



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

Private Bag X54304, DURBAN, 4000 , Southern Life Building 88 Joe Slovo Street, DURBAN,4000,
www.dws.gov.za

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

I, **Mr Ashley Starkey** in my capacity as Provincial Head: KwaZulu-Natal 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.



A. Starkey

Serial Number : 5633849750305441813

Provincial Head: KwaZulu-Natal

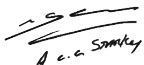
Date: Mar 27 2024 9:27AM

LICENCE NO: 11/U60C/CGCICFGI/14518
FILE NO: 27/2/1/U360/1/4/5/8/36
REF. NO: WU26945

Licensee: Cato Ridge Development Company Limited

Postal Address: P O Box 782075
Sandton
2146

Physical Address: 20 Pineway Place
Woodburn Villas,
Morningside
2146



A. Starkey

Provincial Head

1. Water Uses authorised by this licence

Table 1: Summary of water uses authorised

| | | |
|---|---------------------------|---|
| 1 | 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 Appendices II |
| 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 Appendices III |
| 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 Appendices IV |
| 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 Appendices II |

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

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

| Activity | Farm Name and Farm Portion | Owner's Name | Title Deed Number |
|---|--|--|-------------------|
| Section 21(c) and (i) Water Use | | | |
| Development infrastructure including- Mini Wastewater Treatment Works (MWWTW), internal roads, underground power lines, access and internal roads and water pipelines, cattle fence line, pump and sump stations within the 500m regulated area of a wetland. | Portion 26 of the Farm Uitkomst and Doornrug 852 (26/852) | Cato Ridge Development Company and Assmang Limited | T1676/1958 |
| | Remainder 29 of the Farm Uitkomst and Doornrug 852 (RE/29/852) | | T7408/1960 |
| | Portion 41 of the Farm Uitkomst and Doornrug 852 (41/852) | | T7405/960 |
| | Portion 25 of the Farm Riet Vallei 851 FT (25/852) | | T7409/1960 |
| | Remaining Extent of Farm Riet Vallei 851 FT (RE/851) | | T37939/2002 |
| | Remainder of ERF 50 Cato Ridge FT T7409/1960 | | T37941/2002 |
| | Portion 40 of the Farm Uitkomst and Doornrug 852 FT (41/852) | | |
| Portion 27 of the Farm Riet Vallei 851 FT (27/851) | | | |

| | | | |
|---|---|--|------------|
| | Portion 101 of the Farm Uitkomst and Doornrug 852 FT (101/852) | | |
| | Portion 102 of the Farm Uitkomst and Doornrug 852 FT (102/852) | | |
| Discharge point located within the wetland (W11) | Portion 102 of the Farm Uitkomst and Doornrug 852 (102/852) | Cato Ridge Development Company and Assmang Limited | T7408/1960 |
| Infrastructure (Fence) located within a wetland (W12 & W15) | Portion 29 of the Farm Uitkomst and Doornrug 852 (29/852) Portion 380 of the Farm Uitkomst and Doornrug 852 (380/852) | Cato Ridge Development Company and Assmang Limited | T7405/960 |
| Infrastructure (Fence) located within a wetland (W12 & W13) | Portion 29 of the Farm Uitkomst and Doornrug 852 (29/852) | Cato Ridge Development Company and Assmang Limited | T7405/960 |
| Infrastructure (Fence) located within 1:100 year floodline | Portion 29 of the Farm Uitkomst and Doornrug 852 (29/852) RE of the Farm Uitkomst and Doornrug 852 (RE/852) | Cato Ridge Development Company and Assmang Limited | T7405/960 |
| Infrastructure (Fence) located within a wetland (W11) | RE of the Farm Uitkomst and Doornrug 852 (RE/852) | Cato Ridge Development Company and Assmang Limited | T7405/1960 |
| Infrastructure (Fence) located within a wetland (W23) | Portion 26 of the Farm Uitkomst and Doornrug 852 (26/852) | Cato Ridge Development Company and Assmang Limited | T7408/1960 |
| Infrastructure (Fence) located within a regulated area of 100m of drainage line | Portion 41 of the Farm Uitkomst and Doornrug 852 (41/852) Portion 42 of the Farm Uitkomst and Doornrug 852 (42/852) Portion 429 of the Farm | Cato Ridge Development Company and Assmang Limited | T1676/1958 |

| | | | |
|---|---|--|------------|
| | Uitkomst and Doornrug 852 (429/852) | | |
| | Portion 209 of the Farm Riet Vallei 851 FT (209/851) | | |
| Infrastructure (Fence) located within a regulated area of 100m of drainage line | Portion 235 of the Farm Riet Vallei 851 FT (235/851) | Cato Ridge Development Company and Assmang Limited | T7408/1960 |
| Infrastructure (Fence) located within a wetland (W07) | 851 FT (235/851) | Cato Ridge Development Company and Assmang Limited | T7408/1960 |
| Infrastructure (Fence) located within a regulated area of 100m of drainage line | Portion 235 of the Farm Riet Vallei 851 FT (235/851) | Cato Ridge Development Company and Assmang Limited | T7408/1960 |
| Infrastructure (Fence) located within a regulated area of 100m of drainage line | Portion 29 of the Farm 85129 | Cato Ridge Development Company and Assmang Limited | T7405/960 |
| Infrastructure (Fence) located within a regulated area of 100m of drainage line | Portion 29 of the Farm 85129 | Cato Ridge Development Company and Assmang Limited | T7405/960 |
| Infrastructure (Fence) located within a regulated area of 100m of drainage line | Portion 29 of the Farm 85129 | Cato Ridge Development Company and Assmang Limited | T7405/960 |
| Section 21(f) Water Use | | | |
| Discharging treated sewage water through a pipe into a watercourse (W11) | Portion 101 of the Farm Uitkomst and Doornrug (101/852) | Cato Ridge Development Company and Assmang Limited | T7408/1960 |
| Section 21(g) Water Use | | | |
| Mini | Portion 101 of the Farm | Cato Ridge | T7408/1960 |

