# Continuous disposal of ash at the existing ash disposal facilities at Kendal Power Station Mpumalanga Province

### Nkangala District Municipality

Authorisation register number:	14/12/16/3/3/3/63
Last amended:	First Issue
Holder of integrated authorisation:	Eskom Holding SOC Limited
Location of activities:	MPUMALANGA PROVINCE: On portion
	5, 17 and 36 of the Farm Leeuwfontein
	219IR; portions 21, 24, 25, 27, 38, 39,43
	and 44 of the Farm Schoongezicht 218IR;
	portion 79 of the Farm Heuvelfontein 79IR,
	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.

Department of Environmental Affairs Environmental Authorisation Reg. No. 14/12/16/3/3/3/63 & DEA/E/A/0001508/2012

1. **DECISIONS** 

The Department is satisfied, on the basis of information available to it and subject to

compliance with the conditions of this integrated environmental authorisation ("the

environmental authorisation") 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 2.

By virtue of the powers conferred on it by NEMA, the NEMA EIA Regulations, 2010, NEMWA

and Government Notice 921 of November 2013 the Department hereby authorises ~

ESKOM HOLDING SOC LIMITED

with the following contact details -

Ms Deidre Herbst

Eskom Holding SOC Limited

P.O. Box 1091

Johannesburg

2000

Fax No: 086-660-6092

Tel No: 011-800-3501

E-Mail: HerbstDL@eskom.co.za

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

Listed activities	
GN R. 544 Item 11:	Activity/Project description
The construction of:	The construction of the stream diversion
(ii) channels;	channel will require work / activities to b
(iv) dams;	undertaken within the stream. The work
	proposed for the farm darn will take place
(xi) infrastructure or structures covering 50 squ	are in-stream and therefore also within a
metres or more where such construction occurs wit	
a watercourse or within 32 metres of a watercours	
measured from the edge of a watercourse, excludi	may be located within 32 meters from a watercourse,
where such construction will occur behind to	he
development setback line.	
GN R. 544 Item 18:	The nature of the construction activities
The infilling or depositing of any material of more than 5	required for the stream disamina and
cubic metres into, or the dredging, excavation, removal of	or lowering the dam wall will inhamely.
moving of soil, sand, shells, shell grit, pebbles or rock of	entail excavations within, and the removal
more than 5 cubic metres from a watercourse	/ moving soil from the stream. The volume
	of soil that will be removed by the
	excavations may exceed 5 cubic metres.
GN R. 544 Item 22:	A road linking the N12 to the R545 will be
The construction of a road, outside urban areas;	constructed. The width of the proposed
(ii) where no reserve exists where the road is wider than 8	road will exceed 8 metres. No reserve for
metres	the proposed road exists.
GN R. 545 Item 5:	The proposed PCDs are classified as
The construction of facilities or infrastructure for any	dams which poses a safety risk. The
process or activity which requires a permit or license in	applicable provisions included
terms of national or provincial legislation governing the	Government Notice 704 promulgated in
generation or release of emissions, pollution or effluent	terms of the National Water Act, 1998 (Act
and which is not identified in Notice No. 544 of 2010 or	No. 36 of 1998) must therefore also been
included in the list of waste management activities	adhered to. Furthermore the proposed
published in terms of section 19 of the National	PCDs also triggers Water Uses defined in
Environmental Management: Waste Act, 2008 (Act No.59	Section 21 of the National Water Act,
n 2000) in which case that Act will apply.	1998 (Act No. 36 of 1998),
<u>iN R. 545 Item 6:</u>	The dry ash generated by the combustion
ne construction of facilities or intrastructure for the bulk t	of coal in the electricity generation
	process will be disposed of at the
i) in solid form, outside an industrial complex, using e	

	30 C C C C C C C C C C C C C C C C C C C
Listed activities	Activity/Designed designed
funiculars or conveyors with a throughput capacity of m	Activity/Project description
the sale of conveyors with a throughput capacity of m	ore
than 50 tons day.	
GN R. 545 Item 15:	The proposed DOD - ADT
Physical alteration of undeveloped, vacant or derelict la	The proposed PCDs, ADF and Clea
for residential retail commercial access of derellor ret	A SOLON ON THE SECOND
for residential, retail, commercial, recreational, industrial	or 20 hectares.
institutional use, where the total area to be transformed	is
20 hectares or more	1
GN R. 921 Category B Item 7	77
<del></del>	The dry ash generated by the combustion
The disposal of any quantity of hazardous waste to land.	of coal in the electricity generation
	process will be disposed of at the
	Continuous Ash Disposal Facility. Owing
	to the nature and composition of the ash
	that is generated by the combustion of
	coal, it is considered to be hazardous
	Waste.
N R. 921 Category B Item 10	The evicting ADE
ne construction of a facility for a waste management	The existing ADF will be expanded to into
tivity listed in Octave B. C. a waste management	the north westerly direction. The
tivity listed in Category B of this Schedule (not in	expansion of the dry ash dump is required
elation to associated waste management activity).	to provide sufficient capacity for the
	remaining life of the KPS.

