






water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

WESTERN CAPE PROVINCE

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Ref: 16/2/7/E330/A11
Date: 15 May 2023

Mr Maboee Nthejane
EnviroAfrica CC
P. O. Box 5367
HELDERBERG
7135

Dear Sir

COMMENTS ON THE DRAFT SCOPING REPORT FOR THE PROPOSED NEW WAVE DAM ON PORTIONS 101 AND 168 OF THE FARM MELKBOOM NO 384, VANRHYNSDORP

This letter has reference to the email received on 14 April 2023 inviting Interested and Affected Parties to comment on the draft scoping report for the abovementioned development. Below comments on the application:

1. Scoping Report, Contents (p2)

Item 9.3: page number not defined.

2. Scoping Report, Tables (p3)

Table 3: page number not defined.

3. Scoping Report, Section 1.1: Background (p5)

The location (co-ordinates) of the proposed New Wave Dam given in Table 1 (31° 52' 02.40"S; 18° 37' 48.0"E) differs from the co-ordinates of the proposed dam (31° 52' 05.40"S; 18° 37' 46.35"E) in the rest of the Scoping Report. The co-ordinates in Table 1 however agree with the co-ordinates given in *Appendix 2B: Engineering Designs Report* and *Appendix 2C: Engineering Designs Report (With Layout Plans)*. The co-ordinates of the proposed dam must be verified.

4. Scoping Report, Section 2.1: Need (p7)

According to the report, the farm consists of nine portions of the Farm Melkboom 384 (Portions 72, 101, 126, 127, 128, 129, 130, 168 and 205), that these properties are adjacent to each other and that they are farmed as a single unit. It is further indicated that the farm has an allocation from LORWUA. However, the report does not state what the scheduled allocation of water from LORWUA is, except in Section 4.4: No-Go Alternative (p13) where it refers to the 2022/23 allocation of 363 630 m³. The scheduled allocation¹ must be included

¹ Refer to the scheduled allocation published *under Government Gazette no 6492, dated 22 July 1960: Olifants River Government Water Control Area, Divisions of Clanwilliam and Vanrhynsdorp, as amended; and Appendix 2K (LORWUA Certificate of Allocations) of the Scoping Report*

as it has reference to the existing allocation of 477 020 m³ mentioned in Section 6.1: Water (p20).

It must also be noted that the total scheduled allocation will only be available if there is adequate water in the system during a specific water year. LORWUA revise the annual allocations / quotas as per the water availability in the system.

5. Scoping Report, Section 3.5: National Water Act (p11) and Section 6.1: Water (p20)

The Department of Water and Sanitation (DWS) has issued the Water Use Licence for the proposed development on 15 March 2023 under *Licence No: 01/E33G/BCI/12428 (Annexure A)* and condition stipulated on the licence must be adhered to.

6. Scoping Report, Section 4.4: No-Go Alternative (p13)

The description of the “no-go” alternative is vague. It must be stated that the farm currently stores water in two dams, located on Portions 128 and 205 of the Farm Melkboom 384 respectively, with a combined storage capacity of 112 000 m³. The description of the water allocation is also confusing and should be revised as stipulated in the Licence.

7. Scoping Report, Section 6.1: Water (p20)

Not all readers of this report will be known with how LORWUA operates the water supply system from Bulshoek Dam via the Bulshoek Dam canal. It is therefore proposed the following be included in the report:

- Referring to Section 5: Scoping Report, Section 2.1: Need (p7) above indicating the Existing Lawful Water Use (ELU) for the farming activity (ELU is located on Portions 72, 101, 168 and 205 of the Farm Melkboom 384 and has a total allocation of 951 050 m³/a);
- LORWUA’s operational rules for the area under their jurisdiction allows that only 50% of the winter water allocation may be abstracted and stored. This equates to 477 020 m³/a; and
- The proposed New Wave Dam’s gross storage capacity will be ± 92 000 m³ which is about 20% of the 477 020 m³/a scheduled water available for storage or 50% of the 181 815 m³ scheduled water available for storage for the 2020/23 water year; and
- The total storage of the two existing dams as well as the new proposed New Wave Dam will be less than the storage allowance of the ELU for the farm, if there is no water restrictions / curtailments.

8. Other issues

The farming activity spans over nine portions of the Farm Melkboom 384. Should the applicant in future wish to sell either of the properties on which the proposed New Wave Dam will be situated, storage servitude rights must be registered in favour each of the properties.

Your co-operation aimed at the protection of water resources will be highly appreciated.

Should you have any questions please do not hesitate to contact the official at the above-mentioned details.



K VISSER
CHIEF ENGINEER: BERG-OLIFANTS PROTO-CMA
DATE: 15 May 2023

Annexure A

Water Use Licence No: 01/E33G/BCI/12428, dated: 15 March 2023



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

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

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

I, **Mrs NM Bila-Mupariwa** in my capacity as Provincial Head: Western Cape 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 : 4648531731698343543

Provincial Head: Western Cape

Date: Mar 15 2023 3:02PM

LICENCE NO: 01/E33G/BCI/12428

FILE NO: 27/2/1/E733/8/2

Licensee:

Trawal (Pty) Ltd

Cederberg Farming

Postal Address:

PO Box 50

8147

1. Water Uses authorised by this licence

Table 1: Summary of water uses authorised

1	Section 21(b) of the Act	Storing water, subject to the conditions set out in Appendices I and II.
2	Section 21(c) of the Act	Impeding or diverting the flow of water in a water course; subject to the conditions set out in Appendices I and III.
3	Section 21(i) of the Act:	Altering the bed, banks, course or characteristics of a watercourse; subject to the conditions set out in Appendices I and III.

