water & sanitation
Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

Private Bag X313, Pretoria, 0001, Sedibeng Building, 185 Francis Baard Street, Pretoria, Tel:(012) 336-7500
Fax: (012) 323-4472 / (012) 326-2715

LICENCE IN TERMS OF CHAPTER 4 OF THE NATIONAL WATER ACT, 1998 (ACT NO. 36 OF 1998) (THE ACT)

I, ***Sipho Skosana,*** in my capacity as ***Chief Director: Water Use Licence Management (CD: WULM)***, acting under authority of the powers delegated to me by the Director-General of the Department of Water and Sanitation hereby authorise the following water uses in respect of this licence.

SIGNED: .....

DATE: 31/03/2023

LICENCE NUMBER: 04/B20G/ACFGIJ/2538
FILE NUMBER: 27/2/2/B720/37/1
WUA NUMBER: WU21360

1. **Licensee:** NEW LARGO COAL (PTY) LTD
   Postal Address: 15 CHAPLIN ROAD
   ILLOVO
   2196

B09425

2. Water Uses authorised by this licence

Table 1: Summary of Authorised water use activities

2.1	Section 21(a) of the Act	Taking water from a water resource, subject to the conditions set out in Appendices I and II.
2.2	Section 21(c) of the Act	Impeding or diverting the flow of water in a water course, subject to the conditions set out in Appendices I and III.
2.2	Section 21(f) of the Act	Discharging waste or water containing waste into a water resource, subject to the conditions set out in Appendices I and IV.
2.3	Section 21(g) of the Act	Disposing of waste in a manner which may detrimentally impact on a water resource, subject to the conditions as set out in Appendices I and V.
2.4	Section 21(i) of the Act	Altering the bed, banks, course, or characteristics of a watercourse subject to the conditions set out in Appendices I and III.
2.5	Section 21(j) of the Act	Removing, discharging, or disposing of water found underground, subject to the conditions set out in Appendices I and VI.

3. Property (ies) in respect of which the water use licence is issued

Table 2: Property details where the water uses (s) will take place

Activity	Farm Name	Farm Portion	Owner`s Name	Title deed number
Section 21 (a)	Klipfontein 566 JR	Portion 17	New Largo Coal (Pty) Ltd	T10424/2019
	Klipfontein 566 JR	Remaining Extent of Portion 4	New Largo Coal (Pty) Ltd	T10424/2019
	Vlakfontein 569 JR	Remaining Extent of Portion 1	Truter Boerdery Trust	T53735/1999
	Heuvelfontein 215 IR	Portion 75	Truter Boerdery Trust	T2017/1999

Activity	Farm Name	Farm Portion	Owner`s Name	Title deed number
	Heuvelfontein 215 IR	Portion 36	Truter Boerdery Trust	T104980/1997
	Van Dyksput 214 IR	Portion 4	Truter Boerdery Trust	T104981/1997
	Heuvelfontein 215 IR	Portion 52	Truter Boerdery Trust	T104980/1997
Section 21 (c) and (i)	Honingkrantz 536 JR	Portion 1	Anglo American Inyosi Coal (Pty) Ltd	T7182/2011
	Roodepoortje 326 JS	Remaining Extent of Portion 1	New Largo Coal (Pty) Ltd	T8588/2019
	Roodepoortje 326 JS	Portion 13	New Largo Coal (Pty) Ltd	T8588/2019
	Hartbeesfontein 537 JR	Remaining Extent	New Largo Coal (Pty) Ltd	T10424/2019
	Klipfontein 566 JR	Portion 59	New Largo Coal (Pty) Ltd	T10424/2019
	Klipfontein 566 JR	Remaining Extent of Portion 1	Anglo American Inyosi Coal (Pty) Ltd	T7182/2011
	Klipfontein 566 JR	Remaining Extent	New Largo Coal (Pty) Ltd	T10424/2019
	Klipfontein 566 JR	Portion 1	New Largo Coal (Pty) Ltd	T10424/2019
	Klipfontein 566 JR	Portion 12	New Largo Coal (Pty) Ltd	T10424/2019
	Klipfontein 566 JR	Remaining Extent of Portion 5	New Largo Coal (Pty) Ltd	T10424/2019
	Klipfontein 568 JR	Portion 34	New Largo Coal (Pty) Ltd	T10424/2019
	Klipfontein 568 JR	Remaining Extent of Portion 6	New Largo Coal (Pty) Ltd	T10424/2019

Activity	Farm Name	Farm Portion	Owner`s Name	Title deed number
		Portion 31	Kendal Poultry Farm Pty Ltd	T15024/1984
	Vlakfontein 569 JR	Remaining Extent of Portion 2	Anglo American Inyosi Coal (Pty) Ltd	T7182/2011
	Vlakfontein 569 JR	Portion 9	Anglo American Inyosi Coal (Pty) Ltd	T7182/2011
	Klipfontein 568 JR	Portion 7	Truter Boerdery Trust	T53745/1999
	Vlakfontein 569 JR	Portion 10	Truter Boerdery Trust	T53735/1999
	Klipfontein 568 JR	Portion 13	New Largo Coal (Pty) Ltd	T8472/2019
	Klipfontein 568 JR	Portion 12	New Largo Coal (Pty) Ltd	T8472/2019
	Klipfontein 568 JR	Portion 14	Anglo American Inyosi Coal (Pty) Ltd	T7182/2011
	Klipfontein 568 JR	Portion 15	New Largo Coal (Pty) Ltd	T8472/2019
	Klipfontein 568 JR	Portion 16	New Largo Coal (Pty) Ltd	T10424/2019
	Klipfontein 568 JR	Portion 11	New Largo Coal (Pty) Ltd	T10424/2019
	Klipfontein 568 JR	Portion 17	New Largo Coal (Pty) Ltd	T10424/2019
	Heuvelfontein 215 IR	Portion 75	Truter Boerdery Trust	T2017/1999
	Heuvelfontein 215 IR	Portion 37	Truter Boerdery Trust	T53741/1999
	Bankfontein 216 IR	Remaining Extent	Truter Boerdery Trust	T13322/1998
	Klipfontein 566 JR	Remaining Extent Portion 13	Terra-Nova Trust	T333556/2007
	Klipfontein 566 JR	Portion 66	New Largo Coal (Pty) Ltd	T10424/2019

Activity	Farm Name	Farm Portion	Owner`s Name	Title deed number
	Klipfontein 566 JR	Portion 4	New Largo Coal (Pty) Ltd	T10424/2019
	Prinshof 2 IS	Portion 6	Truter Boerdery Trust	T53753/1999
	Bankfontein 216 IR	Portion 11	Truter Boerdery Trust	T11033/2010
	Vlakfontein 569 JR	Portion 1	Truter Boerdery Trust	T53753/1999
	Vlakfontein 569 JR	Portion 4	Truter Boerdery Trust	T53745/1999
	Klipfontein 568 JR	Portion 18	TBT Boerdery Pty Ltd	T7517/2017
	Heuvelfontein 215 IR	Portion 57	Truter Boerdery Trust	T104980/1997
	Van Dyksput 214 IR	Portion 4	Truter Boerdery Trust	T104981/1997
Section 21 (f)	Vlakfontein 569 JR	Portion 1	Truter Boerdery Trust	T53735/1999
	Klipfontein 568 JR	Portion 12	New Largo Coal (Pty) Ltd	T8472/2019
Section 21 (g)	Klipfontein 566 JR	Remaining Extent	New Largo Coal (Pty) Ltd	T10424/2019
	Hartebeesfontein 537 JR	Portion 6	New Largo Coal (Pty) Ltd	T10424/2019
	Hartbeesfontein 537 JR	Remaining Extent	New Largo Coal (Pty) Ltd	T10424/2019
	Klipfontein 566 JR	Portion 59	New Largo Coal (Pty) Ltd	T10424/2019
	Klipfontein 566 JR	Portion 60	Anglo American Inyosi Coal (Pty) Ltd	T7182/2011
	Klipfontein 566 JR	Remaining Extent of Portion 13	Terra-Nova Trust	T333556/2007
	Klipfontein 566 JR	Remaining Extent Portion 1	Anglo American Inyosi Coal (Pty) Ltd	T7182/2011
	Klipfontein 566 JR	Portion 66	New Largo Coal (Pty) Ltd	T10424/2019
	Klipfontein 568	Remaining	Anglo American Inyosi	T7182/2011

Activity	Farm Name	Farm Portion	Owner`s Name	Title deed number
	JR	Extent	Coal (Pty) Ltd	
	Vlakfontein 569	Remaining Extent	Truter Boerdery Trust	T53735/1999
	Prinshof 2 IS	Remaining Extent	Truter Boerdery Trust	T53742/1999
	Heuvelfontein 215 IR	Portion 75	Truter Boerdery Trust	T2017/1999
	Heuvelfontein 215 IR	Portion 57	Truter Boerdery Trust	T104980/1997
	Klipfontein 568 JR	Portion 12	New Largo Coal (Pty) Ltd	T8472/2019
	Klipfontein 568 JR	Portion 18	TBT Boerdery Pty Ltd	T7517/2017
	Van Dyksput 214 IR	Portion 4	Truter Boerdery Trust	T104981/1997
	Klipfontein 568 JR	Portion 16	New Largo Coal (Pty) Ltd	T10424/2019
	Prinshof 2 IS	Portion 6	Truter Boerdery Trust	T53753/1999
	Vlakfontein 569 JR	Portion 4	Truter Boerdery Trust	T53745/1999
	Vlakfontein 569 JR	Portion 1	Truter Boerdery Trust	T53746/1999
	Bankfontein 216 IR	Portion 11	Truter Boerdery Trust	T11033/2010
Section 21 (j)	Hartbeesfontein 537 JR	Remaining Extent	New Largo Coal (Pty) Ltd	T10424/2019
	Klipfontein 566 JR	Portion 59	New Largo Coal (Pty) Ltd	T10424/2019
	Klipfontein 566 JR	Portion 60	Anglo American Inyosi Coal (Pty) Ltd	T7182/2011
	Klipfontein 566 JR	Remaining Extent	New Largo Coal (Pty) Ltd	T10424/2019
	Klipfontein 566 JR	Portion 4	New Largo Coal (Pty) Ltd	T10424/2019
	Klipfontein 566 JR	Portion 1	New Largo Coal (Pty) Ltd	T10424/2019

Activity	Farm Name	Farm Portion	Owner`s Name	Title deed number
	Klipfontein 566 JR	Portion 66	New Largo Coal (Pty) Ltd	T10424/2019
	Vlakfontein 569 JR	Portion 2	New Largo Coal (Pty) Ltd	T8589/2019
	Vlakfontein 569 JR	Portion 5	New Largo Coal (Pty) Ltd	T8588/2019
	Vlakfontein 569 JR	Portion 9	Anglo American Inyosi Coal (Pty) Ltd	T5781/2011
	Klipfontein 568 JR	Portion 16	New Largo Coal (Pty) Ltd	T10424/2019
	Klipfontein 568 JR	Portion 18	TBT Boerdery Pty Ltd	T7517/2017
	Heuvelfontein 215 IR	Portion 75	Truter Boerdery Trust	T2017/1999
	Van Dyksput 214 IR	Portion 4	Truter Boerdery Trust	T104981/1997
	Vlakfontein 569 JR	Portion 1	Truter Boerdery Trust	T53746/1999

4. Licence and Review Period

4.1 This licence is valid for a period of twenty-two (22) year(s) from the date of issuance and it may be reviewed at intervals of not more than five (5) years.

4.2 On review of the licence, a Responsible Authority may amend any condition of the licence, other than the period of validity thereof.

4.3 This licence supersedes the licence dated 11 January 2015 (Licence number: 04/B20G/ACFGIJ/2538).

5. Definitions

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

"Act" means the National Water Act, 1998 (Act 36 of 1998) as amended.

"Department" means the Department of Water and Sanitation (DWS).

"Minister" means the Minister of the Department of Water and Sanitation.

"Delegated Authority" means the person that has been delegated certain functions of the Act

"Provincial Head" means: the Head of Provincial Operations: Mpumalanga Province, Department of Water and Sanitation, Private Bag X11259, Nelspruit, 1200

"Buffer zone" means a scientifically determined area where water use activities are excluded.

"Days" means Calendar days.

"Sensitive riffle habitats" is a Pool riffle rapid sequences that occur where a mixture of flows and depth provide a variety of habitats to support fish and invertebrate life. Pools are deep with slow water. Riffles are shallow with fast, turbulent water running over rocks. Runs are deep with fast water and little or no turbulence.

"Commencement date": means the date on which water use starts.

"Extent of the watercourse" means:

(a) the outer edge of the 1:100 year flood line or the delineated riparian habitat, whichever is the greatest, measured from the middle of the watercourse of a river, spring, natural channel, lake or dam; and

(b) Wetlands and pans: the delineated boundary (outer temporary zone) of any wetland or pan.

"Regulated area of a watercourse" means:

(a) The outer edge of the 1 in 100-year flood line and /or delineated riparian habitat, whichever is the greatest distance, measured from the middle of the watercourse of a river, spring, natural channel, lake or dam;
(b) In the absence of a determined 1 in 100-year flood line or riparian area the area within 100m from the edge of a watercourse where the edge of the watercourse is the first identifiable annual bank fill flood bench (subject to compliance to section 144 of the Act); or

(c) A 500 m radius from the delineated boundary (extent) of any wetland or pan.