| | | | |
|------------------------------------|--|--|------------|
| Wastewater Treatment Works (MWWTW) | Uitkomst and Doornrug (101/852) Portion 102 of the Farm Uitkomst and Doornrug (102/852) | Development Company and Assmang Limited | |
| Pump and Sump Station 1 | Portion 27 of the Farm Riet Vallei 851 FT | Cato Ridge Development Company and Assmang Limited | T7408/1960 |
| Pump and Sump Station 2 | Portion 229 of the Farm Uitkomst and Doornrug 852 (229/852) Portion 95 of the Farm Uitkomst and Doornrug 852 (95/852) | Cato Ridge Development Company and Assmang Limited | T7408/1960 |
| Pump and Sump Station 3 | Portion 465 of the Farm Uitkomst and Doornrug (465/852) | Cato Ridge Development Company and Assmang Limited | T7408/1960 |
| Pump and Sump Station 4 | Portion 41 of the Farm Uitkomst and Doornrug 852 (41/852) | Cato Ridge Development Company and Assmang Limited | T1676/1958 |

3. Licence and Review Period

- 3.1 This licence is valid for a period of forty (40) year(s) 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) |
| Department | The Department of Water and Sanitation |
| CMA | Catchment Management Agency |
| Provincial Head | Head of Provincial Operations: KwaZulu-Natal: Private Bag X 54304, Durban 4000, 9 th Floor Southern Life Building, 88 Joe Slovo Street, Durban 4000 |
| CEO | The Chief Executive Officer of Catchment Management Agency |
| 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 |
| Delegated Authority | The person that has been delegated certain functions of the Act |
| Minister | Minister of the Department of Water and Sanitation. |
| 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. |
| Days | Calendar days |

| | |
|---------------------------------|---|
| Commencement date | The date on which water use starts |
| 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. |
| Sensitive riffle habitats | 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. |

5 Description of activity and affected water resource(s)

This licence authorises the Licensee; Cato Ridge Development Company Limited, to undertake water use activities in term of Section 21(c), (g), (f) and (i) associated with the development of the Cato Ridge Land Release Project. The project entails the establishment of bulk infrastructure required to service the full extent of this mixed-use development.

The development covers an extent of 351-Hectare (ha) of light industrial, logistics, commercial, warehousing and distribution precinct including roads, electricity, water, sewers, wastewater treatment, and stormwater services and the lease or sale of serviced industrial sites to third-party end-users for development and use. The development would be undertaken in three phases, the first 131-ha would be developed over the first 10 years known as Phase 1, 174-ha developed over the 11-20-year horizon as Phase 2 and the remaining 46-ha in the 21–25-year period as Phase 3 (note that Phase 3 may also be sold off and developed alongside Phase 1 in the initial period).

The following infrastructure within the development footprint would be located within 500m of a regulated area (wetland): Stormwater pipelines, channels and manholes; Raw water pipelines; Internal streets; Overhead powerlines; Sewer pipelines; Stormwater attenuation ponds; Mini

Wastewater Treatment Works (i.e., an onsite sewage treatment plant) (MWTW); and Treated sewage water (effluent) discharge point and erosion protection structures.

There will be internal roads (also referred as street) for the development footprint would be situated within the 500m regulated area of a wetland. The proposed street network will comprise of a 7m wide road, 3.5m lane in both directions with 20m road reserve and total road length will be approximately 3 277m within the development footprint and would be progressively developed throughout the project phases.

In terms of the bulk electrical infrastructure, the development will include construction of a new bulk power supply line from the Assmang Cato Ridge Works (ACRW) substation (788m 33kV with 7m servitude) linking with a new substation and connecting with the 11kV roadside underground powerline reticulation system. Bulk raw water pipeline will include water supply pipelines within road reserve connected with municipal supply.

The project is located in the KwaZulu-Natal Province, near Cato Ridge. The water uses will take place on various farm portions. The project falls within the Pongola Mtamvuna water management area which forms part of the U20L, U20L and U60C quaternary catchment. The geographic location at the property where the water uses will take place are - 30.5878, -29.7342

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/CEO.
- 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 quality of water authorised to be disposed and discharged in this licence may not be exceeded.
- 1.11 The Licensee must adhere to the monitoring programmes submitted with the application.
- 1.12 Any changes to the monitoring programmes should be approved by the Provincial Head/CEO.

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/CEO 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.

Pump stations

- 1.23 The Licensee must design all new pump stations in such a manner that environmental and health risks due to the discharge of untreated sewage into the water resource are avoided.
- 1.24 The designs of all new pump stations and the refurbishment of existing ones must be approved by the responsible authority.
- 1.25 No new pump stations will be allowed within the 1:100 year flood line or riparian habitat, whichever is the greatest and / or within the temporary zone of a wetland unless authorised.

Manholes

- 1.26 The Licensee must ensure that:
- 1.26.1 Manholes are covered at all times with a suitable cover that is not prone to theft and cannot be removed by unauthorised persons;
- 1.26.2 No new manholes are constructed in the 1:100 year flood line or riparian habitat, whichever is the greatest and / or within the temporary zone of a wetland. Existing manholes situated within the 1:100 year flood lines must be sealed adequately to ensure no ingress of water during any rainfall event.

Operations

- 1.27 Suitably qualified and experienced mechanical and electrical artisans must be available to be called in for inspection and maintenance of the works.
- 1.28 Prior to the approval of any new development, the Licensee must check and verify the capacity and adequacy of available wastewater infrastructure to ensure that the systems can handle the additional load arising from the new development and notify the Regional Head/CEO within six (6) months prior to approval of any new development.

