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DEA Reference: 12/12/20/21/75 Enquiries: Samkelisiwe Dlamini

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Mr Diedre Herbst
Eskom Holding SOC Limited
P.O. Box 1091
SUNNINGHILL
2000

Tel no: 011 800 3501

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PER FACSIMILE / MAIL

Dear Mr Herbst

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 2010: GN R.544, GN R.545 AND GN R.546: EXTENSION OF ASH DAMS AT HENDRINA POWER STATION, 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 post: Private Bag X447,

Pretoria, 0001; or

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:

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 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 Sabelo Malaza

Chief Director: Integrated Environmental Authorisations

Department of Environmental Affairs

Date: 26/04/20/6

CC:	Ms Ntombenhle Mkhize	Eskom Holding SOC Limited	e-mail: <u>HerbstDL@eskom.co.za</u>
	Mr Mandla Mnguni	Steve Tshwete Local Municipality	e-mail: mmoffice@stlm.gov.za

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

	APPLICANT		INTERESTED AND AFFECTED PARTIES (IAPs)
1.	Receive EA from the relevant Competent Authority (the Department of Environmental Affairs [DEA])	1.	Receive EA from Applicant/Consultant
2.	Within 12 days of date of the EA notify all IAPs of the EA and draw their attention to their right to appeal against the EA in terms of Chapter 7 of the Regulations.	2.	N/A
3.	If you want to appeal against the EA, submit a notice of intention to appeal within 20 days of the date of the EA. with the Minister of Environmental Affairs (the Minister).	3.	If you want to appeal against the EA, submit a notice of intention to appeal within 20 days of the date of the EA. with the Minister of Environmental Affairs (the Minister).
4.	After having submitted your notice of intention to appeal to the Minister, provide each registered IAP with a copy of the notice of intention to appeal within 10 days of lodging the notice	4.	After having submitted your notice of intention to appeal to the Minister, provide the applicant with a copy of the notice of intention to appeal within 10 days of lodging the notice
5.	 The Applicant must also serve on each IAP: 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.
6.	The appeal must be submitted in writing to the Minister within 30 days after the lapsing of the period of 20 days provided for the lodging of the notice of intention to appeal.	6.	The appeal must be submitted to the Minister within 30 days after the lapsing of the period of 20 days provided for the lodging of the notice of intention to appeal.
7.	Any IAP who received a notice of intention to appeal may submit a responding statement to that appeal to the Minister within 30 days from the date that the appeal submission was lodged with the Minister.	7.	An Applicant who received notice of intention to may submit a responding statement to the appeal to the Minister within 30 days from the date that the appeal submission was lodged with the Minister.

NOTES:

1. An appeal must be:-

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



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 29 November 2013

The expansion of ash disposal facilities at the Hendrina Power Station Mpumalanga Province

Nkangala District Municipality

Authorisation register number:	12/12/20/2175	
Last amended:	First Issue	
Holder of integrated authorisation:	Eskom Holding SOC Limited	
Location of activities:	Boschmanskop 154 IS portion 8 within th	
	Steve Tshwete Local Municipality	

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

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 921 of 29 November 2013 the Department hereby authorises

ESKOM HOLDINGS SOC LIMITED

with the following contact details -

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(086) 660 6092

E-mail:

HerbstDL@eskom.co.za

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

Listed activities	Activity/Project			
	description			
GN R. 544 Item 9	The activity will be			
The construction of facilities or infrastructure exceeding 1000 meters in	applicable for the water			
the length for the bulk transportation of water, sewage or storm water	reticulation clean/dirty			
(i) with an internal diameter of 0.36 metres or more; or (ii) with a peak	water systems at the ADF.			
throughput of 120 litres per second or more				
GN R. 544 Item 10:	The construction of			
The construction of facilities or infrastructure for the transmission and	facilities or infrastructure			
distribution of electricity	for the transmission and			
(i) Outside urban areas or industrial complexes with a	distribution of electricity			
capacity of more than 33 but less than 275 kilovolts;	outside urban area or			
	industrial complexes with a			
	capacity of more than 33			
	but less than 275kV will			
	apply to the infrastructure			
	associated with the ADF.			
GN R. 544 Item 11:	The ash disposal facility			
The construction of infrastructure or structures covering 50 square	has a footprint of			
metres or more where such construction occurs within a watercourse or	approximately 139			
within 32 metres of a watercourse.	hectares and will span			
	across several identified			
	wetlands.			
GN R. 544 Item 18:	Topsoil will be removed			
The infilling or depositing of any material or more than 5 cubic metres	from the identified wetland			
into, or the dredging, excavation, removal or moving of soil, sand,	areas and the ash will be			
shells, shell grit, pebbles or rock of more than 5 cubic metres from	disposed in these areas.			
(i) A watercourse				
GN R. 544 Item 27:	The decommissioning of			
The decommissioning of existing facilities or infrastructure, for –	existing facilities or			
(ii) Electricity transmission and distribution with a threshold or more	infrastructure, for –			
than 132kV				