6. Description of activity and affected water resource(s)

New Largo is located in the eMalahleni Local Municipality (ELM) and partially in the Victor Khanye Local Municipality (VKLM) in the jurisdictional area of Nkangala District Municipality (NDM) in Mpumalanga Province, South Africa. The main New Largo resource lies between the N4 and N12 national freeway. The majority of the New Largo mining rights area (MRA) extends from the N4 (Pretoria-Witbank National Road) to the south of the N12 (Johannesburg-Witbank National Road). The mining operations fall within the B20F and B20G quaternary catchments. The New Largo mine supplies coal to Eskom's power stations located in the area, as well other markets.

The development of the New Largo mine will occur in phases. The Project is currently at the start of the implementation phase. The operational life of the mine is estimated to be 50 years. Truck and Shovel will be used as the sole extraction method for Pit H and Pit F.

The New Largo main mine will produce a total Run of Mine (RoM) of 567Mt over its 50-year LoM, resulting in 490Mt of saleable coal. The separate Pit D mini pit operation will produce approximately 3Mtpa saleable coal over a five-year period totalling 14Mt, while the separate Pit H mini pit operation will produce approximately 3Mtpa of saleable coal over a ten-year period totalling 27Mt. Pit F mini pit operation will produce approximately 3.6Mtpa of saleable coal over a nineteen-year period. Production at the main pit is scheduled to commence two years into production after the mini pit operations - ramping up as they ramp down. The mine is scheduled to have a peak RoM of approximately 14.7Mtpa, while peak saleable coal production of approximately 12.0Mtpa.

The amendment to the mine schedule and development of additional infrastructure will enable New Largo to access higher grade coal reserves at an earlier stage of the Life-of-Mine (LoM) than envisaged in the original mine plan. This is essential as coal currently provides for most of South Africa's primary energy needs. The target destinations are expected to be Eskom (Kendal and Kusile Power Stations) and other power producers within South Africa as well as export markets. The mine will potentially contribute to the reduction of the domestic shortfall of coal, helping Eskom to ensure a sustainable supply of power, which the South African economy depends on.

APPENDIX I

GENERAL PROVISIONS AND CONDITIONS OF THE LICENCE

1. GENERAL PROVISIONS

Legal Framework

1.1 This licence is subject to all applicable provisions of the National Water Act, 1998 (Act 36 of 1998) as amended from time to time.

1.2 The licence shall not be construed as exempting the Licensee from compliance with the provisions of any other applicable Act, Ordinance, Regulation or By-law.

Administrative duties/obligations/responsibilities of the Licensee

1.3 The responsibility for complying with the provisions of the licence is vested in the Licensee and not any other person or body.

1.4 The Licensee must obtain any proprietary rights or servitudes at his / her own cost for lawful access to a property not owned by the Licensee.

1.5 The Licensee will be responsible for any water use charges or levies imposed by a Responsible Authority according to the pricing strategy. The levies/charges will be charged from the date of the issuance of this licence.

1.6 No water taken may be pumped, stored, diverted, or alienated for any other purpose other than as intended in this licence without the written approval of the Delegated Authority.

1.7 It is the responsibility of the Licensee to request an amendment of this licence to reflect the registered volume should the requirements change. All requests must be made to the Provincial Head.

1.8 If the water use licence is not exercised or fully exercised within the five (5) year period and the extended two (2) year period, as referred to in condition 2.4 and condition 2.5 in appendix I, the licence may be amended to reflect the extent of the water use that is being exercised, or the licence may be withdrawn.

Change of property details

1.9 Amendment of the licence to reflect the name of the new owner will not be approved if there are any outstanding charges or levies imposed by the Responsible Authority to the previous owner.

Issue of licence no guarantee of supply

1.10 This licence does not imply any guarantee that the said quantities and qualities of water will be available at present or at any time in the future.

Monitoring

1.11 The quantity of water authorised to be taken in this licence may not be exceeded.

1.12 The quality of water authorised to be disposed and discharged in this licence may not be exceeded.

1.13 Any changes to the monitoring programmes should be approved by the Provincial Head.

Reviewal of licences

1.14 The volume authorised in this licence may be reduced when the licence is reviewed.

1.15 No water taken may be pumped, stored, diverted, or alienated for any other purpose other than as intended in this licence without the written approval of the Delegated Authority.

Effecting of the Reserve

1.16 While effect must be given to the Reserve as determined in terms of the Act, where a desktop determination of the Reserve has been used in issuance of a licence, when a comprehensive determination of the Reserve has finally been made, it shall be given effect to.

Liabilities and Rights

1.17 The Department accepts no liability for any damage, loss, or inconvenience, of whatever nature, suffered as a result of, shortage of water; inundations or flood; siltation of the resource; and required Reserve releases.

1.18 The Minister reserves the right to construct water storage works at any time in any watercourse and to store all surplus water reaching the storage works, as well as to control the allocation of such water.

Dam Safety Requirements

1.19 The Licensee is not indemnified from any detrimental effect that the dam(s) may have on other properties.

1.20 The Department does not accept any responsibility or liability for any damages or losses that may be suffered by any other party because of the construction and utilisation of the dams.

1.21 The Licensee is not exempted from compliance with the provisions of the Dam Safety Regulations published under Government Gazette Notice R.139 of 24 February 2012 or any amendment thereof read with Chapter 12 of the Act, which are applicable to all dams with a safety risk.

Restrictions

1.22 The Licensee must adhere to any restrictions that are gazetted and imposed on the respective water resource.

Water measurement and reporting

1.23 The Provincial Head may at any time direct a Licensee, at the Licensee's expense, to have the accuracy of the Licensee's water measuring device/s verified, in addition to the requirements of their inspection and calibration schedule by a person or an institution accredited to verify the accuracy.

Stormwater Management

1.24 Stormwater leaving the Licensee's premises shall in no way be contaminated by any substance, whether such substance is a solid, liquid, vapour or gas or a combination thereof which is produced, used, stored, dumped, spilled on the premises.

Amendments

1.25 The Licensee may apply for amendment of this licence in terms of the Act at any time during the period of validity of this licence. Applications must be submitted to the Provincial Head.

Appeals

1.26 If this licence is appealed, it is automatically suspended and the water use activities must cease upon receipt of a notification of the appeal from the Department, alternatively the Licensee may request the Minister to lift the suspension pending conclusion of the appeal via the Chief Director Legal Services at the address below:
Private Bag X313,
Pretoria,
0001

2. GENERAL CONDITIONS

Administrative duties/obligations/responsibilities of the Licensee

2.1 The Licensee must avail an original copy of the water use licence and the supporting reports upon request by the Department.

2.2 The conditions of the authorisation must be brought to the attention of all persons (employees, sub-consultants, contractors etc.) associated with the undertaking of these activities and the Licensee must take such measures that are necessary to bind such persons to the conditions of this licence.

Commencement of water use licence

2.3 The Licensee must inform the Provincial Head in writing within seven (07) days after the Licensee commences with water use licence and again within thirty (30) days upon completion of the activity/ies.

2.4 The water uses authorised in this licence must be fully exercised within five (5) years from the date of issuance of this licence.

2.5 If the Licensee cannot exercise or not fully exercise the water use licence within five (5) years, the Licensee may request from the Provincial Head, with reasons, an extension of time to fully utilise the said water use licence, at least three months, before the expiry of the five (5) years. Only one request for extension of time, with maximum of two (2) years for commencement or of fully exercising of water use licence will be considered.

Change of details of Licensee or property

2.6 The Licensee must inform the Provincial Head of any change of ownership, name, address, premises and/or legal status within sixty (60) days of such change taking place.

2.7 If the properties in respect of this licence is/are subdivided or consolidated, the Licensee must provide full details of any change(s) in respect of the properties to the Provincial Head within sixty (60) days after the registration of title deed(s).

2.8 If the Licensee is not the end user/beneficiary of the water user related infrastructure and will not be responsible for long term maintenance and management of the infrastructure, the Licensee must provide a hand over report to the successor in title including a brief management/maintenance plan and the agreement for infrastructure along with allocation of responsibilities, within sixty (60) days after the date of change of end user or beneficiary.

Early renewal for the Licence

2.9 The Licensee must, if needed, apply for early renewal of this licence in terms of the Act within one (1) year before the expiry date of a licence. The application must be submitted to the Provincial Head.

Malfunctions, incidences, contingencies, and pollution prevention

2.10 The Licensee must service all vehicles and other machinery outside the extent of the watercourse/s.

2.11 Oils and other potential pollutants must be disposed of at a licensed site, with the necessary agreement from the owner of such a site.

2.12 The Licensee must handle, transport, store and use any hazardous substances according to the relevant legislation or South African National Standards (SANS).

2.13 Accurate and up-to-date records must be kept of all system malfunctions resulting in non-compliance with the requirements of this licence. The records must be available for inspection by the Provincial Head upon request. Such malfunctions must be tabulated under the following headings with a full explanation of all the contributory circumstances:

2.13.1 operating errors;
2.13.2 mechanical failures (including design, installation or maintenance);
2.13.3 environmental factors (e.g. flood);
2.13.4 loss of supply services (e.g. power failure); and
2.13.5 other causes.

2.14 Any incident that causes or may cause water pollution shall be reported to the Provincial Head or the designated representative within twenty-four (24) hours. Should the incident occur during a weekend or public holiday, the Licensee must report the incident on the next official working day.

2.15 The Licensee must, within fourteen (14) days, or a shorter period of time, as specified by the Provincial Head, from the occurrence or detection of any incident referred above, submit an action plan which must include a detailed time schedule to the satisfaction of the Provincial Head of measures to be taken to:

2.15.1 correct the impacts resulting from the incident;
2.15.2 prevent the incident from causing any further impacts; and
2.15.3 prevent a recurrence of a similar incident

2.16 All incidents must be recorded in an incident register.

Water Conservation and Water Demand Management (WC/WDM)

2.17 The Licensee must establish and implement a continual process of raising awareness among itself, its workers, and stakeholders with respect to water conservation and water Demand Management initiatives.

2.18 The Licensee shall use water efficiently to minimise total water intake, avoid usage of water where possible, implement best management and operating practices, and maximise the reuse /recycle of contaminated water.

2.19 The Licensee must continually investigate new and emerging technologies and put into practice water efficient devices and /or apply technique for the efficient use of water, in an endeavour to conserve water at all times.

2.20 The Licensee must develop and submit water conservation and water demand management (WC/WDM) plan to the Provincial Head within one year (1) from the date of issuance of this licence. The WC/WDM Plan should:

2.20.1 quantify the water use efficiency of the activity;

2.20.2 contain the mine/industry water management and water loss strategies and programmes;

2.20.3 sets annual targets for improved water use efficiency for the mining/industrial activity, beneficiation and waste disposal practices and stipulates which measures will be implemented to achieve the targets on the mine;

2.21 The Licensee must report annually on the implementation of WC/WDM plan including retrofitting with water efficient technologies and devices, reduction of total water demand, improvement in water use efficiency benchmarks and target.

2.22 The Licensee must update the WC/WDM plan every five (5) years and submit to the Provincial Head for approval.

2.23 The Licensee must, where water is stored off-channel in a dam or reservoir ensure that all distribution and reticulation systems or pipelines are properly constructed, operated, and maintained in good working order to prevent water losses through physical leakages, burst and reservoir overflows.

Stormwater management

2.24 Stormwater management facilities must be constructed, operated, and maintained in a sustainable manner throughout the project as detailed in the Stormwater Management Plan.

2.25 Increased runoff due to vegetation clearance and/or soil compaction must be managed, and steps must be taken to ensure that stormwater does not lead to bank instability and excessive levels of silt entering the stream.

2.26 All stormwater that would naturally run across the dirty areas shall be diverted via lined channels and drains designed to contain the 1:50 year flood.

2.27 The dirty stormwater system shall be designed and implemented to provide suitable routing and pumping capacity for contaminated stormwater from the individual facilities to the respective storm water dams in accordance with the design specifications.

2.28 Clean stormwater must be diverted from the construction works, mining areas, and roads and must be managed in such a manner as to disperse runoff and to prevent the concentration of storm water flow.

Monitoring, Methods of analysis

2.29 Sample analysis must be conducted by a recognized analytical laboratory, accredited by the South African National Accreditation System (SANAS), or that participates in a recognised Proficiency Testing Scheme to analyze the relevant constituents in the wastewater.

2.30 The date and time of monitoring in respect of each sample taken shall be recorded together with the results of the analysis.

2.31 The Licensee must adhere to the monitoring programmes submitted with the application.

Water measurement and Reporting

2.32 The Licensee shall install appropriate water measuring devices to measure the amount of water abstracted prior use of water.

2.33 The Licensee must install the flow metering devices to all water uses and readings must be taken on each flow meter on a monthly basis.

2.34 Flow measuring, recording, and monitoring devices shall be maintained in a sound state of repair and calibrated/ verified by a suitable competent person as per device specification. This must include a programme of checking, calibration, and/ or replacement of measuring devices.

