



## **water & sanitation**

Department:  
Water and Sanitation  
**REPUBLIC OF SOUTH AFRICA**

Private Bag X313, PRETORIA, 0001, 185 Francis Baard Street, Sedibeng Building, Pretoria  
Tel: 012 336 7500 Fax: 021 323 4472/012 326 2715

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

I, **Mr Moses Sipho Skosana** in my capacity as Chief Director: Water Use Authorisation Management in the Department of Water and Sanitation and acting under the powers delegated to me by the Minister of Water and Sanitation, hereby authorises the following water use in respect of this licence.

Serial Number : 4963828151604119210  
**Chief Director: Water Use Authorisation Management**  
Date: Mar 18 2024 12:34PM

**LICENCE NO: 06/B11K/G/6921**  
**FILE NO: 27/2/2/B811/22/1**  
**WUA NO: WU28702**

**Licensee: Beethoven investments (Pty) Ltd – Hillside Siding Wash Plant**

**Postal Address:** P.O. Box 1224  
Southdale  
Johannesburg  
2135

**Physical Address:** 66 Vorster Avenue  
Glenanda  
Johannesburg  
2091

**B15307**

CD: WUAM

**1. Water Uses authorised by this licence**

**Table 1: Summary of Authorised water use activities**

1.1	Section 21(a) of the Act	Taking water from a water resource, subject to the conditions set out in Appendices I and II.
1.2	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 IV.
1.3	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.
1.4	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 VI.

**2. Property in respect of which the water use licence is issued**

**Table 2: Property details where the water uses will take place**

Activity	Farm Name	Farm Portion	Owner's Name	Title Deed Number
<b>Section 21(a) Water Uses</b>				
Abstraction of groundwater through Borehole 1	Farm Elandspruit 291 JS	Portion 62	Beethoven Investments (Pty) Ltd	T4796/1968
Abstraction of groundwater through Borehole 2	Farm Elandspruit 291 JS	Portion 62	Beethoven Investments (Pty) Ltd	T4796/1968
<b>Section 21(c) Water Uses</b>				
Pollution Control Dam within 500 m from watercourse	Farm Elandspruit 291 JS	Portion 62	Beethoven Investments (Pty) Ltd	T4796/1968
Above ground galvanised steel reservoirs within 500 m from watercourse	Farm Elandspruit 291 JS	Portion 62	Beethoven Investments (Pty) Ltd	T4796/1968
Offices within 500 m from watercourse	Farm Elandspruit 291 JS	Portion 62	Beethoven Investments (Pty) Ltd	T4796/1968

Activity	Farm Name	Farm Portion	Owner's Name	Title Deed Number
<b>Section 21(c) Water Uses</b>				
Incoming product (ROM, crushed and screened) stockpile within 500 m from watercourse	Farm Elandspruit 291 JS	Portion 62	Beethoven Investments (Pty) Ltd	T4796/1968
Product stockpile within 500 m from watercourse	Farm Elandspruit 291 JS	Portion 62	Beethoven Investments (Pty) Ltd	T4796/1968
Wash & Crusher Platform within 500 m from watercourse	Farm Elandspruit 291 JS	Portion 62	Beethoven Investments (Pty) Ltd	T4796/1968
<b>Section 21(g) Water Use</b>				
Disposal of water containing waste in the Pollution Control Dam	Farm Elandspruit 291 JS	Portion 62	Beethoven Investments (Pty) Ltd	T4796/1968
Disposal of sewer in Conservancy Tank	Farm Elandspruit 291 JS	Portion 62	Beethoven Investments (Pty) Ltd	T4796/1968
Dust suppression on haul roads	Farm Elandspruit 291 JS	Portion 62	Beethoven Investments (Pty) Ltd	T4796/1968
Incoming product (ROM, crushed and screened) stockpile	Farm Elandspruit 291 JS	Portion 62	Beethoven Investments (Pty) Ltd	T4796/1968
Stockpile of product	Farm Elandspruit 291 JS	Portion 62	Beethoven Investments (Pty) Ltd	T4796/1968
Stockpile of low-grade product	Farm Elandspruit 291 JS	Portion 62	Beethoven Investments (Pty) Ltd	T4796/1968
Disposal of slurry in the	Farm Elandspruit 291 JS	Portion 62	Beethoven Investments (Pty)	T4796/1968

Activity	Farm Name	Farm Portion	Owner's Name	Title Deed Number
Slurry Dam			Ltd	

### 3. Licence and Review Period

- 3.1 This licence is valid for a period of ten (10) years from the date of issuance and it may be reviewed at intervals of not more than five (5) years.
- 3.2 On review of the licence, a Responsible Authority may amend any condition of the licence, other than the period of validity thereof.