## as described in the Environmental Impact Assessment Report (EIR) dated September 2014 at:

Description	Coordinates	- In oranio itali alipace.	Size of	Quantity /	
	SOUTH	EAST	Facility	Capacity	Classification
Dam1	26° 5'02.9"S	28°55'42.4"E	2.9 Ha	120 MJ	DIETE
Dam2	26° 5'10.1"S	28°55'42.3"E	5.93 Ha	257 M	DIRTY
Dam3	26° 6'55.3"S	28°56'57.1"E	3.35 Ha	76 MI	CLEAN
Dam4	26° 5'44.9"S	28°57'14.5"E	1.58 Ha		CLEAN
Dam5	26° 5'30.3"S	28°56'54.4"E	0.5 Ha	36 MI	CLEAN
E-Dump	26° 5'12.82"S	28°57'33.02"E		89 ML	DIRTY
	20 0 12.02 0	20 37 33.UZ-E	2.8 Ha	190 ML	DIRTY
Continuous ADF	26° 5'44.03"S	28°56'17.45"E	583 Ha	98000 ML	DIRTY
CSY Attenuation Dam	26° 6' 10.52" S	28° 58' 37.34" E	0.3 Ha	(ash) 10 MI (water)	DIRTY
tream iversion tart)	26° 5′ 36.2" S	28° 57′ 11.9″ E	10 m wide, 2 m	Flow rate before: 100	CLEAN
ream version nd)	26° 4′ 56.9" S	28° 55' 44.9" E	deep, 3.24 km long	m <sup>3</sup> /s Flow rate after: 100 m <sup>3</sup> /s	

for the construction of ash disposal facility and its associated infrastructure on portions 5, 17 and 36 of the Farm Leeuwfontein 219IR; portions 21, 24, 25, 27, 38, 39,43 and 44 of the Farm Schoongezicht 218IR; portion 79 of the Farm Heuvelfontein 79IR within eMalahleni Local Municipality in the Mpumalanga Province, hereafter referred to as "the property".

### The project will include the following components:

- Continuation of the existing ADF in a north westerly direction;
- Increase the storage capacity of the existing Emergency-Dump;
- Construction of Pollution Control Dams, Clean Water Dams and Storm Water Management infrastructure.
- Diversion of a natural stream to accommodate the Continuous ADF footprint.
- Remedial works to an existing in-stream farm dam within Eskom's property boundary, to address the mixing of flow from the final voids of the adjacent mining operations. The dam does not form part of Eskom's Water Management System.

#### 3. SCOPE OF AUTHORISATION

- 3.1 Authorisation is granted for the expansion of ash disposal facility at Kendal Coal Power station within site co-ordinates as indicated above.
- 3.2 Authorisation of the activities is subject to the conditions contained in this authorisation, which form part of the environmental authorisation and are binding on the holder of the environmental authorisation.
- 3.3 The 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.
- 3.4 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.
- 3.5 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.

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.

### 4. NOTIFICATION OF AUTHORISATION AND RIGHT TO APPEAL

- 4.1 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.
- 4.2 The notification referred to must -
  - 4.2.1 specify the date on which the authorisation was issued;
  - 4.2.2 inform the interested and affected party of the appeal procedure provided for in Chapter7 of the Environmental Impact Assessment (EIA) Regulations, 2010:
  - 4.2.3 advise the interested and affected party that a copy of the authorisation will be furnished on request; and
  - 4.2.4 give the reasons for the decision.
- 4.3 The holder of the authorisation must publish a notice
  - 4.3.1 informing interested and affected parties of the decision;
  - 4.3.2 informing interested and affected parties where the decision can be accessed; and
  - 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.
- 4.4 The holder of the environmental authorisation must, in writing, within 12 days of the date of the decision on the application—
  - (a) notify all registered interested and affected parties of-
    - (i) the outcome of the application; and
    - (ii) the reasons for the decision;
  - (b) draw the attention of all registered interested and affected parties to the fact that an appeal may be lodged against the decision in terms of Chapter 7 of the NEMA EIA Regulations, 2010 if such appeal is available in the circumstances of the decision;