2.35 Calibration /verification certificates of the flow measuring, recording, and integrating devices must be available for inspection by the Provincial Head or the representative upon request.

Membership to a Water Users Association

2.36 If a water user association exists or is established in the area to manage the resource, it is compulsory for the Licensee to be a member of the water user association. The Licensee must adhere to the rules, regulations, and water management stipulations of the water user association.

Restrictions on access to certain areas

2.37 Strict access procedures must be developed and followed in order to control access to the property. Access to the facility/ies must be limited to authorised persons and animals.

2.38 Notices prohibiting unauthorised persons from entering the areas as well as internationally acceptable signs indicating the risks involved in case of an unauthorised entry must be displayed along the boundary fence of these areas.

Auditing and Reporting

2.39 The Licensee must conduct annual internal audits on compliance with the conditions of this licence. The first audit must be conducted within ninety (90) calendar days from the date of commencement of water use licence. A report on internal audits must be submitted to the Provincial Head within sixty (60) calendar days of the finalisation of the audits.

2.40 The Licensee must appoint an independent external auditor to conduct biennial (every two (2) years) external audits on compliance with the conditions this licence. The first audit must be conducted and finalised within one (1) year after commencement of a water use. A report on the audit must be submitted to the Provincial Head within sixty (60) calendar days of the finalisation of each audit.

Security by applicant

2.41 The Licensee must ensure sufficient financial provision according to applicable legislation.

Compensative measures

2.42 The Licensee must prevent adverse effects on other water users. All complaints must be recorded in complaints register and be investigated by a suitable qualified person accredited by an institution/ Registration Body and if investigations prove that the Licensee has impaired the rights of other water users, the Licensee must implement appropriate compensative measures as determined by the Provincial Head.

Closure And Post Closure Mine Water Management

2.43 The Licensee must submit the final Rehabilitation plan aimed at water resource management as part of the final closure water management plan to the Provincial Head within one (1) years of remaining life of the mine as part of Integrated Water and Waste Management Plan.

2.44 The Licensee must apply for a post closure water use related activities five (5) years before commencing with closure to the Provincial Head for written approval.

2.45 The Licensee must participate in the development of a regional post-closure water management strategy, in accordance with a methodology and format to be approved by the Provincial Head, in collaboration with all hydro-geological interconnected mines.

APPENDIX II

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

1. Taking water from a resource

1.1. This licence authorises the taking of the maximum quantities of groundwater and surface water at the locations given in Table 3 below.

Table 3: Details of the section 21(a) water uses authorised

Water use Description	Property	Volume (m^3/a)	Co-ordinates	
Intake of water from mine pollution control dam for treatment and use.	Portion 17 of Farm Klipfontein 566 JR	3 612 860 m^3/a	25°56'31.97"S	28°56'05.88"E
Groundwater abstraction from a borehole	Remaining Extent and Portion 4 of Farm Klipfontein 566 JR	1 042 440 m^3/a	25°57'50.28"S	28°57'50.28"E
Abstraction of Groundwater from Pit F Borehole 1	Portion 1 of Farm Vlakfontein 569 JR	12 410 m^3/a	25° 59' 38.8" S	28° 59' 51.3" E
Abstraction of Groundwater from Pit F Borehole 2	Portion 1 of Farm Vlakfontein 569 JR	12 410 m^3/a	25° 59' 41.1"S	28° 59' 51.2" E
Abstraction of Groundwater from Pit H Borehole 1	Portion 75 of Farm Heuvelfontein 215 IR	15 695 m^3/a	26° 1'34.51" S	28°56'41.51"E
Abstraction of Groundwater from Pit H Borehole 2	Portion 36 of Farm Heuvelfontein 215 IR	2 920 m^3/a	26° 01' 27.2" S	28° 55' 46.5" E
Taking water from resource 1	Portion 4 of Farm Van Dyksput 214 IR	15 695 m^3/a	26° 02' 38.4" S	28° 54' 54.2" E

Water use Description	Property	Volume (m^3/a)	Co-ordinates	
Taking water from resource 2	Portion 52 of Farm Heuvelfontein 215 IR	2 920 m^3/a	26° 02' 40.6" S	28° 55' 25.5" E

2. Water measurement

2.1 All water taken from the resource shall be measured, recorded, and reported as follows:

2.1.1 The daily quantity of water taken must be metered or gauged and the total recorded at the last day of each month;

2.1.2 The water level measurements must be taken on a monthly basis and the date, time, and geographical location should be recorded;

2.1.3 The Licensee shall keep record of all water taken and a copy of the records shall be forwarded to the Provincial Head on or before 25 January and 25 July of each.

3. Drinking Water Quality

3.1 The Licensee must ensure that the drinking water quality supplied meets South African National Standards for Drinking Water: SANS 0241.

4. Site specific condition

4.1 The groundwater quality monitoring should be conducted quarterly.

4.2 External groundwater users that can be affected by mining activities should be identified and their boreholes be included in the mine monitoring network.

4.3 The loss in catchment reserve should be calculated and water should be released in all sub-catchments to make up for the loss in individual stream baseflow.

4.4 Groundwater levels in all monitoring boreholes and surrounding external groundwater users' boreholes should be conducted monthly, groundwater quality monitoring should be conducted quarterly.

4.5 The groundwater monitoring results should be analysed and interpreted annually by a Geohydrologist or qualified person.

Pit F

4.6 A hydro-census should be carried out to identify external groundwater users in the vicinity of Pit F within the first two (2) years of mining activities at Pit F.

4.7 Boreholes for groundwater quality, quantity and level monitoring at Pit F should be drilled within three (3) months of mining activities at pit F.

4.8 The groundwater model should be updated within the first two (2) years of mining at Pit F to assess the impacts of mining on groundwater level, including baseflow loss and impacts on water supply to Truters Farm. The groundwater model should be updated every two (2) years of mining.

APPENDIX III

Section 21(c) water use: **Impeding or diverting the flow of water in a watercourse/s**

Section 21(i) water use: **Altering the bed, banks, course, or characteristics of a watercourse/s**

1. Section 21(c) and (i) water use activities

1.1 This licence authorises the Section 21(c) or (i) water use activities as set out in Table 4 below and in the water use licence application reports submitted to the Department or the Regional Head (refer condition 1.2):

Table 4: Details of the section 21(c) and (i) water uses authorised

Water use description	Property/ (ies)	Extent/ Dimensions (mm, Ha)	Co-ordinates	
Mining through seepage wetland (W2)	Portion 1 of Farm Honingkrantz 536 JR	N/A	25°53' 57.48" S 25°53' 44.45" S 25°54' 16.89" S 25°54' 13.74" S	28° 57' 54.27"E 28° 58' 16.48"E 28° 57' 55.36"E 28° 57' 49.49"E
Mining through seepage wetland (W9)	Remaining Extent of Portion 1 and Portion 13 of Farm Roodepoortje 326 JS	N/A	25°56' 04.36" S 25°56' 08.56" S 25°56' 10.84" S 25°56' 13.50" S	28° 58' 46.79"E 28° 58' 44.00"E 28° 58' 40.00"E 28° 58' 35.00"E
Mining through seepage wetland (W10)	Remaining Extent of Farm Hartbeesfontein 537 JR	N/A	25°54' 38.89" S 25°54' 45.28" S 25°54' 57.67" S 25°54' 13.74" S	28° 57' 35.22"E 28° 57' 41.15"E 28° 57' 25.74"E 28° 57' 49.49"E
Mining through seepage wetland (W11)	Remaining Extent of Farm Hartbeesfontein 537 JR	N/A	25°54' 50.55" S 25°54' 54.56" S 25°55' 09.02" S 25°55' 08.70" S	28° 57' 01.95"E 28° 57' 09.55"E 28° 57' 11.05"E 28° 56' 56.86"E
Mining through seepage wetland (W12)	Portion 59 of Farm Klipfontein 566 JR	N/A	25°56' 23.74" S 25°56' 27.43" S 25°56' 30.98" S	28° 56' 57.12"E 28° 56' 58.54"E 28° 56' 56.32"E
Mining through seepage wetland (W13)	Remaining Extent of Portion 1 of Farm Klipfontein 566 JR	N/A	25°57' 14.25" S 25°57' 09.79" S	28° 57'12.95" E 28° 57' 01.07"E
Mining through seepage wetland (W14)	Remaining Extent of Portion 1 and Portion 12 of Farm Klipfontein 566 JR	N/A	25°57' 38.81" S 25°57' 54.36" S 25°58' 06.73" S 25°58' 01.20" S	28° 57' 34.06"E 28° 57' 48.73"E 28° 57' 49.75"E 28° 57' 22.84"E

Water use description	Property/ (ies)	Extent/ Dimensions (mm, Ha)	Co-ordinates	
Mining through seepage wetland (W15)	Remaining Extent of Portion 5 of Farm Klipfontein 566 JR	N/A	25°58' 23.78" S 25°58' 29.59" S 25°58' 38.65" S 25°58' 47.94" S 25°58' 56.44" S 25°59' 00.39" S 25°58' 53.65" S 25°58' 45.92" S	28° 55' 56.44"E 28° 55' 50.28"E 28° 55' 55.50"E 28° 55' 48.82"E 28° 55' 54.08"E 28° 55' 34.02"E 28° 55' 20.84"E 28° 55' 32.52"E
Mining through seepage wetland (W16)	Portion 34 of Farm Klipfontein 568 JR	N/A	25°59' 03.75" S 25°59' 07.37" S 25°59' 18.57" S 25°59' 16.42" S	28° 54' 56.97"E 28° 55' 09.37"E 28° 55' 16.61"E 28° 55' 02.57"E
Mining through seepage wetland (W18)	Remaining Extent of Portion 6 and Portion 31 of Farm Klipfontein 568 JR	N/A	25°59' 21.46" S 25°59' 21.09" S 25°59' 26.66" S	28° 56' 19.62"E 28° 56' 40.24"E 28° 56' 38.21"E
Mining through seepage wetland (W19)	Remaining Extent of Portion 2 and Portion 9 of Farm Vlakfontein 569 JR	N/A	25°58' 35.39' S 25°58' 43.49" S 25°59' 15.92" S 25°58' 58.37" S 25°58' 32.15" S	28° 58' 29.19"E 28° 58' 33.14"E 28° 58' 13.74"E 28° 57' 50.04"E 28° 58' 00.36"E
Mining through seepage wetland (W20)	Portion 7 of Farm Klipfontein 568 JR	N/A	25°59' 49.36" S 25°59' 53.75" S 25°59' 54.99" S	28° 56' 50.86"E 28° 57' 23.54"E 28° 56' 51.28"E
Mining through seepage wetland (W21)	Portion 9 and 10 of Farm Vlakfontein 569 JR	N/A	25°59' 43.92" S 25°59' 48.52" S 25°59' 58.47" S	28° 57' 59.69"E 28° 57' 52.82"E 28° 57' 52.32"E
Mining through seepage wetland (W22)	Portion 9 Farm Vlakfontein 569 JR; Portion 10 Farm Vlakfontein 569 JR; Portion 7 Farm Klipfontein 568 JR; and Portion 13 of Farm Klipfontein 568 JR	N/A	26°00' 06.30" S 26°00' 21.73" S 26°00' 08.46" S 25°59' 55.87" S	28° 57' 48.37"E 28° 57' 40.60"E 28° 57' 18.19"E 28° 57' 30.93"E
Mining through seepage wetland (W23)	Portion 13 of Farm Klipfontein 568 JR	N/A	26°00' 11.74" S 26°00' 23.23" S 26°00' 32.04" S 26°00' 20.43" S	28° 57' 11.79"E 28° 57' 16.13"E 28° 57' 10.64"E 28° 56' 57.80"E
Mining through seepage wetland (W24)	Portion 12,13,14,15 and 16 of Farm Klipfontein 568 JR	N/A	26°00' 57.04" S 26°00' 55.55" S	28° 56' 44.74"E 28° 57' 23.56' E

Water use description	Property/ (ies)	Extent/ Dimensions (mm, Ha)	Co-ordinates	
Mining through seepage wetland (W25)	Portion 11 and 17 of Farm Klipfontein 568 JR	N/A	26°01' 27.90" S 26°01' 23.39" S 26°01' 33.01" S 26°01' 30.67" S 26°01' 39.25" S 26°01' 47.03" S 26°01' 48.24" S 26°01' 53.32" S	28° 54' 47.11"E 28° 54' 59.86"E 28° 55' 02.01"E 28° 55' 11.56"E 28° 55' 23.05"E 28° 55' 08.30"E 28° 55' 23.85"E 28° 55' 25.23"E
Mining through seepage wetland (W26)	Portion 75 of Farm Heuvelfontein 215 IR	N/A	26°02' 16.12" S	28° 56' 30.66"E
Mining through seepage wetland (W27)	Portion 37 of Farm Heuvelfontein 215 IR	N/A	26°02' 19.35" S	28° 56' 08.76"E
Mining through seepage wetland (W28)	Remaining Extent of Farm Bankfontein 216 IR	N/A	26°01' 00.37" S 26°00' 58.62" S 26°00' 54.71" S 26°00' 29.62" S 26°00' 28.60" S 26°00' 24.16" S 26°00' 21.38" S 26°00' 17.05" S	28° 58' 43.80"E 28° 59' 10.02"E 29° 00' 17.08"E 29° 00' 41.60"E 29° 01' 05.61"E 29° 01' 09.52"E 29° 01' 09.74"E 29° 00' 57.88"E
Construction of conveyor between Tip 1 and Tip 2	Remaining Extent Portion 13 of Farm Klipfontein 566 JR	N/A	25°56' 55.49 "S	28° 56' 32.70"E
Construction of admin area pollution control dam in a portion of a wetland (PCD1)	Remaining Extent of Farm Hartbeesfontein 537 JR	N/A	25°54' 52.92 "S	28° 57' 00.82"E
Construction of pollution control dam (Pit water transfer dam 3) in a portion of wetland	Remaining Extent of Farm Hartbeesfontein 537 JR	N/A	25°55' 01.82 "S	28° 57' 05.99"E