### 4. 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.

#### 4.1 The following definitions are of relevance, but not exclusive, to this licence

Act	National Water Act, 1998 (Act 36 of 1998)
Buffer Zone	A scientifically determined area where water use activities are excluded.
Delegated Authority	The person that has been delegated certain functions of the Act
Department	The Department of Water and Sanitation
Commencement date	The date on which water use starts.
Days	Calendar days.
Minister	Minister of the Department of Water and Sanitation.
Provincial Head	Head of Provincial Operations: Mpumalanga, Private Bag x11259, MBOMBELA, 1200.
Responsible Authority	"Responsible authority" in relation to a specific power or duty in respect of water uses, means (a) if that power or duty has been assigned by the Minister to a catchment management agency, that catchment management agency; or (b) if that power or duty has not been so assigned, the Minister
Riparian habitat	"Riparian habitat" includes the physical structure and associated vegetation of the areas associated with a watercourse which are commonly characterised by alluvial soils, and which are inundated or flooded to an extent and with a frequency sufficient to support vegetation of species with a composition and physical structure distinct from those of adjacent land areas.
Watercourse	"Watercourse" means (a) a river or spring; (b) a natural channel in which water flows regularly or intermittently; (c) a wetland, lake or dam into which, or from which, water flows; and (d) any collection of water which the Minister may, by notice in

	the Gazette, declare to be a watercourse, and a reference to a watercourse includes, where relevant, its bed and banks.
Extent of the watercourse	(a) the outer edge of the 1:100 year floodline 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	(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.

#### 5. Description of activity and affected water resource(s)

This licence authorises **Beethoven investments (Pty) Ltd – Hillside Siding Wash Plant** for the water uses in terms of section 21 (a), (c), (g) and (i) of the National Water Act, 1998 (Act No. 36 of 1998). The water uses activities include taking 1 141 m<sup>3</sup>/ annum of water from borehole 1, taking 23 835 m<sup>3</sup>/ annum of water from borehole 2; Pollution Control Dam within 500 m from watercourse, ground galvanised steel reservoirs within 500 m from watercourse, offices within 500 m from watercourse, incoming product stockpile within 500 m from watercourse, product stockpile within 500 m from watercourse, wash and crusher platform within 500 m from watercourse, disposal of water containing waste in the Pollution Control Dam, disposal of slurry in the Slurry Dam, disposal of sewer in Conservancy Tank, dust suppression on haul roads, incoming product stockpile (ROM and crushed and screened); and stockpile of low-grade product. The activity is in quaternary catchment B11H which falls within Olifants Water Management Area.

## 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 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.
- 1.5 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.
- 1.6 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.
- 1.7 If the water use licence is not exercised or fully exercised within the 5 (five) year period and the extended 2 (two) 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

- 1.8 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

- 1.9 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

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

- 1.11 The quality of water authorised to be disposed and discharged in this licence may not be exceeded.
- 1.12 Any changes to the monitoring programmes should be approved by the Provincial Head.

#### **Reviewal of licences**

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

- 1.15 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**

- 1.16 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.
- 1.17 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**

- 1.18 The licensee is not indemnified from any detrimental effect that the dam(s) may have on other properties.
- 1.19 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.
- 1.20 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**

- 1.21 The licensee must adhere to any restrictions that are gazetted and imposed on the respective water resource.

#### **Water measurement and reporting**

- 1.22 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**

- 1.23 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**

- 1.24 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**

- 1.25 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 activities.
- 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 5 (five) 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 5 (five) years. Only one request for extension of time, with maximum of 2 (two) 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 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 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 (1) year 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.