Listed activities	Activity/Project
	description
	(ii) Electricity
	transmission and
	distribution with a
	threshold or more than
	132kV will apply to the
	power lines that needs to
	be re-routed in order to
	make space for the ADF.
GN R. 544 Item 28:	The extension of ashing
The expansion of or changes to existing facilities for any process or	facilities at Hendrina power
activity where such expansion or changes to will result in the need for a	station will result in
permit or license in terms of national or provincial legislation governing	amendments to the
the release of emissions or pollution, excluding where the facility,	Atmospheric Emissions
process or activity is including in the list of waste management activities	Licence and the Water use
published in terms of section 19 of the National Environmental	Licence, among others.
Management: Waste Act, 2008 (Act No. 59 of 2008) in which case that	
Act will apply.	
GN R. 544 Item 37:	This activity will apply to
The expansion of facilities or infrastructure for the bulk transportation of	the water reticulation
water, sewage or storm water where:	infrastructure and the
(a) The facility or infrastructure is expanded by more than 1000	system to convey the ash
metres in length; or	to the facility.
(b) Where the throughput capacity of the facility or infrastructure	
will be increased by 10% or more	
GN R. 544 Item 39:	The expansion of the
The expansion of	existing infrastructure will
(i) Canals	take place within the
(ii) Channels	identified wetland areas.
(iii) Bulk water outlet structures	Such infrastructure
	includes channels, canals
	and dams.

Listed activities	Activity/Project
	description
Within a watercourse or within 32 metres of a watercourse, measured	
from the edge of a watercourse, where such expansion will result in an	
increased development footprint.	
GN R. 544 Item 47 :	Roads that form part of the
The widening of a road by more than 6 metres or the lengthening of a	service infrastructure
road by more than 1 kilometre	around the facility will be
(i) Where the existing reserve is wider than 13.5 meters; or	expanded to
(ii) Where no reserve exists, where the existing road is wider than 8	accommodate the
metres	expanded facility by more
	than 1 kilometre.
GN R. 545 Item 6	This activity will apply to
The construction of facilities or infrastructure for the bulk transportation	the extension of the ash
of dangerous goods in solid form, outside an industrial complex, using	delivery system to the new
funiculars or conveyors with a throughput capacity of more than 50 tons	area.
per day	
GN R. 545 Item 8	The combined capacity of
The construction of facilities or infrastructure for the transmission and	the power lines that will be
distribution of electricity with a capacity of 275 kV or more, outside an	rerouted exceed this
urban area or industrial complex	threshold.
GN R. 545 Item 15	Physical alteration of
Physical alternation of undeveloped, vacant or derelict land for	undeveloped, vacant or
residential, retail, commercial, recreational, industrial or institutional	derelict land for industrial
use, where the total area to be transformed is 20 hectares or more	(the disposal of as) use,
	where the total area to be
	transformed is 20 hectares
	or more.
	The stange of hemordays
GN R.921, Category B:	The storage of hazardous
GN R.921, Category B: Item 1: The storage of hazardous waste in lagoons excluding	waste in lagoons.

Listed activities	Activity/Project		
	description		
GN R.921, Category B:	The disposal of any		
ltem 7: The disposal of any quantity of hazardous waste to land	quantities of hazardous		
	waste to land. According to		
	NEMWA ash is classified		
	as type 3 hazardous.		
	waste.		
GN R.921, Category B:	The ADF and associated		
Item 10: The construction of a facility for a waste management	infrastructure would have		
activity listed in Category B of this Schedule (not in isolation to	to be constructed before		
associated waste management activity)	the disposal processes		
	can take place.		

as described in the Environmental Impact Report (EIR) dated July 2015 at:

Hendrina Power Station		Latitude	Longitude
Wet ash disposal site		26°2'39.76"S	29°35'29.82"E
Preferred powerline alternative E	A	26° 2'42.91"S	29°35'53.89"E
(All corners from Start to end)	В	26° 3'18.84"S	29°35'19.11"E
	С	26° 3'7.91"S	29°34'41.53"E
	D	26° 2'46.75"S	29°34'43.02"E
	E	26° 2'21.94"S	29°34'48.29"E
	G	26° 1'58.77"S	29°35'5.91"E
	F	26° 1'59.78"S	29°35'14.96"E

- for the extension of ash disposal dams at Hendrina Power Station within Steve Tshwete Local Municipality in Mpumalanga hereafter referred to as "the property".