Water use description	Property/ (ies)	Extent/ Dimensions (mm, Ha)	Co-ordinates	
(PWTD3)				
Construction of pollution control dam (Pit water transfer dam 4) on a edge of wetland (PWTD 4)	Remaining Extent of Portion 13 of Farm Klipfontein 566 JR and Portion 59 of Klipfontein 566 JR	N/A	25°56' 23.43 "S	28° 56' 43.43"E
Construction of pollution control Dam (Pit water transfer Dam 5) within wetland (PWTD 5)	Remaining Extent of Portion 1 of Klipfontein 566 JR	N/A	25°57' 08.36 "S	28° 56' 51.97"E
Construction of Haul Road across watercourse (HRC1)	Portion 1 of Farm Honingkrantz 536 JR	3 x 2 500 x 1 500 box culverts	25°54' 12.28 "S	28° 57' 45.77"E
Construction of Haul Road across watercourse (HRC2)	Portion 1 of Farm Honingkrantz 536 JR	2 x 2 500 x 1 500 box culverts	25°54' 21.46 "S	28° 57' 33.55"E
Construction of Haul Road across watercourse (HRC3)	Remaining Extent of Farm Hartbeesfontein 537 JR	1 x 2 500 x 1 500 box culverts	25°54' 35.60 "S	28° 57' 23.86"E
Construction of Haul Road across watercourse (HRC4)	Portion 59 of Farm Klipfontein 566 JR	3 x 2 500 x 1 500 box culverts	25°56' 33.29 "S	28° 56' 50.01"E

Water use description	Property/ (ies)	Extent/ Dimensions (mm, Ha)	Co-ordinates	
Construction of Haul Road across watercourse (HRC5)	Remaining Extent of Portion 13 of Farm Klipfontein 566 JR	2 x 1 500 x 900 box culverts	25°56' 56.64 "S	28° 56' 48.27"E
Construction of Haul Road across watercourse (HRC6)	Remaining Extent of Portion 13 of Farm Klipfontein 566 JR	2 x 1 500 x 900 box culverts	25°57' 01.00 "S	28° 57' 05.20"E
Construction of Haul Road across watercourse (HRC7)	Remaining Extent of Portion 13 of Farm Klipfontein 566 JR	2 x 1 500 x 900 box culverts	25°57' 07.28 "S	28° 57' 03.59"E
Construction of Haul Road across watercourse (HRC8)	Remaining Extent of Portion 1 of Farm Klipfontein 566 JR	4 x 3 000 x 1 200 box culverts	25°57' 16.00 "S	28° 56' 57.33"E
Construction of Haul Road across watercourse (HRC9)	Remaining Extent of Portion 1 of Farm Klipfontein 566 JR	2 x 900 mm diameter pipes	25°57' 40.30 "S	28° 56' 39.32"E
Construction of Haul Road across watercourse (HRC10)	Remaining Extent of Portion 1 of Farm Klipfontein 566 JR	2 x 900 mm diameter pipes	25°57' 45.69 "S	28° 56' 36.34"E
Construction of Haul Road across watercourse	Portion 66 of Farm Klipfontein 566 JR	2 x 900 mm diameter pipes	25°57' 50.94 "S	28° 56' 34.59"E

Water use description	Property/ (ies)	Extent/ Dimensions (mm, Ha)	Co-ordinates	
(HRC11)				
Construction of Haul Road across watercourse (HRC12)	Portion 66 of Farm Klipfontein 566 JR	2 x 900 mm diameter pipes	25°57' 52.39 "S	28° 56' 31.45"E
Construction of Haul Road across watercourse (HRC13)	Portion 66 of Farm Klipfontein 566 JR	2 x 900 mm diameter pipes	25°57' 52.56 "S	28° 56' 27.14"E
Construction of Haul Road across watercourse (HRC14)	Portion 66 of Farm Klipfontein 566 JR	2 x 900 mm diameter pipes	25°57' 52.70 "S	28° 56' 22.83"E
Construction of Haul Road across watercourse (HRC15)	Portion 66 of Farm Klipfontein 566 JR	2 x 1 800 x 1 200 box culverts	25°57' 58.33 "S	28° 55' 50.58"E
Construction of Haul Road across watercourse (HRC16)	Portion 66 of Farm Klipfontein 566 JR	2 x 1 800 x 1 200 box culverts	25°58' 14.72 "S	28° 55' 38.89"E
Construction of Haul Road across watercourse (HRC17)	Portion 66 of Farm Klipfontein 566 JR	4 x 1 800 x 1 500 box culverts	25°58' 34.64 "S	28° 55' 26.23"E
Develop a borrow pit partially in a	Remaining Extent of Portion 13 of Farm Klipfontein 566 JR	N/A	25°56' 46.46" S 25°56' 43.62" S 25°56' 51.10" S 25°56' 56.98" S	28° 56' 25.38"E 28° 56' 47.44"E 28° 57' 06.87"E 28° 56' 50.59"E

Water use description	Property/ (ies)	Extent/ Dimensions (mm, Ha)	Co-ordinates	
wetland (BP1)				
Develop a borrow pit on edge of wetland (BP2)	Remaining Extent of Portion 1 of Farm Klipfontein 566 JR	N/A	25°56' 58.70" S 25°57' 14.35" S 25°57' 29.90" S 25°57' 13.45" S	28° 56' 33.54"E 28° 56' 41.86"E 28° 56' 34.09"E 28° 56' 27.67"E
Develop a borrow pit partially in a wetland (BP3)	Portion 12, 4 and Remaining Extent Portion 1 of Farm Klipfontein 566 JR	N/A	25°57' 35.18" S 25°57' 41.53" S 25°57' 47.40" S 25°57' 41.43" S	28° 57' 52.05"E 28° 57' 57.91"E 28° 57' 50.36"E 28° 57' 44.27"E
Construction of parking area and haul road to discard dump in portion of wetland	Remaining Extent of Farm Hartbeesfontein 537JR	N/A	25°56' 58.70" S 25°57' 14.35" S 25°57' 29.90" S 25°57' 13.45" S	28° 56' 33.54"E 28° 56' 41.86"E 28° 56' 34.09"E 28° 56' 27.67"E
Pit F proximity of mining and related infrastructure to the regulated area of a watercourses	Portion 6 of Prinshof 2 IS; Portion 1 and Portion 4 of Farm Vlakfontein 569 JR; and Portion 11 of Farm Bankfontein 216 IR	960 ha	26° 00' 15.4" S 26° 0' 42.9" S 26° 0' 56.5" S 25° 59' 4.4" S	29° 01' 3.10" E 28° 58' 45.4" E 29° 0' 17.00" E 29° 0' 00.00" E
Pit H proximity of mining and related infrastructure to the regulated area of a watercourses	Portion 12 and Portion 18 of Farm Klipfontein 568 JR; Portion 57 and Portion 75 of Farm Heuvelfontein 215 IR; and Portion 4 of Farm Van Dyksput 214 IR	790 ha	26° 2' 32.1" S 26° 1' 7.3" S 26° 1' 11.2" S 26° 2' 2.2" S	28° 56' 42.4" E 28° 56' 34.9" E 28° 54' 30.9" E 28° 54' 42.7" E

1.2 The Licensee must carry out and complete all the activities listed under condition 1.1 according to the following:

1.2.1 Integrated Water and Waste Management Plan for New Largo Colliery dated March 2022;

1.2.2 Final Environmental Management Programme (EMPr) and Amendment for the New Largo Coal Project dated April 2022;

1.2.3 New Largo Coal Project: EMPr Amendment – Wetland Impact Assessment dated April 2021

1.3 No activity must take place within the extent of a watercourse/s, unless authorised by this licence.

1.4 No fundamental alterations of the work method statement, site plan/s and drawings are allowed, unless a modification is requested and granted by the responsible authority in writing; and

2. FURTHER REQUIREMENTS

2.1 For all the activities listed under condition 1.1, Table 4, "as-built" plans and engineering drawings prepared by a registered professional engineer, must be submitted to the responsible authority within six (6) months of completion of new activities and for existing water uses within six (6) months of the date of issuing of this licence. These plans and drawings must indicate the watercourse/s including wetland boundaries and layout and structure location/s of all infrastructure impeding and/or diverting flow of water in the watercourse/s as well as alternations to watercourse/s on the property/ies.

3. Structures, Construction Plant and Materials

3.1 Structures must withstand a 1:100-year flood.

3.2 Structures must be non-erosive, structurally stable and must not induce any flooding or safety hazard.

3.3 Structures must be inspected for a minimum of once a quarter for accumulation of debris, blockage, erosion of abutments and overflow areas - debris must be removed and damages must be repaired and reinforced within a reasonable time.

4. Flow

4.1 The diversion activities must be conducted in a manner that does not negatively affect the yield of the watercourse where the activity will take place. The Licensee must ensure that the

overall magnitude and frequency of flow in the watercourse/s does not decrease, other than for natural evaporative losses and authorised attenuation volumes.

4.2 Where flow in watercourse/s is permanent, the trench must be staged across part of the channel to maintain flows. Flows must not be stopped unless essential, if necessary to stop flows it must be for a minimal time only.

5. Riparian and Instream Habitat (Vegetation and Physical Structure)

5.1 Activities must start up-stream and proceed into a down-stream direction where feasible, so that the recovery processes can start immediately, without further disturbance from upstream works.

5.2 Operation and storage of equipment within the riparian habitat must only take place within the approved limits of disturbance indicated in the site plans and work method.

5.3 Activities must not occur in sensitive riffle habitats unless authorised by this licence.

5.4 Indigenous riparian vegetation, including dead trees, outside the limits of disturbance indicated in the site plans must not be removed from the area.

5.5 Alien and invader vegetation must not be allowed to further colonise the area, and all new alien vegetation recruitment must be sustainably eradicated or controlled.

5.6 Soils that have become compacted through the water use activities must be loosened to an appropriate depth to allow seed germination.

5.7 Stockpiling of removed soil and sand must be stored outside the extent of the watercourse/s, to prevent being washed into the watercourse/s and must be covered to prevent wind and rain erosion.

5.8 The use of machinery within the instream and riparian habitat will lead to compaction of soils and vegetation and must be restricted to demarcated areas only.

6. Biota

6.1 The Licensee must allow movement of aquatic species, including migratory species where applicable.

6.2 Ensure implementation of all mitigation measures not to disturb the breeding, nesting and/or feeding habitats and natural movement patterns of aquatic biota.

7. Rehabilitation and Management

7.1 The Licensee must implement the rehabilitation programme to restore the watercourse/s to environmentally acceptable and sustainable conditions after completion of the activities as outlined in the rehabilitation plan.

7.2 The rehabilitation must be implemented according to the approved Rehabilitation Plan.

7.3 A photographic record must be kept as follows and submitted with reports as set out in condition 10.

7.4 Dated photographs of all the sites to be impacted before construction commences

7.5 Dated photographs of all the sites during construction on a monthly basis; and

7.6 Dated photographs of all the sites after completion of construction, seasonally

7.7 All disturbed areas must be re-vegetated with indigenous plants in consultation with an indigenous plant expert, ensuring that during rehabilitation only indigenous shrubs, trees and grasses are used in restoring the biodiversity.

8. MONITORING AND REPORTING

8.1 The monitoring plan must be implemented, and reporting done to the Provincial Head as stipulated under condition 10.2

8.2 Six (6) monthly monitoring reports must be submitted to the Provincial Head for the duration of the construction phase and yearly thereafter or until otherwise agreed in writing with the Provincial Head.

8.3 The monitoring programme for undermining watercourses must include the following:

8.3.1 Operational Phase

8.3.1.1 The Licensee must ensure that ground around the undermining area is stable. Where there is subsidence around the mining site, the Licensee must inform the Department

within twenty-four (24) hours, develop, and submit a rehabilitation plan within three (3) months for approval to Regional Head.

8.3.1.2 If a perennial watercourse is to be undermined, the pre-mine survey of the potentially affected reach must be placed on record and compared to surveys during the life of the mine in the event of the underground mining activity operation and dewatering record a sign of distress.

8.4 At least two water quantity monitoring points, one upstream and one downstream of the affected length of the watercourse/s that is being undermined.

8.5 At least two water quality monitoring points, one upstream and one downstream of the affected length of the watercourse/s that is being undermined.

8.6 A bio-monitoring programme (SASS) must be implemented along the affected length of the watercourse/s and must include a habitat assessment.