### **Storm water management**

- 2.24 Storm water management facilities must be constructed, operated and maintained in a sustainable manner throughout the project as detailed in the Storm Water 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 storm water does not lead to bank instability and excessive levels of silt entering the stream.
- 2.26 All storm water 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 storm water system shall be designed and implemented to provide suitable routing and pumping capacity for contaminated storm water from the individual facilities to the respective storm water dams in accordance with the design specifications.
- 2.28 Clean storm water must be diverted from Hillside Siding Wash Plant 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 entitlement. 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, appointed by the licensee, 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 Minister.

#### **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) year of remaining life of the mine as part of IWWMP.
- 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 a maximum quantity of twenty-four thousand nine hundred and seventy-six (24 976) cubic metres (m<sup>3</sup>) per annum from groundwater at the locations given in Table 3

**Table 3: Summary of water uses authorised**

Water use Description	Purpose	Property	Volume of water taken (m <sup>3</sup> /annum)	Pumping rate/hour	Coordinates
Section 21(a): Taking of water from a resource					
Abstraction of groundwater through Borehole 1	Domestic use	Portion 62 of Farm Elandspruit 291 JS	1141 m <sup>3</sup> /annum	262.8	25°49'22.1"S 29°21'38.6"E
Abstraction of groundwater through Borehole 2	Coal Washing Plant	Portion 62 of Farm Elandspruit 291 JS	23 835 m <sup>3</sup> /annum	9150.6	25°49'26.0"S 29°21'29.5"E
Total			24 976 m <sup>3</sup> /annum		

#### 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; and
- 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 conditions



- 4.1 No abstraction above the applied volume and sustainable yield should take place as this could potentially cause damage to the aquifer and impact on the availability of groundwater.
- 4.2 The licensee shall be responsible for appointment of a Responsible Person(s) who will give effect to the various licence conditions and to ensure compliance thereof within one (1) month of the issuance of this licence.
- 4.3 Within one (1) month of the appointment of a Responsible Person(s) mentioned in condition 4.2, the licensee shall in writing inform the Provincial Head thereof.
- 4.4 Flow meter must be installed at the abstraction boreholes, static groundwater levels data and groundwater abstraction volumes should be recorded monthly.

**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 and in the water use licence application reports submitted to the Department or the Regional Head (refer condition 1.2):

**Table 4: Section 21 (c) and (i) water uses authorised**

<b>Water Use description</b>	<b>Purpose</b>	<b>Property</b>	<b>Extent/ Dimensions (m)</b>	<b>Coordinates</b>
Pollution Control Dam within 500 m from watercourse.	Disposal of water containing waste.	Portion 62 of Farm Elandspruit 291 JS	Height: 3 m Width: 33.7 Length: 76.2	<b>(Start Point)</b>  <b>(End Point)</b>  25°49'26.17"S 29°21'26.58"E
Above ground galvanised steel reservoirs within 500 m from watercourse	Storage of raw water	Portion 62 of Farm Elandspruit 291 JS	Height: 2.3 m	25°49'27.26"S 29°21'29.31"E
Offices within 500 m from watercourse	Offices for site staff	Height: 3 m Width: 30 m Length: 45	Portion 62 of Farm Elandspruit 291 JS	25°49'21.90"S 29°21'39.74"E
Incoming product stockpile within 500 m from watercourse	Stockpile of ROM; and crushed and screened product from mines.	Height: 2 m Width: 40 m Length: 40 m	Portion 62 of Farm Elandspruit 291 JS	25°49'22.86"S 29°21'35.21"E
Product stockpile within 500 m from watercourse	Stockpile of ROM; and crushed and screened product from mines.	Height: 2 m Width: 40 m Length: 40 m	Portion 62 of Farm Elandspruit 291 JS	25°49'21.58"S 29°21'30.48"E
Wash & Crusher Platform within 500 m	Crushing and washing of coal.		Portion 62 of Farm Elandspruit 291 JS	25°49'23.33"S 29°21'30.18"E

Water Use description	Purpose	Property	Extent/Dimensions (m)	Coordinates
from watercourse				