The project will include the expansion and the associated infrastructure for the ashing system, including:

- Ash water return dams;
- Ash and ash water return pipelines;

- solution trenches;
- Pump stations;
- Seepage recovery dam;
- Seepage water collection system;
- Re-routing of a 132kV powerline; and
- Access roads.

SCOPE OF AUTHORISATION

- 1. Authorisation for the extension of ash disposal dams and the re-routing of a 132kV powerline at the Hendrina Power Station with coordinates as indicated above for Eskom Holding 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 three (3) years from the date of issue. If commencement of the activity does not occur within that period, the environmental authorisation lapses and a new application for an environmental authorisation must be made for the activities to be undertaken. Commencement with one activity listed in terms of this authorisation constitutes commencement of all authorised activities.
- 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 5 (regulation 28 - 33) of the NEMA EIA Regulations, 2014 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 EMPr and operational EMPr for the extension of the ash dams 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 EMPr and the operational EMPr for the extension of the ash dams which are environmentally defendable, 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 EMPr and the operational EMPr for the extension of the ash dams should any impacts that were not anticipated or covered in the EIR be discovered.
- 9. The provisions of the approved EMPr and the operation EMPr for the extension of the ash dams 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 extension of the ash dams must be managed and operated:
- 10.1. In accordance with an approved EMPr, 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.
- 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.

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- 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) in writing, 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 integrated waste management facility.
- 16. The WMCO must report any non-compliance with any environmental authorisation conditions or requirements or provisions of NEMWA to the Department through whatever 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 EMPr 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 EMPr.
- 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 EMPr 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. In terms of section 43(7), an appeal under section 43 of the National Environmental Management Act, 1998 will suspend the environmental authorisation or any provision or condition attached thereto. In the instance where an appeal is lodged you may not commence with the activity until such time that the appeal has been finalised.

Notification to authorities

26. 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

- 27. Fourteen (14) days written notice must be given to the Department that the activity operational phase will commence.
- 28. 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

29. 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

30. 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.

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Should the approval be granted, the subsequent holder of the environmental authorisation shall remain liable to compliance with all the environmental authorisation conditions.

Transfer of environmental authorisation

- 31. 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.
- 32. Should the transfer of holdership 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.
- 33. Any subsequent holder of an environmental authorisation shall be bound by conditions of this environmental authorisation.

Investigations

34. 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

Permissible Waste

- 35. 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 in accordance to Regulation 634, Waste Classification and Management Regulations, dated 23 August 2013.
- 36. The holder of the environmental authorisation must take all steps to ensure that only waste classified, accepted and treated as indicated in the conceptual design report and drawing for the Hendrina Power Station dated 17 February 2015 as prepared by Alan Robison Consulting Civil & Geotechnical Engineers may be disposed on site.

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Construction

- 37. The site or any portion thereof may only be used for the disposal of permissible waste if the site or any such portion has been constructed or developed according to the conditions listed in this environmental authorisation
- 38. The expansion of the existing waste disposal site must be carried out under supervision of a Registered Professional Engineer, registered under the Engineering Profession of South Africa Act, 2000 (act 46 of 2000).
- 39. The expansion of the existing waste disposal site must be in accordance with the approved drawings, any development in the proposed site shall adhere to 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 reports, drawing and liners must be approved in writing by the Chief Director: Integrated Environmental Authorisation before construction and commencement of disposal.
- 40. The holder of the environmental authorisation must present a waste barrier, ash water return and service life prediction design aspects to the Chief Director: Integrated Environmental Authorisation for approval.
- 41. The holder of the environmental authorisation must ensure that construction quality assurance (CQA) takes place during construction; all construction 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.
- 42. Upon completion of further development within the site, the holder of the 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 environmental authorisation and approved by the Chief Director: Integrated Environmental Authorisation, is in accordance with recognised civil engineering practice and the requirements in this environmental authorisation, before disposal may commence on the site. If the Chief Director: Integrated Environmental Authorisation is satisfied with the construction of the site or any further development within the site and has given written permission, the holder of the environmental authorisation may use the site or any further development with the site for the disposal of waste.
- 43. Works must be constructed and maintained on a continuous basis by the holder of an 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 min fifty (50) years (hereinafter referred to as the

- estimated maximum precipitation). Such works must, under the said rainfall event, maintain a freeboard of 0.8 metre above full supply level.
- 44. Works must be constructed and maintained on a continuous basis by the holder of an environmental 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 0.8 metre and be lined to the satisfaction of the competent authority, to prevent pollution to groundwater.
- 45. The slope of the site shall be constructed in such a manner that little or no erosion occurs and ensures that no damming is occurring.
- 46. Any development which occurs within 1:100 year flood line and/or within 500m from the boundary of wetland would require water use licence in terms of section 40 of the National Water Act, 1998 (Act 36 of 1998).