- (c) draw the attention of all interested and affected parties to the manner in which they can access the decision; and
- (d) publish a notice-
  - (i) informing interested and affected parties of the decision;
  - (ii) informing interested and affected parties where the decision can be accessed; and
  - (iii) drawing the attention of interested and affected parties to the fact that an appeal may be lodged against the decision in terms of Chapter 7 of the NEMA EIA Regulations, 2010, if such appeal is available under the circumstances of the decision; in the newspapers contemplated in regulation 54(2)(c) and (d) of the NEMA EIA Regulations, 2010 and which newspaper was used for the placing of advertisements as part of the public participation process.

### 5. MANAGEMENT OF THE ACTIVITY

- 5.1. The Environmental Management Programme (EMPr) submitted as part of the Application for EA is hereby approved. This EMPr must be implemented and adhered to.
- 5.2. Should there be changes in the operation and management of the authorised activities; the EMPr must be amended to accommodate those changes and be submitted to this Department for written approval before implementation incorporated as part of the EMPr. Once approved, the EMPr must be implemented and adhered to.
- 5.3. The approved EMPr and operational EMPr for the disposal facility 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.
- 5.4. Changes to the EMPr and the operational EMPr for the disposal facility which are environmentally defendable, shall be submitted to this Department for acceptance before such changes could be effected.
- 5.5. The Department reserves the right to request amendments to the EMPr and the operational EMPr for the disposal facility should any impacts that were not anticipated or covered in the EIR be discovered.
- 5.6. The provisions of the approved EMPr and the operational EMPr for the disposal facility 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 non-compliance with the EA.
- 5.7 The effluent management system must be managed and operated:

- 5.7.1. 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;
- 5.7.2. By sufficient persons who are competent in respect of the responsibilities to be undertaken by them in connection with the operation of the activities.
- 5.8. The holder of authorisation must maintain and ensure continued functioning of a Monitoring Committee for the normal operative lifetime of the site operational process and for a period of at least two years after the closure of the site, or at such longer period as may be determined by the Director.
- 5.9. The Monitoring Committee must formulate terms of reference and code of conduct, according to the Minimum Requirements, Second Edition 1998 by Department of Water Affairs and Forestry.
- 5.10. The Monitoring Committee must be comprised of relevant interested and affected parties.
- 5.11. The Monitoring Committee must meet at least twice a year and not later than 30 days after the external audit report specified in Condition 17.4.2 has been submitted according to Condition 17.4.2. (d).
- The holder of authorisation must keep minutes of all the meetings of the Monitoring Committee and distribute these minutes to all members of the Monitoring Committee within 14 days after the meeting.

### 6. ENVIRONMENTAL CONTROL OFFICER (ECO)

- 6.1 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.
- 6.2 The ECO must be appointed before commencement of any authorised activity.
- 6.3 Once appointed, the name and contact details of the ECO must be submitted to the Director: Compliance Monitoring of the Department.
- 6.4 The ECO must remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed and the site is ready for operation.
  - 6.4.1 The ECO must:
  - 6.4.2 Keep record of all activities on site, problems identified, transgressions noted and a schedule of tasks undertaken by the ECO.

- 6.4.3 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.
- 6.4.4 Keep and maintain a daily site diary.
- 6.4.5 Keep copies of all reports submitted to the Department.
- 6.4.6 Keep and maintain a schedule of current site activities including the monitoring of such activities.
- 6.4.7 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.
- 6.4.8 Compile a monthly monitoring report.

### WASTE MANAGEMENT CONTROL OFFICER (WMCO)

- 7.1 The applicant must designate a Waste Management Control Officer (WMCO) in writing, who will monitor and ensure compliance and correct implementation of all conditions and provisions as stipulated in the environmental authorisation and approved EMPr related to the ash disposal facility.
- 7.2 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.
- 7.3 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.

### 8. RECORDING AND REPORTING TO THE DEPARTMENT

- 8.1 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.
- 8.2 All records and/or reports required or resulting from activities relating to this environmental authorisation must:
  - 8.2.1 be legible;
  - 8.2.2 be submitted as required and must form part of the external audit report;

- 8.2.3 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
- 8.2.4 be retained in accordance with documented procedures which are approved by the Department.
- 8.3 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.
- 8.4 Records demonstrating compliance with conditions of this EA must be maintained for five years.
- 8.5 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.