8.7 Exact positions of monitoring points must be indicated on the master layout plan (including their co-ordinates).

9. Post-operational Phase

9.1 Upon completion of the undermining project, if survey results show that the watercourse/s to be stable, an application may be made to the Provincial Head for written approval to continue monitoring at less frequent intervals.

9.2 The mine must include the watercourse/s in its routine environmental inspection program and is obligated to advise the Provincial Head of any unusual deflections or observations.

10. Water Quality

10.1 In-stream water quality must be analysed on a two-weekly basis during construction otherwise monthly at monitoring points both upstream and downstream of the activities for the following variables until pre-construction water quality levels have been reached
10.1.1 Temperature (°C);
10.1.2 pH;

10.1.3 Electrical conductivity (mS/M);

10.1.4 Suspended solids (mg/l);

10.1.5 Dissolved oxygen (mg/l);

10.1.6 Turbidity;

10.1.7 Alkalinity (mg $CaCO_3$/l)

10.1.8 Total dissolved solids (mg/l)

10.2 Monitoring must be undertaken as set out in condition 10.

10.3 Activities that lead to elevated levels of turbidity of any watercourse(s) must be prevented, reduced, or otherwise remediated. Activities must be scheduled to take place during the dry season, as far as practically possible, when flows are low.

10.4 The Licensee must ensure that the quality of the water to downstream water users does not decrease because of the water use activities listed under condition 1.1.

11. Site specific condition

11.1 A written confirmation that Anglo will support a Strategic Zoning Plan where future mines will stay out of regulated watercourses since coal mining is not sustainable, shall be submitted to the Provincial Head six (6) months after the issuance of the licence.

11.2 An updated Mine Plan 7 Master Plan must be drawn up with buffers to conserve and protect Honingkrantz Pan, Klipfonteinspruit, Wilge River and Saalklapspruit and must be submitted to the Provincial Head for approval before construction starts. Master Plan to be drawn on A1/0 paper with a legible scale and informative key/legend. Temporary, permanent infrastructure impacted rivers, wetlands, pans, watercourse names, watercourse crossings, buffers, 1:100 year floodlines to be shown on the Master Plan.

11.3 Design Plans shall be amended accordingly and submitted to the Department for approval before construction starts.

11.4 The alternative to buy better quality export coal to better conserve watercourses shall be addressed.

11.5 Pollution plume model shall be submitted to the Provincial Head for approval six (6) months after commencement of activities (Table 4) and when the Eskom coal supply agreement has been approved.

11.6 The rate of movement of the decant plumes shall be modelled on the basis of geophysical profiles, secondary structures within the geology and other factors that can accelerate the plume's speed.

11.7 Side slopes of inter alia pollution control dam, spoil dumps, clean stormwater channels, drains or berms shall be made 1:3, the slopes shall be protected against erosion, topsoiled, and vegetated.

11.8 Management of spontaneous combustion to be addressed in accordance with the approved Environmental Management Plan.

11.9 Maintenance and responsibilities of the water treatment plant post closure shall be detailed.

11.10 The catchment area of the Honingkrantz Pan shall be conserved and excluded from the mine and future mining.

11.11 Honingkrantz Pan to be excluded from mining. Further mining around the pan must not be approved by Department of Water and Sanitation because ecological connectivity will be cut off if further sand mining was allowed.

11.12 New Largo mine to define discharge points and compensatory ecological flow discharges to maintain Honingkrantz Pan and other head water tributaries within six (6) months after the issuance of the licence.

11.13 Pollution plume and decant maps should be detailed.

11.14 Cone of depression maps should be detailed.

11.15 Water treatment to be detailed and financial provision should be detailed.

11.16 Design drawings to be submitted to the Provincial Head for approval before construction starts. Surface and sub-surface ecological connectivity to be maintained at watercourse crossings. Stormwater drains to end in energy dissipaters with bio-retention ponds. Clean drains to be as natural as possible with use of rock, rock mattresses, topsoil, and indigenous vegetation. Bridges to be of culverts or pillars to enhance ecological connectivity.

11.17 Rehabilitation to include filling of open pits, shaping to as close as possible original topography, redistribution of same soil profiles and re-vegetation with surrounding veld grass and other species as per the approved EMP.

11.18 Plant species plans to be drawn up and submitted to the Provincial Head for approval within six (6) months of issuance of licence.

11.19 Landscape maintenance plan to be drawn up and submitted to the Provincial Head for approval within six (6) months of issuance of the licence.

11.20 Approved Environmental Management Programme to be implemented and kept on site which includes a plant species plan and a landscape maintenance plan.

11.21 Environmental Control Officer to be supervising work on permanent basis in extent of watercourses during construction and rehabilitation of crossings listed in Table 4.

11.22 Reserve as compiled by consultants and reviewed by Resource Directed Measures office to be implemented.

11.23 Monitoring plan and programme to be detail compiled and submitted for approval to Department of Water and Sanitation Provincial Head within three (3) months of issuance of the licence;

11.24 The alternatives of exclusion of the wetlands must be implemented to avoid one category ecological losses due to flow losses. Updated Master Plan must be submitted for approval before construction starts.

11.25 The ecological category of the watercourses must not be lowered.

11.26 The Stormwater Management Plan must be updated and implemented. Clean water drains must be made as natural as possible.

11.27 The updated Wetland Offset Strategy must be submitted for approval.

11.28 The specialist proposed ecological discharges must be implemented.

11.29 A Maintenance Plan must be submitted for approval.

11.30 The Monitoring and Auditing Plan must be implemented.

12. Exemption for Government Notice (GN) 704 Regulation dated 04 June 1999

12.1 The Licensee is exempted from regulation 4(a) of the GN704 for the location of the hard overburden, soft overburden, topsoil stockpile, office complex and related infrastructure, crushing screening plant, and pollution control dams within a horizontal distance of 100

meters from a wetland.

12.2 The Licensee is exempted from regulation 4(b) of the GN704 for carry out opencast and underground mining within a horizontal distance of 100 meters from a wetland.

APPENDIX IV

Section 21(f) of the Act: **Discharging waste or water containing waste into a water resource**

1. QUANTITY OF WATER CONTAINING WASTE

1.1 This licence authorises the discharge a maximum volume of effluent / water containing waste at the following geographical locations as indicate in Table 5 below.

Table 5: Details of the section 21(f) water uses authorised

Water use description	Property (ies)	Volume (m^3/a)	Co-ordinates	
Pit F - Discharge from the wastewater treatment plant into an unnamed Tributary of the Saalboomspruit River	Portion 1 of the Farm Vlakfontein 569 JR	22 265 m^3/a	25° 59' 32.8" S	28° 59' 50.9" E
Pit H - Discharge from the wastewater treatment plant into an unnamed Tributary of the Wilge River	Portion 12 of the Farm Klipfontein 568 JR	16 425 m^3/a	26° 01' 09.3" S	28° 56' 39.7" E

1.2 The quantity of treated effluent / water containing waste authorised to be discharged in terms of this licence must not be exceeded.

2. QUALITY OF WATER CONTAINING WASTE

2.1 The quality of the treated effluent /water containing waste discharged into the water resource must not exceed the following limits in Table 6.

Table 6: Quality of wastewater to be discharged

Variable	Limits	Frequency
pH	5.5 – 9.5	Monthly
Electrical Conductivity (mS/m)	70 – 150	Monthly
Chemical Oxygen Demand (mg/l)	≤ 75	Monthly
Ammonia (mg/l)	≤ 6	Monthly
Nitrate/Nitrite as Nitrogen (mg/l)	≤ 15	Monthly
Chlorine as Free Chlorine (mg/l)	≤ 0.25	Monthly
Suspended Solids (mg/l)	≤ 25	Monthly
Orthophosphate as phosphorous (mg/l)	≤ 10	Monthly
E. coli (per 100 ml)	≤1000 Count/100ml	Monthly
Faecal Coliforms (per 100 ml)	≤1000 Count/100ml	Monthly

3. SURFACE WATER MONITORING

3.1 Quantity

3.1.1 The quantity of the effluent / water containing waste discharged into the water resource shall be metered and recorded daily.

3.1.2 Monitoring for the quantity of effluent/ water containing waste must be done at the inlet and the outlet of the wastewater treatment plants.

3.2 Quality of the water containing waste

3.2.1 Monitoring for quality must be done at the outlet of the wastewater treatment plants where the water containing waste is discharged into the water resource, and upstream and downstream of the discharge point. These must be identified in consultation with the Provincial Head and approved by the Provincial Head.

Table 7: Surface water monitoring point

Locality	Description	Co-ordinate	
NLS20 - Tributary of the Saalklapspruit, downstream of the	Downstream of Pit F wastewater treatment	25°58'49.22" S	28°59'28.75" E

Vlakfontein Mine	discharge point		
NL3 - Tributary of the Wilge River	Downstream of Pit H wastewater treatment discharge point	26°0'7.49" S	28°53'8.30" E

3.2.2 Upstream surface water monitoring points of the discharge point must be established and monitored. These must be identified in consultation with the Provincial Head and approved by the Provincial Head.

3.2.3 The quality of the water containing waste shall be monitored by taking grab samples at the monitoring points described in condition 3.2.1 of Appendix IV. Each sample shall be analysed according to condition 2.29 of Appendix I for the variables and frequency, shown in Table 6 in Appendix IV and/or any other variable as may be required from time by the Provincial Head.

3.3 Bio-Monitoring

3.3.1 A qualified, accredited Aquatic Scientist or as approved by the Provincial Head must establish biomonitoring programme within six (6) months of issuance of the licence. The biomonitoring programme must include scope, water quality assessment and invertebrate habitat assessment of the following: reference condition (upstream of discharge point), discharge point and downstream of discharge point.

3.3.2 The biomonitoring must be undertaken using latest Invertebrate Habitat Assessment System (IHAS) and the South African Scoring System (SASS). Sampling must be conducted seasonally (once in summer and once in winter) and the results must be compared against the selected reference condition or reference condition within the same ecoregion in a case where upstream of selected discharge point is not accessible or representative of discharge point.

3.3.3 The biomonitoring report highlighting the impacts, changes, deterioration, or improvement of the aquatic ecosystem (trends) as the result of this water containing waste/ effluent discharged must be submitted to the Provincial Head.

3.3.4 The Licensee shall monitor quarterly, the toxicity of the water containing waste/effluent in accordance with Direct Estimation of Ecological Effect Potential (DEEEP) initiative to determine the effect of water containing waste

3.3.5 The acute biological assay tests must be conducted by a SANAS accredited laboratory using a minimum of at least three (3) or four (4) trophic levels (bacteria, algae, invertebrate and vertebrate) to determine the toxicity impact of the whole effluent on each trophic level.

3.3.6 Should toxicity equal to or greater than 50% be expressed in the undiluted samples (>1TUa), a definitive exposure should be conducted for the relevant bioassay, based on best professional judgement. A Hazard class should always be maintained at less than Hazard Class III at the downstream sampling site.

3.3.7 The toxicity report highlighting hazard class of effluent and its impact on deterioration or improvement of the aquatic invertebrates or ecosystem must be submitted with or as part of biomonitoring report to the (Provincial Head) within a month after each assessment.

4. Site specific condition

4.1 Boreholes to monitor quantity, quality, and levels should be drilled downgradient of wastewater treatment plants.

4.2 Once the water treatment plants has been commissioned, excess water should be treated by the treatment plant and reused or discharged back into the environment.

APPENDIX V

Section 21(g) of the Act: **Disposing of waste in a manner which may detrimentally impact on a water resource**

1. DISPOSAL OF WASTE /WATER CONTAINING WASTE

1.1 The Licensee is authorised to dispose of a maximum volume of water containing waste into the waste management facilities on the property as described in Table 8 below.