- 1.2 The licensee must carry out and complete all the activities listed under condition 1.1 according to the following:
- 1.2.1 Beethoven Investments (Pty) Ltd: Hillside Siding Wash Plant – Integrated Water and Waste Management Plan (IWWMP) by Eco Elementum Environmental & Engineering dated 16 October 2023.
- 1.2.2 Beethoven Investments (Pty) Ltd: Hillside Siding Wash Plant – Stormwater Management Plan and Waste Containment Facilities Design Report by Eco Elementum Environmental & Engineering dated 6 July 2023.
- 1.2.3 Wetland and Ecological Assessment Report by Oasis Environmental Specialists (Pty) Ltd dated February 2023.
- 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. Biota

- 4.1 The licensee must allow movement of aquatic species, including migratory species where applicable.
- 4.2 Ensure implementation of all mitigation measures not to disturb the breeding, nesting and/or feeding habitats and natural movement patterns of aquatic biota.

## **5. Rehabilitation and Management**

- 5.1 The licensee shall submit the rehabilitation plan within six (6) months of the issuance of this licence to the Provincial Head under 27/2/2/B811/22/1.
- 5.2 The rehabilitation must be implemented according to the approved Rehabilitation Plan.
- 5.3 A photographic record must be kept as follows and submitted upon request:
  - 5.4 Dated photographs of all the sites to be impacted before construction commences
  - 5.5 Dated photographs of all the sites during construction on a monthly basis; and
  - 5.6 Dated photographs of all the sites after completion of construction, seasonally.
- 5.7 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.

## **6. Site specific conditions**

- 6.1 Master Layout Plan must be updated to include scientific buffer.
- 6.2 Scientific buffer of 70 m must be maintained.
- 6.3 Recommended Ecological Category of C must be set.
- 6.4 No stockpiles or equipment must be stored within wetland area including wetland buffer.
- 6.5 Buffer must be demarcated, to prevent the operation and storage of equipment in the wetland area.
- 6.6 Maintenance plan and contingency plan for spills and pollution must be compiled and implemented.
- 6.7 Stormwater Management Plan must be implemented:
  - 6.7.1 Clean water diversion must be designed to be as natural as possible;
  - 6.7.2 Dirty water channels must be designed with liner system and prevent pollutants entering the watercourse; and
  - 6.7.3 Clean stormwater outlets must be designed with sediment and litter traps.
- 6.8 Dust suppression must be conducted accordingly ensuring limited dust settles on the wetland.
- 6.9 Alien Invasive Management Programme must be implemented as well as incorporated into the Environmental Management Programme.

- 6.10 Monitoring programme must be implemented and include wetland to ensure the Recommended Ecological Category C is maintained.

**APPENDIX IV**

**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 waste and water containing waste into the waste management facilities as described in Table 5.

**Table 5: Section 21 (g) Water Uses Authorised**

<b>Water Use Description</b>	<b>Purpose</b>	<b>Property</b>	<b>Volume (m<sup>3</sup>/a), Capacity (m<sup>3</sup>)</b>	<b>Coordinates</b>
Disposal of water containing waste in the Pollution Control Dam	Water containing waste disposal	Portion 62 of Farm Elandspruit 291 JS	77 486 m <sup>3</sup> /annum 2 500 m <sup>3</sup>	25°49'25.23"S 29°21'26.83"E
Disposal of sewer in Conservancy Tank	Sewer disposal	Portion 62 of Farm Elandspruit 291 JS	12 m <sup>3</sup>	25°49'22.17"S, 29°21'39.77"E
Dust suppression on haul roads	Dust suppression on haul roads	Portion 62 of Farm Elandspruit 291 JS	42 135 m <sup>3</sup> /annum	N/A
Incoming product stockpile	Stockpile of ROM; and crushed and screened product from mines.	Portion 62 of Farm Elandspruit 291 JS	470 m <sup>3</sup> /a	25°49'23.12"S 29°21'35.95"E
Stockpile of product	Product stockpile	Portion 62 of Farm Elandspruit 291 JS	1 822 m <sup>3</sup> /a	25°49'20.88"S 29°21'30.10"E
Stockpile of low-grade product	Low grade product stockpile	Portion 62 of Farm Elandspruit 291 JS	1 315 m <sup>3</sup> /a	25°49'17.40"S 29°21'22.71"E
Disposal of slurry in the Slurry Dam	Disposal of slurry.	Portion 62 of Farm Elandspruit 291 JS	96 528 m <sup>3</sup> /a 1 232 m <sup>3</sup>	25°49'24.66"S 29°21'23.94"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 Pollution Control Dam and Slurry Dam, according to

the Report and according to the final plans Beethoven Investments (Pty) Ltd: Hillside Siding Wash Plant – Stormwater Management Plan and Waste Containment Facilities Design Report as approved by the Provincial Head.