Water Quality Management

- 47. Runoff management
- 47.1. All runoff water (storm water) arising as a results of precipitation on land adjacent to the site must be prevented and diverted from entering the site and drained from the site.
- 47.2. Runoff referred to in condition 44 must comply with the quality requirements if 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 Chief Director: Integrated Environmental Authorisation and must be drained from the site in a legal manner.
- 47.3. Runoff water referred to in condition 44 which does not comply with the quality requirements as prescribed by the Chief Director: Integrated Environmental Authorisation which may be determined from time to time and shall be drained from the site.
- 47.4. Runoff water referred to in condition 44 does not comply with the quality requirements applicable in terms of condition 47.2 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 the environmental authorisation and be lined as approved by the Chief Director: Integrated Environmental Authorisation, to prevent pollution to ground water —
- 47.4.1. Be treated to comply with the aforementioned standard and discharged in a legal manner; and/or
- 47.4.2. Be evaporated in lined dams as approved by the Chief Director: Integrated Environmental Authorisation; and/or

47.4.3. Be discharged into any convenient sewer accepted by the authority in control of that sewer.

Monitoring

- 48. Water Quality Monitoring
- 48.1. The holder of the environmental authorisation must ensure that the following information is submitted to the Chief Director: Integrated Environmental Authorisation prior to the construction of the site.
- 48.1.1. A groundwater monitoring programme and network must be established up gradient and down gradient of the site which must be maintained by a Groundwater speciality so that unobstructed sampling can take place.
- 48.1.2. A surface water monitoring plan for all the identified water resources within the site which must be done in consultation with the Chief Director: Integrated Environmental Authorisation.
- 48.1.3. A geohydrological report which includes a hydrocensus and geophysical study.
- 48.2. Monitoring boreholes must be equipped with lockable caps. The Chief Director: Integrated Environmental Authorisation reserves the right to take the water samples at any time and to analyse these samples or have them analysed
- 49. Detection Monitoring
- 49.1. Ground water and surface water quality monitoring must be conducted -
 - (a) for variables listed in Annexure III bi-annually
 - (b) for variables listed in Annexure IV quarterly
- 49.2. Liner leak and failure detection monitoring
- 49.2.1. The 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 55 below and be addressed to the satisfaction of the Chief Director: Integrated Environmental Authorisation.
- 49.2.2. Inspections of liners, where lines 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 Chief Director: Integrated Environmental Authorisation.
- 49.3. Investigative Monitoring
- 49.3.1. If, in the opinion of the Chief Director: Integrated Environmental Authorisation, a water quality variable listed under the detection monitoring programme, as referred to in condition 49, shows an increasing trend, the holder of authorisation shall initiate a monthly monitoring programme or perform any corrective measures as required by the Chief Director: Integrated Environmental Authorisation.

Methods of analysis

- 50. The holder of the environmental authorisation shall carry out all tests in accordance with methods prescribed by and obtainable from the South African Bureau of Standards (SABS), referred to in the Standards Act, 2008 (Act 08 of 2008), analyse the samples taken under the monitoring programmes specified under monitoring above (condition 48 and 49).
- 51. The holder of the environmental authorisation shall only use another method of analysis if written proof that the method is at least equivalent to the SABS method, is submitted to the Chief Director: Integrated Environmental Authorisation.

Auditing

- 52. Departmental audits and inspections
- 52.1. The Department reserves the right to audit and/or inspected the site at any time and at such frequency as the Department may decide, or to have the site audited or inspected.
- 52.2. The holder of the environmental authorisation must take any records or documentations available to the Department upon request, as well as any other information the Department may require.

53. Internal Audits

53.1. Internal audits must be conducted quarterly by the holder of the environmental authorisation and 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 54 below.