### 9. ENVIRONMENTAL AUDIT REPORT FOR CONSTRUCTION

- 9.1 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.
- 9.2 The environmental audit report must:
  - 9.2.1 Be compiled by an independent environmental auditor;
  - 9.2.2 Indicate the date of the audit, the name of the auditor and the outcome of the audit;
  - 9.2.3 Evaluate compliance with the requirements of the approved EMPr and this environmental authorisation;
  - 9.2.4 Include measures to be implemented to attend to any non-compliances or degradation noted;
  - 9.2.5 Include copies of any approvals granted by other authorities relevant to the development for the reporting period;
  - 9.2.6 Highlight any outstanding environmental issues that must be addressed, along with recommendations for ensuring these issues are appropriately addressed;
- 9.2.7 Include a copy of this authorisation and the approved EMPr;
- 9.2.8 Include all documentation such as waste disposal certificates, hazardous waste landfill site licences etc. pertaining to this authorisation; and
- 9.2.9 Include evidence of adherence to the conditions of this authorisation and the EMPr where relevant such as training records and attendance records.

### 10. COMMENCEMENT OF ACTIVITIES

- 10.1 The authorised activity shall not commence within twenty (20) days of the date of signature of the authorisation.
- 10.2 An appeal under section 43 of the National Environmental Management Act (NEMA), Act 107 of 1998 (as amended), suspend an environmental authorisation or exemption, or any provisions or conditions attached thereto.
- 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.
- 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 Chief Director: Integrated Environmental Authorisations at the Department.
- The holder of this authorisation must obtain Atmospheric Emission Licence from relevant authority prior to commencement of the project should the project trigger listed activities in terms of the National Environmental Management: Air Quality Act 39 of 2004. The copy of the licence obtained must be included in the first audit submitted to the Department.

#### 11. NOTIFICATION TO AUTHORITIES

OF BUILD

- 11.1 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.
- 11.2 After construction of the site or further development within the site, the EA holder shall notify the Responsible Authority thereof and the person referred to in condition 2.5 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 EA holder and approved by the Responsible Authority is in accordance with recognised civil engineering practice and the requirements in this EA 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 EA holder may use the site or any further development within the site for the disposal of waste.

#### 12. OPERATION OF THE ACTIVITY

- 12.1 Fourteen (14) days written notice must be given to the Department that the activity operational phase will commence.
- 12.2 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.

### 13. SITE CLOSURE AND DECOMMISSIONING

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

### 14. LEASING AND ALIENATION OF THE SITE

14.1 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.

### 15. TRANSFER OF ENVIRONMENTAL AUTHORISATION

- 15.1 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.
- 15.2 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.
- 15.3 Any subsequent holder of an environmental authorisation shall be bound by conditions of this environmental authorisation.

#### 16. INVESTIGATIONS

- 16.1 If, in the opinion of the Department, pollution, nuisances or health risks may be or are occurring on the site, the holder of the environmental authorisation must initiate an investigation into the cause of the problem or suspected problem, including such investigations as identified by the Department related to the risks posed. Such investigation must include the monitoring of water quality variables at those monitoring points and at such frequency as may be specified by Director: Department of Water and Sanitation.
- 16.2 Should the investigation carried out as per conditions 16.1 above reveal any unacceptable levels of pollution, the holder of the environmental authorisation must submit mitigation measures to the satisfaction of the relevant Department.

### 17. SPECIFIC CONDITIONS RELATED TO THE DISPOSAL FACILITY

#### 17.1 Site Security and Access Control

17.1.1 The holder of the environmental authorisation must ensure effective access control to the effluent management system to prevent unauthorised entry. Weatherproof, durable and legible signs in at least three official languages applicable in the area must be displayed at each entrance to the site. The signs must indicate the risks involved in entering the site as well as the person responsible for the operation of the site.

#### 17.2 Permissible waste

- 17.2.1 Any portion of the site which has been constructed or developed according to the Class C containment barrier design in terms of Regulation 636, National Norms and Standards for Disposal of Waste to Landfill, dated 23 August 2013 and approved in writing by the competent authority may be used for the disposal of waste classified as Type 3 Waste according to Regulation 634, Waste Classification and Management Regulations, dated 23 August 2013.
- 17.2.2 Any portion of the site which has been constructed or developed according to condition 17.3 may be used for the disposal of ash waste.