Stormwater Management

- 1.29 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

- 1.30 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/CEO.

Appeals

- 1.31 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 a water use licence.

- 2.3 The Licensee must inform the Provincial Head/CEO 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 fully exercise the water use licence within 5 (five) years, the Licensee may request from the Provincial Head/CEO, 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/CEO 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/CEO 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/CEO.

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/CEO 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 The Licensee must, within 24 hours, notify the Regional Head/CEO of the occurrence or potential occurrence of any incident which has the potential to cause, or has caused water pollution, pollution of the environment, health risks or which is a contravention of the licence conditions.
- 2.15 The Licensee must, within 14 days, or a shorter period of time, as specified by the Provincial Head/CEO, 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/CEO 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 The Licensee must adhere to the Wastewater Incident Management Protocol.

- 2.17 The Licensee must compile/develop an environmental call and reporting centre protocol, which must ensure the investigation of every complaint within 24 hours.
- 2.18 The Licensee must implement and promote an environmental call and reporting centre.
- 2.19 The Licensee must rectify all valid issues reported within seven (7) days of the issue being reported to the Licensee. All valid complaints must be recorded in complaints register which will include reasons for non-rectification of issues raised.

Water Conservation and Water Demand Management (WCWDM)

- 2.20 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.
- 2.21 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.
- 2.22 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.
- 2.23 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.
- 2.24 The Licensee must update the WC/WDM plan every five (5) years and submit to the Provincial Head/CEO for approval.

Water measurement and reporting

- 2.25 The Licensee shall install appropriate water measuring devices to measure the amount of water abstracted prior use of water.
- 2.26 The Licensee shall ensure that all measuring, recording and monitoring devices are properly maintained and in good working order as per design specification and must be easily accessible. This shall include a programme of checking, calibration, and/or renewal of measuring devices.
- 2.27 Calibration/verification certificates of the flow measuring, recording and integrating devices must be available for inspection by the Provincial Head/CEO or the representative upon request.

Membership to a Water Users Association

- 2.28 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.

Monitoring, Methods of analysis and Reporting

- 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 wastewater.
- 2.30 The monitoring points must not be changed without prior notification to and written approval by the Provincial Head/CEO.
- 2.31 The date, time and monitoring point in respect of each sample taken shall be recorded together with the results of the analysis.
- 2.32 The Licensee shall submit the results of analysis for all the monitoring requirements to the Provincial Head/CEO as per the frequency in the monitoring conditions basis under Reference number **File Number 27/2/1/U360/1/4/5/8/36** and loaded onto Integrated Green Drop system or Regulatory information System (IRS).
- 2.33 The Licensee must submit an Annual Report to the Provincial Head/CEO for the purposes of quantifying the potential impacts of the Cato Ridge MWWTW on to the water resources.
- 2.34 The Licensee must develop and implement a Wastewater Risk Abatement Plan (W2RAP), according to W2RAP guideline: WRC report TT489/11 dated June 2011 and any subsequent updates. This must be submitted to the Provincial Head/CEO annually. The Wastewater Risk Abatement Plan should be practical and site specific.

Stormwater Management

- 2.35 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 erosion and excessive levels of silt entering the stream.
- 2.36 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.
- 2.37 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.
- 2.38 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.

- 2.39 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.
- 2.40 Clean storm water must be diverted from the site and must be managed in such a manner as to disperse runoff and to prevent the concentration of storm water flow.
- 2.41 The Licensee must ensure that no storm water should ingress into the wastewater system and that there is no wastewater ingress into the storm water system.
- 2.42 Wastewater impoundments must be designed, constructed and managed to ensure that there is sufficient capacity to contain the 1:50 year flood event, with a minimum of 0.8 m freeboard. Freeboard will be defined as the difference between the water level and the crest of the overflow.
- 2.43 Cut-off drains must be provided around the WWTW to prevent storm-water ingress into the surrounding of the works. These drains shall be designed to contain the maximum runoff, which could be expected over a period of 24 hours with a frequency of once in every twenty (20) years.
- 2.44 The Licensee must implement an approved storm water management plan.

Restrictions on access

- 2.45 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.
- 2.46 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.

Pipelines

- 2.47 Pipelines used for the conveyance of effluent must be painted in a conspicuous colour or manufactured of a coloured material distinctly different from the colour of the pipelines in which drinking water is flowing to avoid the possibility of any cross-connections of different pipelines.
- 2.48 All stop-valves and taps on the pipelines conveying water containing waste must be of a type that can be opened and closed by means of a loose wrench. This wrench must be in the safekeeping of a responsible member of the staff to prevent unauthorised use thereof.
- 2.49 Pollution caused by spills from the pipelines used for conveyance of effluent must be prevented.

- 2.50 The pipelines containing waste must withstand the 1:100 year flood where they cross a water resource and must not affect the 1:100 year flood or flow regime.
- 2.51 The Licensee must have the full length of the collector and the outfall sewer lines inspected on an annual basis. The results of the inspection must be reported in writing within one month of finalisation to the Provincial Head/CEO.
- 2.52 Notices manufactured of a durable weather-proof material warning against the use of water containing waste for drinking and washing purposes must be displayed at prominent places where the waste is being reused and at all taps. Such notices shall be worded in the official languages applicable in the area.

Pump stations

- 2.53 The Licensee must comply with the approved scheduled monitoring and maintenance plan for all wastewater pump stations and manholes under its control. Evidence of the implementation of the plan must be made available upon request.
- 2.54 All pump stations must be operated in such a manner that they have an emergency containment facility with sufficient capacity to ensure untreated effluent retention up to a 24-hour period.