Table 8: Details of the section 21(g) water uses authorised

Water use description	Property (ies)	Volume (m^3/a) / Capacity (m^3, Ml, Tpa, Mtpa)	Coordinates	
Settling Dam 1 for storing water from Borrow Pit 1	Farm Klipfontein 566 JR and Portion 6 of Farm Hartebeesfontein 537 JR	35 770 m^3/a	25°53'40.63"S 25°53'43.84"S 25°58'29.21"S 25°58'8.14"S	28°56'38.04"E 28°58'16.79"E 28°57'11.29"E 28°55'44.97"E
Settling Dam 2 for storing water from Borrow Pit 2	Farm Klipfontein 566 JR and Portion 6 of Farm Hartebeesfontein 537 JR	35 770 m^3/a	25°53'40.63"S 25°53'43.84"S 25°58'29.21"S 25°58'8.14"S	28°56'38.04"E 28°58'16.79"E 28°57'11.29"E 28°55'44.97"E
Bulk Water Dam 1 (BW1), raw water for use as process water at the coal washing plant	Farm Klipfontein 566 JR and Portion 6 of Farm Hartebeesfontein 537 JR	10 Ml	25°53'40.63"S 25°53'43.84"S 25°58'29.21"S 25°58'8.14"S	28°56'38.04"E 28°58'16.79"E 28°57'11.29"E 28°55'44.97"E
Pollution Water Transfer Dam 1 (PWTD 1) for water management system	Remaining Extent Farm Hartbeesfontein 537 JR	5 Ml	25° 54' 19.01" S 25° 54' 19.94" S 25° 54' 21.99" S 25° 54' 21.05" S	28° 57' 23.99" E 28° 57' 26.23" E 28° 57' 25.18" E 28° 57' 22.91" E

Water use description	Property (ies)	Volume (m^3/a) / Capacity (m^3, Ml, Tpa, Mtpa)	Coordinates	
PWTD 2 for water management system	Remaining Extent Farm Hartbeesfontein 537 JR	5 Ml	25° 54' 33.95" S 25° 54' 34.88" S 25° 54' 36.93" S 25° 54' 39.24" S	28° 57' 14.29" E 28° 57' 16.53" E 28° 57' 15.49" E 28° 57' 13.21" E
PWTD 3 for water management system	Remaining Extent Farm Hartbeesfontein 537 JR	5 Ml	25° 55' 00.53" S 25° 55' 00.88" S 25° 55' 03.11" S 25° 55' 02.76" S	28° 57' 04.97" E 28° 57' 07.45" E 28° 57' 07.01" E 28° 57' 04.58" E
PWTD 4 for Portion 59 and water management system	Portion 59 and Remaining Extent/13 Farm Klipfontein 566 JR	5 Ml	25° 56' 21.85" S 25° 56' 23.30" S 25° 56' 25.01" S 25° 56' 23.58" S	28° 56' 43.28" E 28° 56' 45.20" E 28° 56' 43.57" E 28° 56' 41.68" E
PWTD 5 for water management system	Remaining Extent Portion 1 Farm Klipfontein 566 JR	5 Ml	25° 57' 06.80" S 25° 57' 08.06" S 25° 57' 09.92" S 25° 57' 08.67" S	28° 56' 51.64" E 28° 56' 53.72" E 28° 56' 52.30" E 28° 56' 50.25" E
PWTD 6 for water management system	Remaining Extent Portion 1 Farm Klipfontein 566 JR	5 Ml	25° 57' 27.74" S 25° 57' 29.03" S 25° 57' 30.89" S 25° 57' 29.58" S	28° 56' 37.71" E 28° 56' 39.76" E 28° 56' 38.33" E 28° 56' 36.30" E
PWTD 7 for water management system	Portion 66 of Farm Klipfontein 566 JR	5 Ml	25° 57' 43.89" S 25° 57' 43.89" S 25° 57' 46.82" S 25° 57' 44.76" S	28° 55' 49.85" E 28° 55' 50.82" E 28° 55' 48.49" E 28° 55' 47.54" E
PWTD 8 for water management system	Portion 66 of Farm Klipfontein 566 JR	5 Ml	25° 58' 27.36" S 25° 58' 28.27" S 25° 58' 30.33" S 25° 58' 29.44" S	28° 55' 19.74" E 28° 55' 22.03" E 28° 55' 20.99" E 28° 55' 18.73" E
Pollution Control Dam 1 (Admin area PCD) for water	Remaining Extent of Farm Hartbeesfontein 537	15 Ml	25°53'40.63"S 25°53'43.84"S 25°58'29.21"S	28°56'38.04"E 28°58'16.79"E 28°57'11.29"E

Water use description	Property (ies)	Volume (m^3/a) / Capacity (m^3, Ml, Tpa, Mtpa)	Coordinates	
management system	JR Farm Klipfontein 566 JR		25°58'8.14"S	28°55'44.97"E
Pollution Control Dam 2 (PCD at Tip 2) for water management system	Remaining Extent of Portion 1 Farm Klipfontein 566 JR	10 Ml	25° 57' 05.82 "S 25° 57' 08.75" S 25° 57' 11.65 "S 25° 57' 12.30 " S	28° 56' 33.89" E 28° 56' 38.10" E 28° 56' 37.77" E 28° 56' 35.19" E
PCD3 (Plant area PCD) for water management system	Remaining Extent of Hartbeesfontein 537 JR and Farm Klipfontein 566 JR	36 Ml	25°53'40.63"S 25°53'43.84"S 25°58'29.21"S 25°58'8.14"S	28°56'38.04"E 28°58'16.79"E 28°57'11.29"E 28°55'44.97"E
PCD4 (Balancing Dam at waste treatment plant} for water management system)	Farm Klipfontein 566 JR and Portion 6 of Hartebeesfontein 537 JR	100 Ml	25°53'40.63"S 25°53'43.84"S 25°58'29.21"S 25°58'8.14"S	28°56'38.04"E 28°58'16.79"E 28°57'11.29"E 28°55'44.97"E
1 200 Ml Dewatering Reservoir for water management system	Farm Klipfontein 566 JR and Portion 6 of Hartebeesfontein 537 JR	1 200 Ml	25°53'40.63"S 25°53'43.84"S 25°58'29.21"S 25°58'8.14"S	28°56'38.04"E 28°58'16.79"E 28°57'11.29"E 28°55'44.97"E
Final Void Dam (in-pit water storage in Final Void Dam)	Farm Hartbeesfontein 537 JR and Farm Klipfontein 566 JR	1 000 Ml	25°53'40.63"S 25°53'43.84"S 25°58'29.21"S 25°58'8.14"S	28°56'38.04"E 28°58'16.79"E 28°57'11.29"E 28°55'44.97"E
PCD at discard dump	Portion 59 and 60 Farm Klipfontein 566JR	5 Ml	25°56'26.98"S 25°56'28.76"S 25°56'29.76"S 25°55'27.98"S	28°57'06.41"E 28°57'07.71"E 28°57'06.04"E 28°57'04.74"E
Discard dump	Farm Klipfontein 566 JR and Farm Hartbeesfontein 537	When required	25°53'40.63"S 25°53'43.84"S 25°58'29.21"S	28°56'38.04"E 28°58'16.79"E 28°57'11.29"E

Water use description	Property (ies)	Volume (m^3/a) / Capacity (m^3, Ml, Tpa, Mtpa)	Coordinates	
	JR		25°58'8.14"S	28°55'44.97"E
Dust Suppression on haul roads and stockpile	Farm Hartbeesfontein 537 JR; Farm Klipfontein 566 JR; Farm Klipfontein 568 JR; Farm Vlakfontein 569 JR; and Farm Prinshof 2 IS	219 000 m^3/a	25°53'42.19"S 26° 0'34.50"S 26° 0'39.98"S 25°57'51.71"S 25°55'3.19"S 25°57'5.52"S 25°58'57.90"S	28°56'37.56"E 29° 0'42.04"E 28°56'32.82"E 28°55'45.19"E 28°56'23.48"E 28°59'16.87"E 28°54'55.55"E
In-pit discard disposal	<u>Compartment 1:</u> Remaining Extent of Farm Honingkrantz 536 JR; Portion 12, Remaining Extent/1, 23/1 & 24/1 Farm Roodepoortje 326 JS; Portion 62 Farm Klipfontein 566 JR; Remaining Extent of Portion 8/2 Farm Vlakfontein 569 JR.	3.7 Mtpa	25°53' 27 .91" S 25° 55' 11.08" S 25° 55' 56.45" S 25° 57' 22.91" S 25° 57' 20.04" S 25° 55' 22.70" S 2S· 53· 41.66" S	28 °58 '59.17" E 29° 0' 4.37" E 28° 58' 43.23" E 28° 58' 17.89" E 28° 57' 56.20" E 28° 58' 18.09" E 28° 58' 36.78" E
	<u>Compartment 2:</u> Portion 2, 5, 9 & Remaining Extent of Farm 8/2 and 16/8 Farm Vlakfontein 569 JR; Portion 55/1, 12/4, Remaining Extent 1,		25° 57' 25.76" S 25° 57' 32.83" S 25° 57' 57.58" S 25° 59' 22.13" S 26° 0' 44.65" S 26° 0' 49.22" S 26° 0' 23.33" S 25° 59' 38.17" S	28° 58' 19.44" E 29° 58' 29.71" E 28° 58' 42.55" E 28° 58' 52.76" E 28° 57' 47.61" E 28° 56' 42.98" E 28° 56' 15.90" E 28° 56' 0.70" E

Water use description	Property (ies)	Volume (m^3/a) / Capacity (m^3, Ml, Tpa, Mtpa)	Coordinates	
	remaining Extent 4 and Portion 66 Farm Klipfontein 566 JR, Portion 2,5,6,7,12,13,15, 16,23,30,31,32, 33,34 ,35 and 36 Farm Klipfontein 568 JR		25° 59' 37.21" S 25° 58' 59.44" S 25° 58' 46.89" S 25° 58' 10.88" S 25° 57' 22.44" S	28° 55' 11.96" E 28° 54' 55.07" E 28° 55' 29.03" E 28° 55' 47.19" E 28° 58' 0.48" E
	<u>Compartment 3:</u> Remaining Extent, Portion 5, Remaining Extent of Portion 6 Farm Prinshof 2 IS; Portion 7/4, Remaining/1 and Remaining Extent/1/1 Farm Vlakfontein 569 JR		25° 59' 39.01" S 26° 0' 22.82" S 26° 0' 53.65" S 26° 0' 59.55" S 26° 0' 54.07" S 26° 0' 43.95" S	28° 59' 32.07" E 29° 1' 7.78" E 29° 0' 30.34" E 28° 59' 59.29" E 28° 59' 37.58" E 28° 58' 38.56" E
Overburden Stockpile	Remaining Extent of Farm Hartbeesfontein 537 JR	2.5 Mtpa	25° 53' 45.06" S 25° 54' 52.85" S 25° 54' 11.34" S 25° 54' 54.65" S 25° 54' 57.27" S 25° 54' 46.78" S 25° 54' 18.78" S	28° 56' 40.87" E 28° 56' 49.00" E 28° 56' 43.81" E 28° 56' 47.43" E 28° 56' 39.88" E 28° 56' 29.85" E 28° 57' 19.45" E
ROM Coal Stockpile	Portion 60 Farm Klipfontein 566 JR	480 000 Tpa	25° 55' 34.55" S 25° 55' 52.56" S 25° 55' 55.93" S 25° 55' 37.75" S	28° 56' 47.17" E 28° 56' 54.86" E 28° 56' 51.79" E 28° 56' 38.23" E
Emergency ROM	Portion 60 of Farm	60 000 Tpa	25° 55' 44.11" S	28° 57' 02.72" E

Water use description	Property (ies)	Volume (m^3/a) / Capacity (m^3, Ml, Tpa, Mtpa)	Coordinates	
Stockpile (EROM 1)	Klipfontein 566 JR		25° 55' 47.11" S 25° 55' 53.82" S 25° 55' 50.97" S	28° 57' 14.75" E 28° 57' 12.57" E 28° 57' 00.65" E
Emergency ROM Stockpile (EROM 2)	Remaining Extent Portion 1 and Remaining Extent Portion 13 of Farm Klipfontein 566 JR	60 000 Tpa	25° 56' 55.81" S 25° 56' 58.78" S 25° 57' 09.49" S 25° 57' 06.59" S	28° 57' 08.50" E 28° 57' 13.56" E 28° 57' 06.40" E 28° 57' 01.18" E
Pit H Conservancy tank	Portion 75 of Farm Heuvelfontein 215 IR	16 425 m^3/a	26° 1'36.44"S 26° 1'36.46"S 26° 1'36.77"S 26° 1'36.75"S Centre: 26° 1'36.61"S	28°56'40.73"E 28°56'41.04"E 28°56'41.01"E 28°56'40.70"E Centre: 28°56'40.87"E
Pit H Eastern Pollution Control Dam	Portion 12 of Farm Klipfontein 568 JR	158 410 m^3/a	26° 1'36.44"S 26° 1'36.46"S 26° 1'36.77"S 26° 1'36.75"S Centre: 26° 1'36.61"S	28°56'40.73"E 28°56'41.04"E 28°56'41.01"E 28°56'40.70"E Centre: 28°56'40.87"E
Pit H Western Pollution Control Dam	Portion 18 of Farm Klipfontein 568 JR	3 672 265 m^3/a	26° 1'10.17"S 26° 1'9.70"S 26° 1'10.93"S 26° 1'11.38"S Centre: 26° 1'10.55"S	28°56'36.27"E 28°56'39.02"E 28°56'39.27"E 28°56'36.53"E Centre: 28°56'37.64"E
Pit H Dust suppression	Portion 12 & 18 of Farm Klipfontein 568 JR; Portion 57 & 75 of Farm Heuvelfontein 215 IR; and	517 935 m^3/a	26° 1'12.09"S 26° 1'10.23"S 26° 1'11.05"S 26° 1'12.91"S Centre: 26° 1'11.57"S	28°54'32.12"E 28°54'34.01"E 28°54'35.01"E 28°54'33.15"E Centre: 28°54'33.57"E

Water use description	Property (ies)	Volume (m^3/a) / Capacity (m^3, Ml, Tpa, Mtpa)	Coordinates	
	Portion 4 of Farm Van Dyksput 214 IR			
Pit H In-pit mineral residue disposal	Portion 16 & 18 of Farm Klipfontein 568 JR; Portion 75 of Farm Heuvelfontein 215 IR; and Portion 4 of Farm Van Dyksput 214 IR;	2 628 000 Tpa	26° 2' 32.1" S 26° 1' 7.3" S 26° 1' 11.2" S 26° 2' 2.2" S Centre: 26° 1'37.82"S	28° 56' 42.4" E 28° 56' 34.9" E 28° 54' 30.9" E 28° 54' 42.7" E Centre: 28°55'36.37"E
Pit F Dust suppression	Portion 6 of Farm Prinshof 2 IS; Portion 1 & 4 of Farm Vlakfontein 569 JR; and Portion 11 of Farm Bankfontein 216 IR	225 935 m^3/a	25° 59' 3.6" S 26° 0' 15.3" S 26° 0' 57.4" S 26° 0' 40.8" S	29° 0' 0.6" E 29° 1' 1.0" E 29° 0' 16.3" E 28° 58' 41.8" E
Pit F Pollution Control Dam (East)	Portion 6 of Prinshof 2 IS	160 000 m^3	25° 59' 55.4" S 25° 59' 48.2" S 25° 59' 48.6" S 26° 0' 2.4" S 26° 00' 1.4" S	29° 0' 50.9" E 29° 0' 50.3" E 29° 0' 54.4" E 29° 0' 51.5" E 29° 0' 47.4" E
Pit F Pollution Control Dam (West)	Portion 1 of Farm Vlakfontein 569 JR	20 000 m^3	25° 59' 35.5" S 25° 59' 34.2" S 25° 59' 35.5" S 25° 59' 36.7" S 25° 59' 35.6" S	28° 59' 49.2" E 28° 59' 49.3" E 28° 59' 50.5" E 28° 59' 49.2" E 28° 59' 47.6" E

2. CONSTRUCTION, OPERATION AND MAINTANANCE

2.1 The Licensee shall carry out and complete all the activities listed in condition 1.1, including the construction and operation of the waste management facilities, according to the Report and according to the final plans as approved by the Provincial Head.