### 17.3 Construction and commissioning of activities

17.3.1 Construction and further development within the proposed waste disposal site must be carried out under the supervision of a Registered Professional Engineer. Any development on the site must adhere to a Class C containment barrier design as described in Regulation 636, National Norms and Standards for Disposal of Waste to Landfill dated 23 August 2013. The design

- drawings must be approved in writing by the competent authority before construction may commence.
- 17.3.2 The holder of the authorisation must ensure that Construction Quality Assurance (CQA) takes place during construction and geosynthetic material must comply with relevant South African National specifications, or any prescribed management practice or standards which ensure relevant performance. Details of quality assurance during construction must be provided; this must also include conformation that construction will be supervised by a registered professional engineer.
- 17.3.3 After construction of the Site or further development within the Site, the holder of environmental authorisation must notify the competent authority thereof and the Registered Professional Engineer must submit a certificate or alternatively a letter to the competent authority that the construction of the Site or further development within the Site, as proposed by the holder of the authorisation and approved by the competent authority, is in accordance with recognised civil engineering practice and the requirements in this Licence, before disposal may commence on the Site. If the competent authority is satisfied with the construction of the Site or any further development within the Site and has given written permission, the holder of authorisation may use the Site or any further development within the Site for the disposal of waste.
- 17.3.4 Works must be constructed and maintained on a continuous basis by the holder of environmental authorisation to divert and drain from the Site in a legal manner, all runoff water arising on land adjacent to the Site, which could be expected as a result of the estimated maximum precipitation during a period of 24 hours with an average frequency of once in fifty (50) years (hereinafter referred to as the "estimated maximum precipitation"). Such works must, under the said rainfall event, maintain a freeboard of 800mm.
- 17.3.5 Works must be constructed and maintained on a continuous basis by the holder of authorisation to divert and drain from the working face of the Site, all runoff water arising on the Site, which could be expected as a result of the estimated maximum precipitation and to prevent such runoff water from coming into contact with leachate from the Site. Such works must, under the said rainfall event, maintain a freeboard of 800mm and be lined to the satisfaction of the competent authority, to prevent pollution to groundwater.
- 17.3.6 Runoff water referred to in Condition 17.3.5 must comply with the quality requirements of the General and Special Standard, prescribed in terms of section 21(1)(a) of the Water Act, 1956 (Act 54 of 1956) 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 competent authority and must be drained from the Site in a legal manner.

- 17.3.7 Runoff water referred to in Condition 17.3.6 which does not comply with the quality requirements applicable in terms of Condition 17.3.6 and all sporadic leachate from the Site must, by means of works which must be constructed and maintained on a continuous basis by the holder of authorisation and be lined as approved by the competent authority, to prevent pollution to groundwater
  - (i) be treated to comply with the aforementioned standard and discharged in a legal manner; and/or
  - (ii) be evaporated in lined dams as approved by the competent authority; and/or
  - (iii) be discharged into any convenient sewer if accepted by the authority in control of that sewer.
- 17.3.8 The site must be constructed in accordance with recognised civil engineering practice to ensure that it remains stable.
- 17.3.9 The slope of the sides of the Site must be constructed in such a manner that little or no erosion occurs.
- 17.3.10 The EA holder must ensure that the storage areas have firm, waterproof base and drainage system. It must be designed and managed that there is no escape of contaminants in the environment. All runoff must be prevented from entering local watercourses including wetlands.
- 17.3.11 The EA holder must ensure that the integrity of the waterproof base and walls are routinely monitored and corrective action taken before containment integrity is breached.
- 17.3.12 Any development which occurs within 1:100 year flood line and/or within 500m from the boundary of wetlands would require a water use licence in terms of section 40 of the National Water Act, 1998.

#### 17.4 Environmental auditing and reporting

#### 17.4.1 Internal Audits

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

#### 17.4.2 External Audits

(a) The holder of the environmental authorisation and approved EMPr must appoint an independent external auditor to audit the power plant bi-annually subject to the

environmental authorisation and this auditor must compile an audit report documenting the findings of the audit, which must be submitted by the holder of the environmental authorisation.