Operations

- 2.55 The Licensee must classify the WWTW and register the process controllers on the Green Drop System or Integrated Regulatory Information System. The WWTW must be supervised and controlled by a suitably qualified and experienced employee of the Licensee who must have under his/her control an adequate number of process controllers who have been registered in terms of regulation 2834 of 27 December 1985 or any update thereto; to ensure proper functioning of the works and processes at all times.
- 2.56 The Licensee must develop<for existing WWTW that do not have the O&M Manual>and implement an Operation and Maintenance Manual including maintenance schedules and logbooks for recording maintenance work conducted on mechanical, electrical, instrumentation and civil within the wastewater treatment works including all pump stations. These must be available for site inspection by the Provincial Head/CEO or his/her representative upon request.
- 2.57 The Licensee must develop and enforce bylaws to prevent the discharge of any substance into the sewerage system which could have a deleterious effect on the operation of works and/or the final discharge of water containing waste to the Sterkspruit river (Tributary of the Umlazi river) and Mshwathi river (tributary of Umgeni river).

Auditing and reporting

- 2.58 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/CEO within sixty (60) calendar days of the finalisation of the audits.
- 2.59 The Licensee must appoint an independent external auditor to conduct biennial (every two (2) years) external audits on compliance with the conditions of 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/CEO within sixty (60) calendar days of the finalisation of each audit.
- 2.60 The Licensee must conduct internal process audits annually and independent process audits every five (5) years. These process audits must be carried out/conducted by a certified engineer/ process engineer on the Cato Ridge MWWTW. The first of these audits must be conducted within ninety (90) calendar days from the commencement of the operation of the Wastewater Treatment Works (WTWs). A report on the audit must be submitted to the Provincial Head/CEO within one (1) month of the finalisation of each audit.

Compensative measures

- 2.61 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 Plan

- 2.62 A closure plan of any of the water use activities must be submitted one (1) year before commencing with closure to the Provincial Head/CEO for written approval.

2.63 APPENDIX II

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) activities

1.1 This licence authorises the Section 21(c) or (i) water use activities as set out in Table 3 and in the water use licence application reports submitted to the Department or the Regional Head (refer condition 1.2)

Table 3: Water uses authorised

| Water Use description | Purpose | Property/ (ies) | Extent/Dimensions (m) | Coordinates | Property Owner |
|--|--|--|-----------------------|---|--|
| Section 21 (c) and (i) water uses | | | | | |
| Development infrastructure including- Mini Wastewater Treatment Works (MWWTW), internal roads, underground power lines, access and internal roads and water pipelines, cattle fence line, pump and sump stations within the 500m | Development and associated infrastructure within 500m of wetlands. | Portion 26 of the Farm Uitkomst and Doornrug 852 (26/852) | 351ha | Centre coordinates: 29°42'46.11 "S 30°37'13.49 "E | Cato Ridge Development Company and Assmang Limited |
| | | Remainder 29 of the Farm Uitkomst and Doornrug 852 (RE/29/852) | | | |
| | | Portion 41 of the Farm Uitkomst and Doornrug 852 (41/852) | | | |

| Water Use description | Purpose | Property/ (ies) | Extent/Dimensions (m) | Coordinates | Property Owner |
|------------------------------|---------|---|-----------------------|-------------|----------------|
| regulated area of a wetland. | | Portion 25 of the Farm Riet Vallei 851 FT (25/852) Remaining Extent of Farm Riet Vallei 851 FT (RE/851) Remainder of ERF 50 Cato Ridge FT T7409/1960 Portion 40 of the Farm Uitkomst and Doornrug 852 FT (41/852) Portion 27 of the Farm Riet Vallei 851 FT (27/851) Portion 101 of the Farm Uitkomst and Doornrug 852 FT (101/852) Portion 102 | | | |

| Water Use description | Purpose | Property/ (ies) | Extent/Dimensions (m) | Coordinates | Property Owner |
|---|---|--|--|--|--|
| | | of the Farm Uitkomst and Doornrug 852 FT (102/852) | | | |
| Discharge point located within the wetland (W11) | Discharge of the treated sewage water (effluent from the MWWTW) | Portion 102 of the Farm Uitkomst and Doornrug 852 (102/852) | Length: 16m Width: 8m Height: 5m | Star 29°43'19.13 "S 30°37'08.84 "E End 29°43'19.44 "S 30°37'09.64 "E | Cato Ridge Development Company and Assmang Limited |
| Infrastructure (Fence) located within a wetland (W12 & W15) | Conducting fence repairs or periodic (as when required) maintenance work and rehabilitation | Portion 29 of the Farm Uitkomst and Doornrug 852 (29/852) Portion 380 of the Farm Uitkomst and Doornrug 852 (380/852) | Length: 763m Height 2m | Start Point 29°44'23.26 "S 30°37'24.38 "E End 29°44'17.52 "S 30°36'57.09 "E | Cato Ridge Development Company and Assmang Limited |
| Infrastructure (Fence) located within a wetland (W12 & W13) | Installation of a new fence, conducting repairs or periodic (as when required) | Portion 29 of the Farm Uitkomst and Doornrug 852 (29/852) | Length: 751m Height: 2m | Start 29°44'23.26 "S 30°37'24.38 "E End 29°43'58.86 | Cato Ridge Development Company and Assmang Limited |