54. External Audits

- 54.1. The holder of the environmental authorisation must appoint an independent external auditor to audit the site bi-annually and the auditor must compile and audit report documenting the findings of the audit, which must be submitted by the holder of the environmental authorisation.
- 54.2. The audit report must-
- Specifically state compliance and no-compliance with condition of this environmental authorisation;
- (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 targets dates for the implementation of the recommendations by the holder of the environmental authorisation to achieve compliance;
- (iv) Contain recommendations regarding non-compliances or potential non-compliance;
- (v) Specify whether corrective action taken for the previous audit non conformities was adequate; and
- (vi) Show monitoring results graphically and conduct trend analysis

54.3. The audit report must be finalised within sixty days of the finalisation of the external audit. Each external audit report must be submitted to the Director: Compliance Monitoring within 30 days from the date on which the external auditor finalised the audit report.

Reporting

- 55. Reporting of Incidents
- 55.1. The holder of the environmental authorisation must, within 24 hours, notify the Department of the occurrence or detection of any incident on the site, which has the potential to cause, or has caused pollution of the environmental, health risks, nuisance conditions or water pollution.
- 55.2. The holder of the environmental authorisation must, within 14 days, or a shorter period of time, if specified by the Department, from the occurrence or detection of any incident referred to in condition 55.1, submit an action plan, which shall include a detailed time schedule, to the satisfaction of the Department of measures take to
 - a) Correct the impact resulting from the incident;
 - b) Prevent the incident from causing any further impact; and
 - c) Prevent a recurrence of a similar incident.
- 55.3. 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 55.1, or measures which have been implemented are inadequate, the Department may implement the necessary measures at the cost and risk of the holder of environmental authorisation.

Other Reports

- 56. The information required in terms of monitoring (condition 48 and 49) must be reported to the Department in a yearly report. The information must be included into a trend report, which must contain a graphic presentation of all results obtained 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.
- 57. The holder of the environmental authorisation must submit a written report to the competent authority if any deviations from plans described in this environmental authorisation and must obtain written permission from the Department before such deviations may be implemented.

Date of environmental authorisation: 25/04/2016

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 July 2015;
- b) The mitigation measures included in the EIR dated July 2015 and the EMPr;
- c) The information contained in the specialist studies contained within EIR dated July 2015;
- d) The comments received from the Directorate: Licencing and comments from interested and affected parties as included in the EAIR dated July 2015; and
- e) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998).

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 July 2015 and sufficient assessment of the key identified issues and impacts have been completed.
- b) The procedure followed for impact assessment is adequate for the decision-making process.
- c) The proposed mitigation of impacts identified and assessed adequately curtails the identified impacts.
- d) 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 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 le	gibly.	_	<u>.</u>	
NAME OF SITE:		DATE OF REPORT:(y/m/d)			
Registered own	er(s) of proper	ty on which	n the waste manag	ement facility is sit	uated:
Name				Telephone	
Postal Address				Fax	
				Postal Code	
2. Operator in con	trol of the was	te manager	nent facility:		
Name				Telephone	
Identity number				Tel. After hours	
Educational Qualificatio	ns				
Other Relevant compete	encies:				
3. Indicate the type	of waste and	approxima	te quantities of wa	ste disposed durin	g the year:
Type of waste (Specify)		Quantity (n ³ annum ⁻¹)		
	· .	+			
TOTAL		+			 -
4. Indicate the type	of waste and	approximat	te quantities of wa	ste diverted for reu	se and
recycling during					oo ana
Type of waste	Quantity (m	³ annum ⁻¹)	reused, treated or o	disposed	
					-
TOTAL					
l, the undersigned, de				ny knowledge a true	reflection of the
Signature:					
Name:					
Capacity:	-				
-					
Place:			Da		-6
	This form may	/ be obtained	electronically from the l	Department.	

ANNEXURE III

WATER QUALITY VARIABLES REQUIRED FOR DETECTION MONITORING

Monitor at bi-annual intervals for:
Alkalinity (P.Alk)
Aluminum (Al)
Chloride (CI)
Electrical Conductivity (EC)
Nitrate (No ₃₋ N)
Nitrite (NO ₂₎
pH
Pottasium (K)
Total Dissolved Solids (TDS)
Sodium (Na)
Calcium (Ca)
Flouride (F)
Magnesium (Mg)
Sulphate (SO ₄)
Chromium Chromium (Total) (Cr)
Dissolved Oxygen
Iron (Fe)
Manganese (Mn)
Mercury (Hg)
Selenium
Silicon (si)
Total Phosphorus

ANNEXURE IV

WATER QUALITY VARIABLES REQUIRED FOR DETECTION AND INVESTIGATIVE MONITORING

Monitor at bi-annual intervals for:
Chromium
Electrical Conductivity (EC)
Iron (Fe)
Manganese (Mn)
Selenium
Sodium (Na)
Sulphate (SO ₄)

Total Dissolved Solids (TDS)