- (b) The audit report must-
  - Specifically state whether conditions and requirements related to this environmental authorisation are adhered to;
  - (ii) Include an interpretation of all available data and test results regarding the operation of the site and all its impacts on the environment;
  - (iii) Specify target dates for the implementation of the recommendations by the holder of the environmental authorisation to achieve compliance;
  - (iv) Contain recommendations regarding non-compliance or potential non-compliance and must specify target dates for the implementation of the recommendations by the holder of the environmental authorisation and whether corrective action taken for the previous audit non conformities was adequate;
  - (v) Show results graphically and conduct trend analysis; and
  - (vi) Include the information required in Annexure II.
- (c) Each external audit reports referred to in condition 17.4.2 must be submitted to the Department within 30 days from the date on which the external auditor finalised the audit.

#### 17.4.3 Reporting

- (a) The holder of the environmental authorisation must, within 24 hours, notify the Director 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 pollution of the environment, health risks, nuisance conditions or water pollution.
- (b) The holder of the environmental authorisation must, within 14 days inform the Department from the occurrence or detection of any incident referred to in condition 16.1, must within 14 days period of time specified by the Department submit an action plan, which must —
  - (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 to the satisfaction of the Department.
- (c) In the event that measures have not been implemented within 21 days of the incident, or within the time period identified by the Department, or the measures which have been implemented are inadequate, the Department may implement the necessary measures at the cost and risk of the holder of the environmental authorisation.

- (d) The holder of the environmental authorisation must keep an incident report and complaints register, which must be made available to the external auditor, representatives of this Department and Department of Water and Sanitation for the purpose of audit.
- (e) The Department must be notified as soon as the holder of this environmental authorisation becomes aware of the following incidents:
  - (i) Any malfunction, breakdown or failure of equipment or techniques, accident or fugitive emission which has caused, is causing or may cause significant pollution;
  - (ii) The breach of this environmental authorisation; and
  - (iii) Any significant adverse environmental and health effects.

### 17.5 General operation and impact management of waste management activities

- 17.5.1 Waste, which is not sewage from the authorised development, must be dealt with according to relevant legislation or the Department's policies and practices.
- 17.5.2 The holder of environmental authorisation must prevent spillages. Where the spillages occur, the holder of authorisation must ensure the effective and safe cleaning of such spillages.
- 17.5.3 The holder of environmental authorisation must prevent the occurrence of nuisance conditions or health hazards.
- 17.5.4 The holder of environmental authorisation must ensure that all personnel who work with hazardous waste are trained to deal with these potential hazardous situations so as to minimise the risks involved. Records of training and verification of competence must be kept by the Authorisation Holder.
- 17.5.5 No effluent must be discharged into any storm water drain or furrow, whether by commission or by omission.

#### 17.6 Water quality monitoring

- 17.6.1 The holder of the environmental authorisation must carry out all tests required in terms of this environmental authorisation in accordance with published laboratory analysis methods or those prescribed by and obtainable from the South African Bureau of Standards (SABS), referred to in the Standards Act, 2008 (Act 08 of 2008).
- 17.6.2 Seven pairs of monitoring boreholes must be drilled around the proposed continuous ash disposal facility. The holder of authorisation must conduct monthly monitoring of groundwater levels, groundwater quality as indicated in condition 17.6.4 purged groundwater sampling and the analytical suite for groundwater samples including determinants as per existing Water Use Licence (Licence no: 04/B20E/BCEGI/1048).

- 17.6.3 Numerical groundwater modelling and geophysical studies should be carried out to map out the geological structures, and to assist with locating the proposed new monitoring boreholes. This information must be submitted to the competent authority within 6 months from the date of issue of this environmental authorisation.
- 17.6.4 Monitoring boreholes must be equipped with lockable caps. The competent authority reserves the right to take water samples at any time and to analyse these samples or have them analysed.
- 17.6.5 Detection Monitoring
- 17.6.5.1 Groundwater and surface water quality monitoring must be conducted -
  - (a) for variables listed in Annexure III bi-annually
  - (b) for variables listed in Annexure III annually or such frequency as may be determined by the competent authority.
- 17.6.6 Liner Leak and Failure Detection Monitoring
- 17.6.6.1The leachate detection system must be monitored on a daily basis for possible leakages. Should a leak or failure be suspected or detected during monitoring or at any time, it must be regarded as an incident according to condition 17.4.3 below and be addressed to the satisfaction of the competent authority.
- 17.6.6.2Inspections of liners, where liners are accessible must be performed monthly. Liners must be repaired or replaced when inspection tests show deterioration/leakage and these corrective actions shall be performed to the satisfaction of the competent authority.
- 17.6.7 Investigative Monitoring
- 17.6.7.1 If, in the opinion of the competent authority, a water quality variable listed under the detection monitoring programme, as referred to in condition 17.6.4 shows an increasing trend, the holder of authorisation shall initiate a monthly monitoring programme.