| Water Use description | Purpose | Property/(ies) | Extent/Dimensions (m) | Coordinates | Property Owner |
|--|--|--|----------------------------|--|--|
| | maintenance work and rehabilitation | | | "S 30°37'24.19 "E | |
| Infrastructure (Fence) located within 1:100 year floodline | Installation of a new fence, conducting repairs or periodic (as when required) maintenance work and rehabilitation | Portion 29 of the Farm Uitkomst and Doornrug 852 (29/852) RE of the Farm Uitkomst and Doornrug 852 (RE/852) | Length: 14m Height: 2m | Start 29°43'25.61 "S 30°37'10.80 "E End 29°43'25.49 "S 30°37'10.32 "E | Cato Ridge Development Company and Assmang Limited |
| Infrastructure (Fence) located within a wetland (W11) | Installation of a new fence, conducting repairs or periodic (as when required) maintenance work and rehabilitation | RE of the Farm Uitkomst and Doornrug 852 (RE/852) | Length: 48m Height: 2m | Start 29°43'25.49 "S 30°37'10.32 "E | Cato Ridge Development Company and Assmang Limited |
| Infrastructure (Fence) located within a wetland (W23) | Installation of a new fence, conducting repairs or periodic (as when required) maintenance | Portion 26 of the Farm Uitkomst and Doornrug 852 (26/852) | Length: 123m Height: 2m | Start 29°43'49.14 "S 30°36'25.30 "E End 29°43'51.99 "S 30°36'28.49 | Cato Ridge Development Company and Assmang Limited |

| Water Use description | Purpose | Property/ (ies) | Extent/Dimensions (m) | Coordinates | Property Owner |
|---|--|---|----------------------------|--|--|
| | ere work and rehabilitation | | | "E | |
| Infrastructure (Fence) located within a regulated area of 100m of drainage line | Installation of a new fence, conducting repairs or periodic (as when required) maintenance work and rehabilitation | Portion 41 of the Farm Uitkomst and Doornrug 852 (41/852) Portion 42 of the Farm Uitkomst and Doornrug 852 (42/852) Portion 429 of the Farm Uitkomst and Doornrug 852 (429/852) Portion 209 of the Farm Riet Vallei 851 FT (209/851) | Length: 369m Height: 2m | Start 29°43'04.47 "S 30°37'23.05 "E End 29°43'04.55 "S 30°37'36.07 "E | Cato Ridge Development Company and Assmang Limited |
| Infrastructure (Fence) located within a regulated area of 100m of drainage | Installation of a new fence, conducting repairs or periodic (as when required) | Portion 235 of the Farm Riet Vallei 851 FT (235/851) | Length: 101m Height: 2m | Start 29°42'55.45 "S 30°37'56.89 "E End 29°42'53.11 | Cato Ridge Development Company and Assmang Limited |

| Water Use description | Purpose | Property/ (ies) | Extent/Dimensions (m) | Coordinates | Property Owner |
|---|--|--|----------------------------|--|--|
| line | maintenance work and rehabilitation | | | S 30°37'57.74 "E | |
| Infrastructure (Fence) located within a wetland (W07) | Installation of a new fence, conducting repairs or periodic (as when required) maintenance work and rehabilitation | Portion 235 of the Farm Riet Vallei 851 FT (235/851) | Length: 76m Height: 2m | Start 29°42'55.45 "S 30°37'56.89 "E End 29°42'53.11 S 30°37'57.74 "E | Cato Ridge Development Company and Assmang Limited |
| Infrastructure (Fence) located within a regulated area of 100m of drainage line | Installation of a new fence, conducting repairs or periodic (as when required) maintenance work and rehabilitation | Portion 235 of the Farm Riet Vallei 851 FT (235/851) | Length: 251m Height: 2m | Start 29°42'47.89 "S 30°37'59.62 "E End 29°42'40.11 "S 30°38'02.42 "E | Cato Ridge Development Company and Assmang Limited |
| Infrastructure (Fence) located within a regulated area of 100m of drainage line | Installation of a new fence, conducting repairs or periodic (as when required) maintenance work and rehabilitation | Portion 29 of the Farm 85129 | Length: 65m Height: 2m | Start 29°42'37.65 "S 30°37'54.38 "E End 29°42'37.53 "S 30°37'56.79 "E | Cato Ridge Development Company and Assmang Limited |

| Water Use description | Purpose | Property/ (ies) | Extent/Dimensions (m) | Coordinates | Property Owner |
|---|--|------------------------------|---------------------------|--|--|
| Infrastructure (Fence) located within a regulated area of 100m of drainage line | Installation of a new fence, conducting repairs or periodic (as when required) maintenance work and rehabilitation | Portion 29 of the Farm 85129 | Length: 84m Height: 2m | Start 29°42'36.84 "S 30°37'45.26 "E End 29°42'35.62 "S 30°37'46.55 "E | Cato Ridge Development Company and Assmang Limited |
| Infrastructure (Fence) located within a regulated area of 100m of drainage line | Installation of a new fence, conducting repairs or periodic (as when required) maintenance work and rehabilitation | Portion 29 of the Farm 85129 | Length: 53m Height: 2m | Start 29°42'36.84 "S 30°37'45.26 "E End 29°42'35.62 "S 30°37'46.55 "E | Cato Ridge Development Company and Assmang Limited |

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

- 1.2.1 Hydropedology Assessment, GCS Water and Environment (Pty) Ltd, April 2023.
- 1.2.2 Wetland and Aquatic Assessment, Eco-Pulse Environmental Consulting Services, March 2023.
- 1.2.3 Hydrology, Nature Stamp, March 2023.
- 1.2.4 Geohydrology, Geo-measure Group (Pty) Ltd, March 2023.
- 1.2.5 Biodiversity Offset, Eco-Pulse Environmental Consulting Services, June 2023.
- 1.2.6 Geotechnical, Zutari, previously Aurecon South Africa, February 2020
- 1.2.7 Flood line Study, Zutari, previously Aurecon South Africa, October 2019.
- 1.2.8 Engineering Design Report, Kantey & Templer (Pty) Ltd, October 2022.
- 1.2.9 Stormwater Management Plan, Kantey & Templer (Pty) Ltd, April 2023.
- 1.2.10 Environmental Management Programme, Zutari (Pty) Ltd, June 2023.
- 1.2.11 Monitoring Programme, Zutari (Pty) Ltd, November 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 3, "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.