2.2 The construction of the waste management facilities must be carried out under the supervision of a professional Civil Engineer, registered under the Engineering Profession of South Africa Act, 1990 (Act 114 of 1990), as approved by the designer.

2.3 Within thirty (30) days after the completion of the activities referred in condition 1.1 the Licensee shall in writing, under reference 27/2/2/B720/37/1, inform the Provincial Head thereof. This shall be accompanied by a signature of approval from the designer referred to above that the construction was done according to the design plans referred to in the Report.

2.4 The Licensee must ensure that the disposal of the water containing waste and the operation and maintenance of the system are done according to the provisions in the Integrated Water and Waste Management Plan.

2.5 The Licensee shall submit a set of as-built drawings within thirty (30) days to the Provincial Head after the completion of the waste management facilities.

2.6 The waste management facilities shall be operated and maintained to have a minimum freeboard of 0.8 metres above full supply level and all other water systems related thereto shall be operated in such a manner that it is at all times capable of handling the 1:50 year flood-event on top of its mean operating level.

3. QUALITY OF WASTEWATER TO BE DISPOSED

3.1 The Licensee shall submit the nature and the quality of the waste disposed into the wastewater facilities.

4. GROUNDWATER MONITORING

4.1 The Licensee shall monitor groundwater resources to determine the impact of the activity on the water resource by taking samples at the monitoring points indicated in Table 9.

Table 9: Groundwater monitoring points

Sampling point name	Locality	Co-ordinates	
LGW - B1	North of Pit A	25° 53' 9.596" S	28° 58' 19.559" E
LGW - B2	Northern Extent of PitA 1695	25° 53' 40.367" S	28° 58' 15.133" E
LGW - B3	Western Extent of Pit A	25° 54' 1.241" S	28° 57' 2.734" E
LGW - B4	West of Pit B	25° 55' 59.415" S	28° 56' 35.480" E
LGW - B5	North-West of Pit C	25° 57' 27.049" S	28° 56' 24.008" E
LGW - B6	Western Extent of Pit C	25° 58' 53.598" S	28° 54' 45.635" E
LGW - B7	Western Extent of Pit A	25° 54' 26.198" S	28° 57' 4.017" E
LGW - B8	South-East of Pit D	26° 0' 57.073" S	28° 59' 32.992" E
LGW - B9	North-Western Extentof Pit D	25° 59' 41.036" S	28° 59' 27.927" E
LGW - B10	East of Pit C	25° 59' 19.362" S	28° 59' 22.859" E
LGW - B11	Western Extent of Pit A	25° 54' 57.917" S	28° 57' 14.856" E
LGW - B12	North-East of Pit C	25° 57' 40.674" S	28° 59' 2.846" E
LGW - B13	Western Extent of Pit C	25° 58' 44.252" S	28° 56' 11.781" E
LGW - B14	South-Western Extentof Pit C	25° 59' 44.399" S	28° 56' 12.145" E
LGW - B15	East of Pit B	25° 57' 1.286" S	28° 58' 32.480" E
LGW - B16	South-Eastern Extent ofPit A	25° 55' 28.487" S	28° 59' 27.659" E
BN - 2	South-East of Pit G	26° 1' 56.793" S	28° 59' 0.527" E
ED - 3	West of Pit A	25° 53' 58.519" S	28° 57' 24.543" E
ED -6	North of Pit A	25° 53' 7.192" S	28° 58' 29.115" E
HFN - 3	South-West of Pit F	26° 2' 35.434" S	28° 55' 45.032" E
HFN - 5	South of Pit F	26° 1' 14.031" S	28° 56' 32.390" E
HFN - 6	Central Region of Pit G	26° 1' 41.604" S	28° 58' 25.025" E
HFN - 7	Southern Region of PitD	25° 54' 39.236" S	28° 57' 27.180" E
HFN - 60	South of Pit F North- Eastern Limb	26° 2' 35.434" S	28° 55' 45.032" E
HZ - 1	East of Pit A	25° 54' 39.258" S	28° 59' 47.220" E
HZ - 3	North of Pit A	25° 53' 19.932" S	28° 58' 55.776" E
HZ - 5	Central Extent of Pit A	25° 54' 21.313" S	28° 58' 27.123" E
KF - 13	South-Western Regionof Pit C	25° 59' 2.580" S	28° 56' 39.372" E
KF - 18	South-West of Pit C	25° 59' 47.256" S	28° 55' 5.448" E
KF - 19	South-West of Pit C	25° 59' 42.180" S	28° 54' 41.616" E
KF -6	Southern Extent of PitC	25° 59' 44.232" S	28° 57' 5.328" E

Sampling point name	Locality	Co-ordinates	
LGW - B17	East of Pit A	25° 54' 51.867" S	28° 59' 53.676" E
LGW - B18	North-East of Pit A	25° 54' 0.427" S	28° 59' 37.977" E
LGW - B19	North-Eastern Extent ofPit A	25° 53' 25.753" S	28° 59' 7.981" E
LGW - B20	Northern Region of PitA	25° 54' 21.249" S	28° 58' 34.453" E
LGW - B21	Southern Extent of PitA	25° 55' 28.833" S	28° 58' 3.356" E
LGW - B22	Central Extent of Pit B	25° 56' 18.543" S	28° 57' 38.796" E
LGW - B23	Southern Extent of PitB	25° 57' 13.652" S	28° 57' 28.030" E
LGW -B24	North-West of Pit C	25° 57' 42.294" S	28° 56' 34.532" E
LGW -B25	Central Extent of Pit C	25° 58' 52.334" S	28° 57' 16.023" E
LGW - B26	Western Extent of Pit C	25° 58' 58.366" S	28° 55' 29.745" E
LGW - B27	Western Extent of Pit C	25° 59' 13.381" S	28° 55' 33.475" E
LGW - B28	South-West of Pit C	26° 0' 39.586" S	28° 55' 29.034" E
KF - 7	South-West of Pit C	25° 59' 47.076" S	28° 56' 43.872" E
KN - 4	North-West of Pit B	25° 55' 27.624" S	28° 57' 1.656" E
KN - 5	East of Pit B	25° 56' 20.022" S	28° 59' 3.612" E
KN - 12	West of Pit B	25° 56' 23.536" S	28° 57' 0.303" E
KN - 14	South-West of Pit A	25° 55' 24.766" S	28° 57' 45.102" E
KN - 20	Central Region of Pit B	25° 56' 47.472" S	28° 57' 59.976" E
KN - 24	Northern Extent of PitC	25° 57' 34.969" S	28° 57' 33.091" E
KN - 34	West of Pit C	25° 57' 18.756" S	28° 55' 49.620" E
NSW - 7	South-West of Pit G	26° 1' 48.885" S	28° 57' 46.383" E
NSW - 9	Western Extent of Pit F	26° 1' 29.470" S	28° 54' 52.305" E
NSW - 10	Eastern Extent of Pit F	26° 1' 31.384" S	28° 56' 46.398" E
RP - 4	East of Pit B	25° 56' 32.856" S	28° 58' 33.600" E
VN - 1	North of Pit D	25° 59' 21.082" S	28° 59' 2.185" E
VN - 6	East of Pit C	25° 57' 40.932" S	28° 58' 44.580" E
VN - 8	Eastern Extent of Pit C	25° 58' 0.336" S	28° 58' 33.924" E
VN - 11	East of Pit C	25° 58' 48.720" S	28° 59' 17.844" E
VN - 14	Eastern Region of Pit C	25° 58' 52.251" S	28° 58' 12.683" E

4.2 Monitoring boreholes in Table 9 in condition 4.1 in Appendix V must be clearly marked, numbered, and must be equipped with lockable caps. The Department reserves the right to sample monitoring boreholes at any time and to analyse these samples, or to have samples taken and analysed.

4.3 The Licensee shall monitor groundwater resources to determine the impact of the facility and other activities on the water quality by taking samples at the monitoring points indicated in Table 10.

Table 10: Groundwater monitoring variables and frequency

Variables	Frequency	Baseline groundwater quality
pH	Quarterly	6.21
Electrical Conductivity (mS/m)	Quarterly	7.56
Total Dissolved Solids (mg/l)	Quarterly	46
Total Alkalinity (mg/l)	Quarterly	10.2
Ammonium (as N) (mg/l)	Quarterly	To be determined*
Nitrate (as N) (mg/l)	Quarterly	< 0.194
Chloride (as Cl) (mg/l)	Quarterly	1.69
Sulphate (as SO4) (mg/l)	Quarterly	21.2
Sodium (mg/l)	Quarterly	4.48
Potassium (as K) (mg/l)	Quarterly	5.38
Calcium (mg/l)	Quarterly	2.27
Magnesium (mg/l)	Quarterly	2.80
Aluminium (as Al) (mg/l)	Quarterly	< 0.002
Iron (as Fe) (mg/l)	Quarterly	1.97
Manganese (as Mn) (mg/l)	Quarterly	0.170
Fluoride (as F) (mg/l)	Quarterly	1.31

*The groundwater baseline water quality must be determined and reported upon. The results must then be utilised as baseline data for groundwater monitoring.

4.4 The quality of the groundwater resource must be monitored by taking samples quarterly at groundwater monitoring points as described in condition 4.3 in Appendix V. Each sample shall be analysed for the variables and at frequencies, as shown in Table 10 in Appendix V and/ or any other variable as may be required from time to time by the Provincial Head.

4.5 Should pollution occur or possible pollution occur, the Licensee must conduct the necessary investigations to determine the impact on groundwater associated with the waste facilities and any mitigating actions that could be required. This must be done in consultation with the Provincial Head and at time frames set by the Provincial Head.

5. SURFACE WATER MONITORING

5.1 The Licensee shall monitor surface water resources to determine the impact of the activity on the water resource by taking samples at the monitoring points indicated in Table 11.