Date of environmental authorisation: 28/07/2015

Mr Sabelo Malaza

Chief Director: Integrated Environmental Authorisations

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 September 2014;
- b) The mitigation measures included in the EIR dated September 2014; and the EMPr;
- c) The comments received from the Directorate: Authorisations & Waste Disposal Management and comments from interested and affected parties as included in the EIR dated September 2014; and
- 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).

#### 2. Conclusions

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

- a) The extension of the disposal facility will take place within the already existing ash disposal facility.
- b) The identification and assessment of impacts are detailed in the EIR dated September 2014; and sufficient assessment of the key identified issues and impacts have been completed.
- c) The procedure followed for impact assessment is adequate for the decision-making process.
- d) The proposed mitigation of impacts identified and assessed adequately curtails the identified impacts.
- e) 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.

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 environmental authorisation is accordingly granted.

#### **ANNEXURE II**

### INFORMATION WHICH SHALL BE SUBMITTED ON AN ANNUAL BASIS CONDITION 8.5

* = Indicate with an X. Ple	ease print legibly.		
NAME OF SITE:		DATE OF REPORT:(y/m/d)	
1. Registered own	er(s) of property	on which the disposal facility is situated:	
Name		Telephone	
Postal Address		Fax	
		Postal Code	
2. Operator in cont	rol of the disposa	I facility:	
Name		Telephone	
Identity number		Tel. After hours	
Educational Qualifications			
Other Relevant competencies:			
. Indicate the type	of waste and app	roximate quantities of ash treated during to	he vear:
ype of waste (Specify)		(m³ annum¹)	
OTAL			
Indicate the type of	f waste and appre	oximate quantities of ash reused, recycled	AF.
disposed of durin	g the year:		, 01
oe of waste Qua	mility (m² annum¹)	reused, treated or disposed	
TAL			
1		<u> </u>	
ne undersigned, declare tha	at the information s	stated above is to my knowledge a true refle	
us at the	effluent i	restment facility	Cuon of th
nature:	Olidoni i	reduilent lacinty.	
ne;			
acity:			
e:		Date	

#### **ANNEXURE III**

### WATER QUALITY VARIABLES REQUIRED FOR DETECTION MONITORING

Monitor at Di-annually intervals for.
Alkalinity (P.Alk)
Ammonia (NH₃-N)
Calcium (Ca)
Chemical Oxygen Demand (COD)
Chloride (CI)
Chromium (hexavelent) (Cr6+)
Chromium (Total) (Cr)
Electrical Conductivity (EC)
Fluoride (F)
Magnesium (Mg)
Nitrate (NO <sub>3</sub> -N)
pH
Potassium (K)
Sodium (Na)
Sulphate (SO <sub>4</sub> )
Total Dissolved Solids (TDS)
WATER QUALITY VARIABLES REQUIRED FOR DETECTION AND INVESTIGATIVE MONITORING
Monitor at annual intervals for:
Alkalinity (P.Alk)
Boron (B)
Cadmium (Cd)
Chemical Oxygen Demand (COD)
Biological Oxygen Demand (BOD)

Chloride (CI)

# Department of Environmental Affairs Environmental Authorisation Reg. No. 14/12/16/3/3/3/63 & DEA/EIA/0001508/2012

Chromium (hexavalent) (Cr6+)		
Chromium (Total) (Cr)		
Cyanide (CN)		
Electrical Conductivity (EC)		
Fluoride (F)		
Free and Saline ammonia as N (NH4-N)		
Lead (Pb)		
Magnesium (Mg)		
Mercury (Hg)		
Nitrate (NO <sub>3</sub> -N)		
рН		
Phenolic Compounds (Phen)		
Potassium (K)		
Sodium (Na)		
Sulphate (SO <sub>4</sub> )		
Total Dissolved Solids (TDS)		
Total Organic Carbon (TOC)		
Fotal Organic Halogen (TOX)		
olatile Organic Compounds		

# APPENDIX 3 PROOF OF PAYMENT/ MOTIVATION FOR EXCLUSION



Mr. S Malaza

Chief Director: Integrated Environmental Authorization

Department of Environmental Affairs

Private Bag X447

Pretoria 0001 Date:

9 November 2018

Enquiries: Emmy Molepo

Tel +27 11 800 4211

Our Ref No: ENV18 - L300

DEA Ref: 14/12/16/3/3/3/63

Dear Mr. Malaza

AMENDMENT APPLICATION FOR THE KENDAL ASH DISPOSAL FACILITY SPR: MOTIVATION FOR FEE APPLICATION EXCLUSION MADE BY AN ORGAN OF STATE

Eskom hereby confirms that it is a State Owned Company and the company is excluded from paying the application fees for the Environmental Authorization and Amendments in terms of regulation 3 of "National Environmental Management Act, 1998 (Act no. 107 of 1998). Fees for consideration and processing of applications for Environmental Authorisations and Amendments thereto" which were published on 28 February 2014 in the Government Gazette No.37383.