2.2 Structures, Construction Plant and Materials

- 2.2.1 Structures must withstand a 1:100 year flood.
- 2.2.2 Structures must be non-erosive, structurally stable and must not induce any flooding or safety hazard.
- 2.2.3 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.

2.3 Water Quality

- 2.3.1 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:

- 2.3.1.1 pH;
- 2.3.1.2 Electrical conductivity (mS/M)
- 2.3.1.3 Suspended solids (mg/l)
- 2.3.1.4 Turbidity;
- 2.3.1.5 Total dissolved solids (mg/l)
- 2.3.1.6 Colour, odour or taste
- 2.3.1.7 Dissolved oxygen
- 2.3.1.8 Typical (faecal) coli/100 ml
- 2.3.1.9 Temperature (° C)
- 2.3.1.10 Chemical oxygen demand (m/l)
- 2.3.1.11 Oxygen absorbed
- 2.3.1.12 Sodium content (mg/l)

- 2.3.1.13 Soap, oil and grease
- 2.3.1.14 Residual chlorine (as CP) (mg/l)
- 2.3.1.15 Free and saline ammonia (as N) (mg/l)
- 2.3.1.16 Nitrates (as N) (mg/l)
- 2.3.1.17 Arsenic (as As) (mg/l)
- 2.3.1.18 Boron (as B) (mg/l)
- 2.3.1.19 Total chromium (as Cr) (mg/l)
- 2.3.1.20 Copper (as Cu) (mg/l)
- 2.3.1.21 Phenolic compounds (as phenol) (mg/l)
- 2.3.1.22 Lead (as Pb) (mg/l)
- 2.3.1.23 Soluble ortho-phosphate (as P) (mg/l)
- 2.3.1.24 Iron (as Fe) (mg/l)
- 2.3.1.25 Manganese (as Mn) (mg/l)
- 2.3.1.26 Cyanides (as Cn) (mg/l)
- 2.3.1.27 Sulphides (as S) (mg/l)
- 2.3.1.28 Fluoride (as F) (mg/l)
- 2.3.1.29 Zinc (as Zn) (mg/l)
- 2.3.1.30 Cadmium (as Cd) (mg/l)
- 2.3.1.31 Mercury (as Hg) (mg/l)
- 2.3.1.32 Selenium (as Se) (mg/l)

2.3.2 Monitoring must be undertaken as set out in condition 3 below.

2.3.3 Activities must be scheduled to take place during the dry seasons when flows are lowest where reasonably possible.

2.3.4 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.

2.4 Flow

2.4.1 The diversion activities must be conducted in a manner that does not negatively affect the yield of the water course 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.

2.4.2 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.

2.5 Riparian and Instream Habitat (Vegetation and Physical Structure)

2.5.1 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.

- 2.5.2 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 statements.
- 2.5.3 Activities must not occur in sensitive riffle habitats unless authorised by this licence.
- 2.5.4 Indigenous riparian vegetation, including dead trees, outside the limits of disturbance indicated in the site plans must not be removed from the area.
- 2.5.5 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.
- 2.5.6 Soils that have become compacted through the water use activities must be loosened to an appropriate depth to allow seed germination.
- 2.5.7 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.
- 2.5.8 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.
- 2.6 Directional drilling:**
- 2.6.1 The Licensee must submit an as-drilled report within three (3) months of completion of the drilling to the Provincial Head/CEO;
- 2.6.2 Drilling entry and exit locations must be located outside the following designated riparian
- 2.7 Trenching:**
- 2.7.1 A buffer zone of 33m must be implemented for each wetland and construction within the buffer zone must be restricted to the trench line and working side of the trench.
- 2.8 Biota**
- 2.8.1 The Licensee must allow movement of aquatic species, including migratory species where applicable.
- 2.8.2 Ensure implementation of all mitigation measures not to disturb the breeding, nesting and/or feeding habitats and natural movement patterns of aquatic biota.
- 2.9 Rehabilitation and Management**
- 2.9.1 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.

- 2.9.2 The rehabilitation must be implemented according to the approved Rehabilitation Plan .
- 2.9.3 A photographic record must be kept as follows and submitted with reports as set out in condition 3.
- 2.9.4 Dated photographs of all the sites to be impacted before construction commences;
- 2.9.5 Dated photographs of all the sites during construction on a monthly basis; and
- 2.9.6 Dated photographs of all the sites after completion of construction, seasonally
- 2.9.7 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.

3. MONITORING AND REPORTING

- 3.1 The monitoring plan must be implemented and reporting done to the Provincial Head/CEO as stipulated under condition 3.2.
- 3.2 Six (6) monthly monitoring reports must be submitted to the Provincial Head/CEO for the duration of the construction phase and yearly thereafter or until otherwise agreed in writing with the Regional Head/CEO.

4. Construction and Operational Phase

- 4.1 At least two water quality monitoring points, one upstream and one downstream of the affected length of the watercourse/s.
- 4.2 A bio-monitoring programme (SASS) must be implemented along the affected length of the watercourse/s and must include a habitat assessment.
- 4.3 Exact positions of monitoring points must be indicated on the master layout plan (including their co-ordinates).

APPENDIX III

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 Cato Ridge Development to discharge water containing waste from the Cato Ridge MWWTW at a maximum quantity of seven hundred and thirty one thousand two hundred and seventy seven point five cubic metres per annum (731 277.5 m³/a), based on average of two thousand cubic metres per day (2 000 m³/d) into the wetland 11 and drainage line R3 at the following geographical location 29°43'19.13"S; 30°37'08.84"E
- 1.2 The quantity of water containing waste authorised to be discharged of in terms of this licence must not be exceeded.