Table 11: Surface water monitoring points

Sampling point name	Locality	Co-ordinates	
NL1	On the Wilge River at a bridge crossing on the R555. This represents the upstream monitoring point for this sub-catchment, as it will not be impacted by any of the New Largo Open Cast Mine activities.	S 26°2'40.57"	E 28°52'5.91"
NL2	On a tributary of the Wilge River. This point will monitor impacts associated with Pit H.	S 26°2'5.53"	E 28°53'1.39"
NL3	On a tributary of the Wilge River. Will monitor impacts associated with PitD.	S 26°0'7.49"	E 28°53'8.30"
NL4	On the Klipfonteinspruit (a tributary of the Wilge River). Monitor impacts associated with the Central Pit.	S 25°56'54.38"	E 28°56'10.36"
NL5	On the Klipfonteinspruit (a tributary of the Wilge River), downstream of NL4.	S 25°56'26.92"	E 28°53'58.81"
NL6	On the Klipfonteinspruit (a tributary of the Wilge River), downstream of NL5 and upstream of the confluence of the Klipfonteinspruit with the Wilge River.	S 25°53'20.54"	E 28°51'59.08"
NL7	On a tributary of the Wilge River, downstream of NL22.	S 25°54'0.68"	E 28°54'35.06"
NL8	On tributary of the Wilge River, downstream of NL7 and upstream of its confluence with the Wilge River.	S 25°52'42.24"	E 28°52'11.50"
NL9	On the Wilge River. This represents the downstream monitoring point for this sub-catchment, reflecting the cumulative impact	S 25°50'38.00"	E 28°52'18.80"

Sampling point name	Locality	Co-ordinates	
	of the New Largo activities and other activities further upstream on the Wilge River.		
NLS10	On the Saalklapspruit, downstream of NLS19. Monitor impact associated with mining in Pit F.	S 26°0'34.78"	E 29°1'26.87"
NLS11	On the Saalklapspruit, downstream of NLS10.	S 25°58'3.54"	E 29°1'37.06"
NLS12	On the eastern boundary of the mine on a tributary of the Saalklapspruit, downstream of NLS20.	S 25°57'31.14"	E 28°59'20.04"
NLS13	On the Grootspruit, a tributary of the Saalklapspruit.	S 25°54'31.93"	E 29°3'55.15"
NLS14	On a tributary of the Saalklapspruit. Monitor impact associated with miningin Pit A.	S 25°53'59.35"	E 29°0'55.62"
NLS15	On a tributary of the Saalklapspruit. Monitor impact associated with miningin Pit A.	S 25°53'18.31"	E 29°0'38.81"
NLS16	On a tributary of the Saalklapspruit. Monitor impact associated with miningin Pit A.	S 25°52'39.07"	E 29°0'7.99"
NLS17	On the Saalboomspruit. Monitor impact associated with mining in Pit A.	S 25°51'31.58"	E 28°58'12.53"
NLS18	On the Saalklapspruit downstream of all the mining activities and upstream of the confluence with the tributary on which NLS17 is located.	S 25°50'6.68"	E 28°59'28.57"
NLS19	On the Saalklapspruit above the Klipspruit Mine discharge. This is the most upstream monitoring point in this sub-catchment.	S 26°1'4.36"	E 29°0'23.54"
NLS20	On a tributary of the Saalklapspruit, downstream of the Vlakfontein Mine.	S 25°58'49.22"	E 28°59'28.75"
NL21	On the western boundary of the mine and monitors surface water discharge into the Holfonteinspruit, a tributary of the Klipfonteinspruit.	S 25°58'32.04"	E 28°55'35.12"

Sampling point name	Locality	Co-ordinates	
NL22	On a tributary of the Wilge River, upstream of NL7.	S 25°54'6.71"	E 28°56'13.79"

5.2 The Licensee must submit within one month of the date of the issuance of the licence, a surface water quality monitoring programme, with the GPS co-ordinates and the criteria used in the selection of the water monitoring points.

5.3 The Licensee must further submit within one month of the date of issuance of this licence the GPS co-ordinates of the point of discharge of water containing wastes into the water resource.

5.4 The Licensee shall monitor surface water resources to determine the impact of the facility and other activities on the water quality by taking samples at the monitoring points indicated in Table 12.

Table 12: Surface water monitoring variables and frequency

Variables	Frequency	Baseline groundwater quality
pH	Quarterly	9.03
Electrical Conductivity (mS/m)	Quarterly	96
Total Dissolved Solids (mg/l)	Quarterly	865
Alkalinity (mg/l)	Quarterly	59.9
Ammonia (as N) (mg/l)	Quarterly	To be determined*
Nitrate (as N) (mg/l)	Quarterly	< 0.194
Chloride (as Cl) (mg/l)	Quarterly	11.2
Sulphate (as SO4) (mg/l)	Quarterly	585
Sodium (mg/l)	Quarterly	33.9
Potassium (as K) (mg/l)	Quarterly	7.87
Calcium (mg/l)	Quarterly	124
Magnesium (mg/l)	Quarterly	65.8
Aluminium (as Al) (mg/l)	Quarterly	< 0.002
Iron (as Fe) (mg/l)	Quarterly	< 0.004
Manganese (as Mn) (mg/l)	Quarterly	0.031
Zinc (as Zn) (mg/l)	Quarterly	0.611
Fluoride (as F) (mg/l)	Quarterly	< 0.194

*The groundwater baseline water quality must be determined and reported upon. The results must then be utilised as baseline data for groundwater monitoring.

5.5 The quality of the surface water resource must be monitored by taking samples quarterly at surface water monitoring points as described in condition 5.4 in Appendix V. Each sample shall be analysed for the variables and at frequencies, as shown in Table 12 in Appendix V and/ or any other variable as may be required from time to time by the Provincial Head.

5.6 Should pollution occur or possible pollution occur, the Licensee must conduct the necessary investigations to determine the impact on surface water associated with the waste facilities and any mitigating actions that could be required. This must be done in consultation with the Provincial Head and at time frames set by the Provincial Head.

6. REPORTING

6.1 The Licensee shall update the water balance annually and calculate the loads of waste emanating from the activities. The Licensee shall determine the contribution of their activities to the mass balance for the water resource and must furthermore co-operate with other water users in the catchment to determine the mass balance for the water resource reserve compliance point.

6.2 The Licensee shall submit the results of analysis for the monitoring requirements to the Provincial Head on a quarterly basis under 27/2/2/B720/37/1.

7. INTEGRATED WATER AND WASTE MANAGEMENT

7.1 The Integrated Water and Waste Management Plan (IWWMP) and Rehabilitation Strategy and Implementation Plan (RSIP) must be updated annually and submitted to the Provincial Head for approval.

7.2 The Licensee must, at least one hundred and eighty (180) days prior to the intended closure of any facility, or any portion thereof, notify the Provincial Head of such intention and submit any final amendments to the IWWMP and RSIP for approval.

8. Site specific condition

8.1 This recommendation does not exempt the designer from complying with any other legislation. This review refers only to the activity as specified and described in the signed design report and drawings listed under documentation submitted for consideration.

8.2 One month's written notice must be given to the DWS before commencement of construction activities. Such notice shall make clear reference to the site location details and the reference number of the project as indicated on the license and include a high-level project programme to facilitate optional attendance of the preconstruction meeting (specified in SANS 10409 (2020)) by the Regulator and an inspection of the site during construction. One month's written notice must also be given to the Department of Water and Sanitation before commencement of the operational phase activities.

8.3 The designs are approved as currently indicated for those facilities that are already compliant and for those which have been earmarked for upgrades as indicated in the as-built report. The license holder must notify the DWS in writing, within 24 (twenty-four) hours if any condition of this design and its acceptance cannot be or is not adhered to during operation. The notification must be supplemented with reasons for non-compliance, and proposed rectification measures.

8.4 The license holder must install a monitoring protocol for the facilities to measure quantity of water handled by the facilities.

8.5 The license holder shall monitor waste streams handled by the facilities and measure this against the installed type of liner and determine the competency of the liner over its service life.

8.6 Should the liner found not to be competent, the license holder should notify DWS within a (1) week of coming to this knowledge, detailing the measures that they would implement to address any shortcomings.

8.7 Overtopping of pollution control dams (PCDs) or return water dams (RWDs) and similar containment infrastructure: The discharge of leachate or polluted water from any pollution control dam (or return water or process water dam or potentially polluted stormwater dam) to the environment (or similar non-compliant containment) is to be reported as an incident within 24 hours, and treated as such, with appropriate remediation. Similarly, pollutant discharges from sumps or manholes on pipeline routes shall be reported and treated as an incident.

8.8 The license holder shall employ a third-party controller (as defined in SANS 10409: 2020), also known as an independent CQA person, who is responsible for ensuring that the procedures of document management on site are followed and that independent laboratory tests are undertaken, and the results reflect compliance with SANS 1526 (2015) for HDPE geomembranes on the liner and SANS 10409:2020 for the installation along with other quality assurance records. The CQA person shall keep records of the certified welding technicians (CWTs) certification.

8.9 The facility owner should ensure the independence of the Engineer, Contractor, Subcontractors, Material suppliers, and CQA agent in the development and implementation of the construction quality assurance.

8.10 The SANS standard specifications and generally accepted engineering practices specified shall be the most recent amendment thereof as at commencement of construction. As a minimum these include SANS 10409: 2020; SANS 1526 (2015) and GRI GM 19 as well as SANS 1200D as relevant to embankment dams.

8.11 The license holder shall afford the authorities opportunity to obtain samples of geosynthetics during installation of the barrier system for independent performance evaluation (such as differential scanning calorimeter and standard OIT tests, the costs for such tests which will be borne by the license holder).

8.12 The license holder should ensure that the stormwater management facilities and pollution control dams are kept in a well-maintained state such that at any given point in time they are able to handle the 1:50 year flood events.

8.13 The license holder should ensure that the facilities are kept in a safe operating condition and should ensure timeous repair to the facilities should they suffer any damages.

8.14 The facility manager must place cordons, barriers, and warning systems around facilities to define the nature and extent of each disposal or waste management area and avoid intersection of different waste Types as per the NEMWA Regulations 2013, with particular attention to health and safety of persons.

8.15 The authorities shall not be held responsible for any damages or losses suffered by the license holder or its successor in title in any instance where construction or operation after construction is temporarily or permanently stopped for reasons of non-compliance by the license holder with the conditions of approval as set out in this document or any other subsequent document emanating from these conditions of acceptance.

8.16 Comprehensive records of liquid movement with time from subsurface drain sumps and leachate collection sumps shall be maintained and reported to the authorities quarterly or upon request.

8.17 Close out reports must be given to DWS detailing but not limited to the following: construction methods followed, tests for quality assurance undertaken, as built drawings including map showing as built footprint of the infrastructure, compliance with SANS standards. The supporting evidence shall include the number of tests, minimum, maximum, mean value, and standard deviation for each test method undertaken on all materials used in the barrier system design and construction which include compacted clay, geotextiles, geomembranes, drainage material, and soil cement or ash-Crete or similar protection/ballast material.

9. Exemption for Government Notice (GN) 704 Regulation dated 04 June 1999

9.1 The Licensee is exempted from regulation 4(c) of the GN704 for disposing of micaceous hard overburden material in the mined out opencast pit during the backfilling of the opencast voids.

APPENDIX VI

Section 21(j) of the Act: **Removing, discharging, or disposing of water found underground if it is necessary for the efficient continuation of an activity or for the safety of people**

1. Removing of water found underground

1.1 The Licensee is authorised to remove maximum volume of water found underground as indicated in Table 13 below.

Table 13: Details of the section 21(j) water uses authorised

Water use description	Property	Volume (m^3/a)	Co-ordinates	
Dewatering of Borrow Pit 1	Remaining Extent of Farm Hartbeesfontein 537 JR	35 770	25°54'59.99"S	28°57'11.52"E
Dewatering of Borrow Pit 2	Portion 59 and 60 of Klipfontein 566 JR	35 770	25°56'11.30"S	28°56'57.60"E
Progressive dewatering of New Largo Pit D	Remaining Extent and Portion 33 of Farm Klipfontein 568 JR	1 042 440	25°59'00.49"S	28°55'03.01"
Progressive dewatering of New Largo Main Mine via borehole 1	Remaining Extent and Portion 1 of Klipfontein 566 JR	1 042 440	25°57'26.29"S	28°57'14.15"E
Progressive dewatering of New Largo Main Mine via Borehole 2	Remaining Extent and Portion 1 of Klipfontein 566 JR	1 042 440	25°58'02.35"S	28°56'43.94"E
Progressive dewatering of New Largo Main Mine via Borehole 3	Portion 66 of Farm Klipfontein 566 JR	1 042 440	25°58'3.53"S	28°56'06.38"E

Progressive dewatering of New Largo Main Mine via Borehole 4	Portion 2 of Farm Vlakfontein 569 JR	82 800	25°58'38.21"S	28°58'09.77"E
Progressive dewatering of New Largo Main Mine via Borehole 5	Portion 2 of Farm Vlakfontein 569 JR	82 800	25°59'05.74"S	28°58'40.51"E
Progressive dewatering of New Largo Main Mine via Borehole 6	Portion 5 of Farm Vlakfontein 569 JR	82 800	25°58'46.58"S	28°57'20.34"E
Groundwater abstraction from Pit F	Portion 5 and 1 of Farm Vlakfontein 569 JR	82 800	26° 0'18.39" S	28°59'28.78"E
Groundwater abstraction	Portion 9 of Farm Vlakfontein 569 JR	82 800	25°59'49.60"S	28°57'48.83"E
Dewatering of Pit H in a progressive manner	Portion 16 & Portion 18 of Farm Klipfontein 568 JR; Portion 75 of Farm Heuvelfontein 215 IR; and Portion 4 of Farm Van Dyksput 214 IR	10 000	26° 1' 15.2" S 26° 2' 33.9" S 26° 1' 14.0" S 26° 1' 46.2" S Centre: 26° 1'37.82"S	28° 56' 24.6" E 28° 56' 37.5" E 28° 54' 42.3" E 28° 54' 51.2" E Centre: 28°55'36.37"E
Dewatering of Pit F in a progressive manner	Portion 1 of Farm Vlakfontein 569 JR	726 715	26° 00'17.06"S	28° 59'46.36"E

1.2 The quantity of water removed from underground must be metered and recorded on a daily basis.

1.3 The groundwater levels shall be monitored every six (6) months (once in the beginning of the dry season and once in the beginning of the wet season).

1.4 Self-registering flow meters must be installed in the delivery lines at easily accessible positions near the dewatering points.

1.5 The Licensee shall follow acceptable construction, maintenance, and operational practices to

ensure the consistent, effective, and safe performance of the underground water removal system.

1.6 Reasonable measures must be taken to provide for mechanical, electrical, or operational failures and malfunctions of the underground water removal system.

[END OF LICENCE]