- 2.2 The construction of the Pollution Control Dam and Slurry Dam 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 30 days after the completion of the activities referred in condition 1.1 the licensee shall in writing, under reference 27/2/2/B811/22/1, 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 Beethoven Investments (Pty) Ltd: Hillside Siding Wash Plant – Stormwater Management Plan and Waste Containment Facilities Design Report
- 2.5 The licensee shall submit a set of as-built drawings within six (6) months to the Provincial Head after the completion of the Pollution Control Dam and Slurry Dam.
- 2.6 The Pollution Control Dam and Slurry Dam 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.
- 2.7 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.
- 2.8 One month's written notice must be given to the Provincial Head 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.
- 2.9 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 Provincial Head 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.
- 2.10 Should the liner the facilities found not to be competent, the License holder should notify the Provincial Head within a week of coming to this knowledge, detailing the measures that they would implement to address the shortcomings.
- 2.11 The licensee 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.
- 2.12 The licensee shall ensure that each underdrainage leak detection system does not discharge into environment, as this will pose a significant impact into the water resource. A sump or manhole shall be constructed to monitor any leakages from the facilities.
- 2.13 The license holder shall install a monitoring protocol to measure quantity of water handled by the facilities.
- 2.14 The licensee shall afford the authorities opportunity to obtain samples of Geosynthetic 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).
- 2.15 The licensee must 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.
- 2.16 The licensee 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.
- 2.17 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 National Environmental Management: Waste Act Regulations 2013, with particular attention to health and safety of persons.
- 2.18 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.
- 2.19 Comprehensive records of liquid movement with time from underdrainage system sumps/ manhole and leachate collection sumps shall be maintained and reported to the authorities quarterly or upon request.
- 2.20 The licensee shall ensure that an electric leak location survey (ELLS) is undertaken on the (lowest) GM post placement of the cushion soil layer (or GT cushion plus drainage material) in accordance with ASTM D8265 for the secondary liner of double composite liner facilities and ASTM D7007 for single composite liner barrier systems. The results of such an ELLS shall be included in the construction completion report, including the nature and extent of abnormalities and photographs thereof. There shall be no relaxation of this requirement without the written approval of the authorities prior to commencement of construction (for which consideration may be based on the competence and relevant experience of the site supervision engineer and CQA monitor, the contractor and the geosynthetics installer for the particular waste to be contained, conductivity of above and below liner material and foundation conditions.)

**3. QUALITY OF WASTEWATER TO BE DISPOSED**

- 3.1 The licensee shall monitor the quality of wastewater disposed of into a dirty water containment facility as indicated in Table 6.

**Table 6: Quality of water to be disposed into dirty water containment Facilities**

Parameters/ Substances	Quality of water to be disposed
pH	8
Electrical Conductivity (S/m)	95
Chloride (mg/l)	110
Sulphate (mg/l)	40
Fluoride (mg/l)	0.5
Sodium (mg/l)	50
Potassium (mg/l)	1.5
Magnesium (mg/l)	55
Aluminium (mg/l)	0.25
Iron (mg/l)	1.5
Total Dissolved Solids (mg/l)	700
Calcium (mg/l)	90
Manganese (mg/l)	2

#### 4. SURFACE WATER MONITORING

4.1 The licensee shall monitor surface water to determine the impact of the activity on the water resource by taking samples at the monitoring points indicated in Table 7.