2. QUALITY OF WATER CONTAINING WASTE DISCHARGED

- 2.1 Quality of the waste water discharged into wetland 11 from the Cato Ridge MWWTW must not exceed the limits shown in Table 4.

Table 4: Quality of wastewater to be discharged

| Variable | Limits | Frequency |
|-----------------------------------|-----------|-----------|
| pH | 5.5 – 9.5 | Daily |
| Electrical Conductivity EC (mS/m) | 70 - 150 | Daily |
| Chemical Oxygen Demand (mg/l) | 75 | Daily |
| Suspended Solids (mg/l) | 25 | Daily |
| Ammonia (mg/l) | 6 | Daily |
| Nitrate/Nitrite (mg/l) | 15 | Daily |
| Orthophosphate (mg/l) | 10 | Daily |
| E. Coli (per 100ml) | 1000 | Daily |
| Residual chlorine (mg/l) | 0.25 | Daily |
| Fluoride (mg/l) | 1 | Daily |
| Soap, oil or grease (mg/l) | 2.5 | Daily |
| Dissolved Arsenic (mg/l) | 0.02 | Daily |
| Dissolved Cadmium (mg/l) | 0.005 | Daily |
| Dissolved Chromium (VI)(mg/l) | 0.05 | Daily |
| Dissolved Copper (mg/l) | 0.01 | Daily |
| Dissolved Cyanide (mg/l) | 0.02 | Daily |
| Dissolved Iron (mg/l) | 0.3 | Daily |
| Dissolved Lead (mg/l) | 0.01 | Daily |
| Dissolved Manganese (mg/l) | 0.1 | Daily |
| Mercury and its compounds | 0.005 | Daily |

| Variable | Limits | Frequency |
|---------------------------|--------|-----------|
| (mg/l) | | |
| Dissolved Selenium (mg/l) | 0.02 | Daily |
| Dissolved Zinc (mg/l) | 0.1 | Daily |
| Boron (mg/l) | 1 | Daily |

3. SURFACE WATER MONITORING

3.1 Quantity

- 3.1.1 The quantity of the water containing waste discharged into wetland 11 and drainage line R3 shall be metered and recorded daily.
- 3.1.2 Monitoring for the quantity of water containing waste must be done at the inlet and the outlet of the WWTWs

3.2 Quality of the water containing waste

- 3.2.1 Monitoring for quality must be done at the outlet of the WWTWs where the water containing waste is discharged into wetland 11; and upstream and downstream of the discharge point. These must be identified in consultation with the Provincial Head/CEO and approved by the Provincial Head/CEO.
- 3.2.2 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 III. Each sample shall be analysed according to condition 14.1 of Appendix I for the variables and at frequency shown in Table 4 in condition 2.1 in Appendix III and/or any other variable as may be required from time by the Provincial Head/CEO.

3.3 Bio-Monitoring

- 3.3.1 A qualified accredited Aquatic Scientist must establish a bio-monitoring programme within six (6) months of issuance of this licence. The bio-monitoring programme must include the 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 bio-monitoring 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 results must be compared against the selected reference condition or reference condition within the same eco-region in a case where upstream of selected discharge point is not accessible or representative of discharge point.

- 3.3.3 The bio-monitoring report highlighting the impacts, changes, deterioration or improvement of the aquatic ecosystem (trends) as the result of this effluent discharged must be submitted to the Provincial Head/CEO within a month after each assessment.
- 3.3.4 The Licensee shall monitor on quarterly basis the toxicity of the final effluent in accordance with Department's Direct Estimation of Ecological Effect Potential (DEEEP) approach (Slabbert, 2004) to determine the toxicity of effluent.
- 3.3.5 Acute biological assay tests must be conducted by a SANAS accredited laboratory using a minimum of at least three (3) trophic levels (bacteria, algae, invertebrate or 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/CEO) within a month after each assessment.

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 WATER CONTAINING WASTE

- 1.1 The Licensee is authorised to dispose the volumes of water containing waste into the facilities as per Table 5 with storage capacities, geographic locations and properties included in the same table.
- 1.2 The quantity of treated wastewater and/ sludge authorised to be disposed in terms of this licence may be not exceeded.

Table 5: Disposing of water containing waste.

| Facility Name / Purpose | Capacity & Dimensions | Property Description | Co-ordinates | Property owner |
|--|-------------------------------------|--|--------------------------------|--|
| S21 (g): Disposing of waste in a manner which may detrimentally impact on a water resource | | | | |
| Mini Wastewater Treatment Works (MWWTW) | 2Ml per day | Portion 101 of the Farm Uitkomst and Doornrug (101/852) Portion 102 of the Farm Uitkomst and Doornrug (102/852) | 29°43'18.32"S 30°37'07.13"E | Cato Ridge Development Company and Assmang Limited |
| Pump and Sump Station 1 | Overall capacity: 274m ³ | Portion 27 of the Farm Riet Vallei 851 FT | 29°41'4.78"S 30°37'45.74"E | Cato Ridge Development Company and Assmang Limited |
| Pump and Sump Station 2 | Overall capacity: 91m ³ | Portion 229 of the Farm Uitkomst and Doornrug 852 (229/852) Portion 95 of the Farm Uitkomst and Doornrug | 29°43'42.41"S 30°36'28.56"E | Cato Ridge Development Company and Assmang Limited |

| | | | | |
|-------------------------|------------------------------------|---|--------------------------------|--|
| | | 852 (95/852) | | |
| Pump and Sump Station 3 | Overall capacity: 29m ³ | Portion 465 of the Farm Uitkomst and Doornrug (465/852) | 29°43'48.84"S 30°36'45.49"E | Cato Ridge Development Company and Assmang Limited |
| Pump and Sump Station 4 | 43m ³ | Portion 41 of the Farm Uitkomst and Doornrug 852 (41/852) | 29°43'04.02"S 30°37'20.22"E | Cato Ridge Development Company and Assmang Limited |