Eskom was established in South Africa in 1923 as the Electricity Supply Commission. In July 2002, it was converted into a public, limited liability company, wholly owned by government. The constitutional definition of `organ of state' makes it clear that other institutions and functionaries are organs of state on the basis of what they are and others by virtue of the functions they are engaged in.

Eskom is one of the top 20 utilities in the world by generation capacity (net maximum self-generated capacity: 41 194MW). Eskom generates approximately 95% of the electricity used in South Africa and approximately 45% of the electricity used in Africa. Eskom directly provides electricity to about 45% of all end-users in South Africa. The other 55% is resold by redistributors (including municipalities).

### Amendment application for the Kendal ash disposal facility SPR

Eskom applies for exclusion from payment of the fees applicable to Kendal Power Station ash disposal facility SPR amendment application, since it is a State Owned Company.

Yours sincerely

Deidre Herbst

ESKOM ENVIRONMENTAL MANAGER

SUSTAINABILITY DIVISION: ENVIRONMENTAL MANAGEMENT

### APPENDIX 4 LIST OF LAND OWNERS

# APPENDIX 5 DECLARATION OF THE EAP declare that -

I act as the independent environmental assessment practitioner in this application;

I have expertise in conducting environmental impact assessments, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;

I will comply with the Act, Regulations and all other applicable legislation;

 I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;

 I will take into account, to the extent possible, the matters listed in Regulation 14 of the Regulations when preparing the application and any report relating to the application;

I undertake to disclose to the applicant and the Competent Authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the Competent Authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the Competent Authority, unless access to that information is protected by law, in which case it will be indicated that such information exists and will be provided to the Competent Authority;

I will perform all obligations as expected from an environmental assessment practitioner in terms of the Regulations;

 I am aware of what constitutes an offence in terms of Regulation 48 and that a person convicted of an offence in terms of Regulation 48(1) is liable to the penalties as contemplated in Section 49B of the Act.

### Disclosure of Vested Interest (delete whichever is not applicable)

Signature of the environmental assessment practitioner  Zitholele Consulting (Pty) Ltd.  Name of company:  12/11/2018	•	<ul> <li>I do not have and will not have any vested interest (either business, financial, personal or other) in the proposed activity proceeding other than remuneration for work performed in terms of the Regulations;</li> </ul>	
Zitholele Consulting (Pty) Ltd. Name of company: 12/11/2018	-•	-I have a vested interest in the proposed activity proceeding, such vested interest being:	
Zitholele Consulting (Pty) Ltd. Name of company: 12/11/2018			
Zitholele Consulting (Pty) Ltd. Name of company: 12/11/2018			
Zitholele Consulting (Pty) Ltd.  Name of company:  12/11/2018	Signa	ature of the environmental goods and the	
12/11/2018		Zitholele Consulting (Ptu) Ltd	
	 Date	12/11/2018	

### UNDERTAKING UNDER OATH/ AFFIRMATION

I, <u>Mathys Vosloo</u> , swe submitted for the purposes of this application is true	ar under oath / affirm that all the information submitted or to be and correct.
Signature of the environmental assessment practition	ner
Zitholele Consul	ting (Pty) Ltd.
Date 12   11   2018	
Signature of the commissioner of oaths  12/11/2018  Date	I certify that the DEPONENT has acknowledged that he/she knews and understands the contents of this affidavit, that he/she does not have any objection to taking the oath, and that he/she considers it to be binding on his/her conscience, and which was sworn to and signed before me at Micros on this day of 20.00  administering oath complied with the regulations contains time Government Gazette No. R1258 of July 1972, as amended.  Signature:  COMMISSIONER OF OATHS  C. Venter  Ex Officio - GTP (SA)  Commissioner of Oaths (BSA)  Building 1, Magwa Cresent  Maxwell Office Park, onr Allandale Roau & Maxwell Drive, Waterfall City, Midrand
, s	