**Table 7: Surface water monitoring points**

Sampling point name	Locality	X Co-ordinate	Y Co-ordinate
SDS	Downstream of Spookspruit	29°20'43.6560"	25°49'28.9200"
SUS	Upstream of Spookspruit	29°21'37.3320"	25°49'55.5600"
ABH1	Background	29°21'42.0480"	25°49'05.8800"
ABH2	Background/Impact	29°21'43.6680"	25°49'01.5600"

**Table 8: Surface water monitoring variables and frequency**

Variables	Frequency
pH	Monthly
Electrical Conductivity (S/m)	Monthly
Chloride (mg/l)	Monthly
Sulphate (mg/l)	Monthly
Fluoride (mg/l)	Monthly
Sodium (mg/l)	Monthly
Potassium (mg/l)	Monthly
Magnesium (mg/l)	Monthly
Aluminium (mg/l)	Monthly
Iron (mg/l)	Monthly
Total Dissolved Solids (mg/l)	Monthly
Suspended solids (mg/l)	Monthly
Calcium (mg/l)	Monthly
Nitrate (mg/l)	Monthly
Phosphate (mg/l)	Monthly
Zinc (mg/l)	Monthly
Manganese (mg/l)	Monthly

4.2 The quality of the groundwater resource must be monitored by taking samples monthly at surface water monitoring points as described in condition 4.2 in Appendix IV Each sample shall be analysed for the variables and at frequencies, as shown in Table 8: in Appendix IV and/ or any other variable as may be required from time to time by the Provincial Head.

**5. GROUNDWATER MONITORING**

5.1 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	X Co-ordinate	Y Co-ordinate
HS-MON01	Upgradient Borehole	29°21'27.66"	25°49'26.68"
HS-MON02	Downgradient of Product Stockpile	29°21'35.23"	25°49'24.72"
HS-MON03	Downgradient of Pollution Control Dam	29°21'30.96"	25°49'17.95"

5.2 Monitoring boreholes in the Table 9 in condition 5.1 in Appendix IV 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.

5.3 All boreholes on site must be properly sealed at the surface to prevent surface pollution into the groundwater system.

5.4 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 9.

**Table 10: Groundwater monitoring variables and frequency**

Variables	Frequency	Baseline groundwater quality
pH	Quarterly	7.6
Electrical Conductivity (S/m)	Quarterly	47
Chloride (mg/l)	Quarterly	23
Sulphate (mg/l)	Quarterly	25
Fluoride (mg/l)	Quarterly	0.1
Nitrate (mg/l)	Quarterly	1.9
Sodium (mg/l)	Quarterly	21
Potassium (mg/l)	Quarterly	0.58
Magnesium (mg/l)	Quarterly	26
Aluminium (mg/l)	Quarterly	0.09
Iron (mg/l)	Quarterly	0.06
Total Dissolved Solids (mg/l)	Quarterly	335
Calcium (mg/l)	Quarterly	46

Variables	Frequency	Baseline groundwater quality
Manganese (mg/l)	Quarterly	<0.05

5.5 The quality of the groundwater resource must be monitored by taking samples quarterly at groundwater monitoring points as described in condition 5.1 in Appendix IV Each sample shall be analysed for the variables and at frequencies, as shown in Table 10: in Appendix IV 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 groundwater associated with the Waste Containment 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.

5.7 The licensee shall monitor waste handled by the facilities and measure it against the installed type of liner, furthermore and determine the competency of the liner over its service life.

**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/B811/22/1.

**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 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 conditions**

8.1 All boreholes on site must be constructed such that they do not unnecessarily penetrate impermeable layers that could possibly create conduits for the migration of leachate pollution to groundwater.

8.2 A pump test must be conducted for all the proposed groundwater monitoring boreholes after drilling is completed to determine the aquifer parameters as well as to further characterize the hydrogeology in the area.

- 8.3 The area to be used for storage of any hazardous waste and items which contain hazardous substance must be lined with bounded walls to prevent pollution of surface water or groundwater should a leakage / spillage occur.
- 8.4 Hydrocensus borehole HH-07 must be added to the monitoring network.
- 8.5 A numerical flow and transport model should be updated, calibrated every two years as groundwater levels and quantity data generated becomes available to enhance model predictions and used to adequately assess the monitoring results and possible impacts upon detection.
- 8.6 Hydrocensus borehole HH-07 is in the impact zone in terms of abstraction, the groundwater user will have to be compensated with water equal to daily abstraction and quality.
- 8.7 The licensee shall provide any water user whose water supply is impacted by the water use with potable water.
- 8.8 The proposed groundwater monitoring boreholes must be drilled before the start of operations.

**[END OF LICENCE]**