2. CONSTRUCTION, OPERATION AND MAINTANANCE

- 2.1 The Licensee shall carry out and complete all the activities listed in conditions 1.1 and 1.2 of Appendix IV, including the construction and operation of the said facilities according to the final plans as approved by the Provincial Head/CEO.
- 2.2 The construction of the facilities in Table 5 of Appendix IV 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 2.1 of Appendix IV the Licensee shall in writing, under reference **27/2/1/U360/1/4/5/8/36**, inform the Provincial Head/CEO 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 facilities in Table 5 of Appendix IV and the operation and maintenance of the system are done according to the provisions in the Engineering Design Report by Kantey & Templer (Pty) Ltd (2022) as part of the WULA.
- 2.5 The Licensee shall submit a set of as-built drawings within 6 months to the Provincial Head/CEO after the completion of any facilities identified in Table 5 of Appendix IV.
- 2.6 The facilities in Table 5 of Appendix IV 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 Groundwater pollution prevention measures by way of appropriate liners be implemented at all the waste containment facilities in conditions 1.1 and 1.2 in appendix IV.

3. GROUNDWATER MONITORING

- 3.1 The Licensee shall monitor groundwater resources, according to the monitoring plan submitted with the water use licence application, to determine the impact of the of WWTWs and its associated infrastructure on the groundwater resources by taking samples at the monitoring points indicated in Table 5 Appendix IV.

Table 6: Groundwater monitoring points

| Sampling point name | Locality | X Co-ordinate | Y Co-ordinate |
|---------------------|---|---------------|---------------|
| BH F2 | Phase 2 area of the site | -29.701065 | 30.6208244 |
| BH 1 Shallow | Adject to BH1 Deep In Phase 1 portion of the site | -29.712344 | 30.621113 |

| | | | |
|---------------------|--|------------|-----------|
| BH 1 Deep | Adjacent to BH1 Shallow in Phase 1 portion of the site | -29.712328 | 30.621077 |
| BH SH 1 Shallow | Adjacent to BH SH 1 deep in Phase 1 portion of the site | -29.712845 | 30.618177 |
| BH SH 1 Deep | Adjacent to BH SH1 Shallow in Phase 1 portion of the site | -29.712845 | 30.618212 |
| BH Doornrug Deep | Adjacent to BH Doornrug Shallow in the Southern portion of Phase 1 of the site | -29.724740 | 30.607086 |
| BH Doornrug Shallow | Adjacent to BH Doornrug deep in the Southern portion of Phase 1 of the site | -29.724738 | 30.607060 |

- 3.2 Monitoring boreholes in the table 6 in condition 3.1 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.
- 3.3 The quality of the ground water resource must be monitored by taking samples quarterly at groundwater monitoring points as described in condition 3.1 in Appendix IV. Each sample shall be analysed for the variables and at frequencies, as shown in Table 7 in Appendix IV and/ or any other variable as may be required from time to time by the Provincial Head/CEO.

Table 7: Groundwater monitoring variables and frequency

| Variables | Monitoring Frequency | Baseline groundwater quality |
|-------------------------------|---|------------------------------|
| Faecal Coliform (per 100ml) | Biannually (during dry and wet seasons) | - |
| E.Coli (per 100ml) | Biannually (during dry and wet seasons) | ≤170 |
| Chemical Oxygen Demand (mg/l) | Biannually (during dry and wet seasons) | ns |
| pH | Biannually (during dry and wet seasons) | ≥5.0 to ≤9.7 |
| Ammonia as Nitrogen (mg/l) | Biannually (during dry and wet seasons) | ≤1.50 |
| Nitrate as Nitrogen | Biannually (during dry and wet seasons) | ≤11 |

| Variables | Monitoring Frequency | Baseline groundwater quality |
|---------------------------------------|---|------------------------------|
| Chlorine as Free Chlorine | Biannually (during dry and wet seasons) | ≤300 |
| Suspended Solids (mg/l) | Biannually (during dry and wet seasons) | - |
| Electrical Conductivity (mS/m) | Biannually (during dry and wet seasons) | ≤170 |
| Ortho-phosphate as Phosphorous (mg/l) | Biannually (during dry and wet seasons) | - |

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

4. SLUDGE MANAGEMENT

4.1 Sewage sludge shall be handled, stored, transported, utilized or disposed of in such a manner as not to cause any odour, flies, health hazard, secondary pollution or other nuisance.

4.2 Sewage sludge may be alienated for utilisation or disposal thereof, only in terms of a written agreement and provided that the responsibility for complying with the requirements contained in this licence is accepted by the Licensee and such other party, jointly and separately.

4.3 Sludge emanating from the treatment process must be quantified, analysed, monitored and dealt with according to the requirements of chapter 5 of the National Environmental Management: Waste Act, 2008 (Act 59 of 2008) and the Guideline for the Utilisation and Disposal of wastewater sludge (volume 1-5), dated March 2006 and any updates thereafter, to the satisfaction of by the Provincial Head/CEO..

5. SOLID WASTE MANAGEMENT

5.1 Solid sewage waste, for instance grit and screenings, shall be handled, stored, transported, utilized or disposed of in such a manner as not to cause any odour, flies, health hazard, secondary pollution or other nuisance.

5.2 Solid sewage waste must be disposed of only in terms of a written agreement and provided that the responsibility for complying with the requirements contained in this licence is accepted by the Licensee and such other party, jointly and separately.

6. SITE SPECIFIC CONDITIONS

The Licensee is responsible for all the Licensee conditions attached. It is therefore the responsibility of the Licensee to ensure that no water uses are undertaken on the properties stipulated in this licence without authorisation from the department.

END OF LICENCE