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

Provincial Head

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

Activity	Farm Name	Farm Portion	Owner's Name	Title Deed Number
Section 21(b) Water Use				
New Wave Dam for storing of scheduled water	Melkboom 384	101 and 168	Cederberg Farming Trawal (Pty) Ltd	T10314/2017
Section 21(c) Water Use				
Infilling within the regulated area of the Olifants River	Melkboom 384	101 and 168	Cederberg Farming Trawal (Pty) Ltd	T10314/2017
Section 21(i) Water Use				
Infilling within the regulated area of the Olifants River	Melkboom 384	101 and 168	Cederberg Farming Trawal (Pty) Ltd	T10314/2017

3. Licence and Review Period

- 3.1 This licence is valid for a period of twenty (20) 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.
- 3.3 The Licensee must, if needed, apply for early renewal of this licence in terms of the Act within one (1) year before its expiry date

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) as amended.
Authorized Area	The area authorized for the undertaking of afforestation as described in this licence (point 7 & table 5) and depicted in appendix III.
Buffer zone	Buffer zone: a strip of land surrounding a wetland or riparian area in which activities are controlled or restricted, in order to reduce the impact of adjacent land uses on the wetland or riparian area. The buffer zone is measured from the edge of the delineated watercourse determined according to the Departmental guideline - "A practical field procedure for identification and delineation of wetlands and riparian areas."
Department	The Department of Water and Sanitation
CEO	The Chief Executive Officer of Catchment Management Agency Insert the name of the Agency and Address.
CMA	Catchment Management Agency
Stream flow reduction activity section 36 (1)	The following are stream flow reduction activities: (a) the use of land for afforestation which has been or is being established for commercial purposes; and (b) an activity which has been declared as such under section 32(2) of the Act.
Regional Head	Head of Provincial Operations insert name of Provincial Operation and Address
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
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.



Pollution	<p>“Pollution” means the direct or indirect alteration of the physical, chemical or biological properties of a water resource so as to make it -</p> <p>(a) less fit for any beneficial purpose for which it may reasonably be expected to be used; or</p> <p>(b) harmful or potentially harmful -</p> <p>(aa) to the welfare, health or safety of human beings;</p> <p>(bb) to any aquatic or non-aquatic organisms;</p> <p>(cc) to the resource quality; or</p> <p>(dd) to property.</p>
Days	Calendar days
Commencement date	The date on which water use starts
Minister	means the Minister of the Department of Water and Sanitation.
Sensitive riffle habitats	is a Pool riffle rapid sequences that occur where a mixture of flows and depth provide a variety of habitats to support fish and invertebrate life. Pools are deep with slow water. Riffles are shallow with fast, turbulent water running over rocks. Runs are deep with fast water and little or no turbulence.
Extent of the watercourse	<p>(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</p> <p>(b) Wetlands and pans: the delineated boundary (outer temporary zone) of any wetland or pan.</p>
Regulated area of a watercourse	<p>(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;</p> <p>(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</p> <p>(c) A 500 m radius from the delineated boundary (extent) of any wetland or pan.</p>

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

This licence authorises the applicant, Cederberg Farming Trawal (Pty) Ltd, for the construction of the New Wave Dam to a final capacity of 92 000 m³ (ninety two thousand cubic metres) on the left bank of the Olifants River on Portions 101 and 168 of Melkboom 384, Vanrhynsdorp RD for the purpose of irrigation. The activity is in quaternary catchment E33G which falls within the Olifants-Doorn Water Management Area, Western Cape. The geographical location of the New Wave Dam is defined by the following coordinates:

Latitude: -31.86762
Longitude: 18.62968



APPENDIX I

GENERAL PROVISIONS AND CONDITIONS OF THE LICENCE

1. GENERAL PROVISIONS

Legal Framework

- 1.1 This licence is subject to all applicable provisions of the National Water Act, 1998 (Act 36 of 1998) as amended from time to time.
- 1.2 The licence shall not be construed as exempting the Licensee from compliance with the provisions of any other applicable Act, Ordinance, Regulation or By-law.

Administrative duties/obligations/responsibilities of the Licensee

- 1.3 The responsibility for complying with the provisions of the licence is vested in the licensee and not any other person or body.
- 1.4 The licensee must obtain any proprietary rights or servitudes at his / her own cost for lawful access to a property not owned by the Licensee
- 1.5 The licensee will be responsible for any water use charges or levies imposed by a Responsible Authority according to the pricing strategy. The levies/charges will be charged from the date of the issuance of this licence.
- 1.6 No water taken may be pumped, stored, diverted, or alienated for any other purpose other than as intended in this licence without the written approval of the Delegated Authority.
- 1.7 It is the responsibility of the licensee to request an amendment of this licence to reflect the registered volume should the requirements change. All requests must be made to the Responsible Authority.
- 1.8 If the water use entitlement is not fully utilised within the 5 (five) year period referred to in 2.4 in Appendix I, this licence may be amended to reflect the extent of the water use that is being utilised, or the licence may be cancelled.
- 1.9 A request for extension of time to fully utilise an entitlement to use water must be submitted to the Provincial Head/CEO, three (3) months, before the expiry of the 5 (five) years referred to in 2.4 in Appendix I. An extension may only be made after the Delegated Authority has considered all relevant factors.
- 1.10 Only one request for extension of time for commencement or of fully exercising of water use licence will be considered.
- 1.11 The maximum period for extension of time that may be granted to fully utilise the water entitlement is a maximum of 2 (two) years after the initial 5 (five) year period referred to in 2.4 in Appendix I.

Change of property details



- 1.12 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 no guarantee of supply

- 1.13 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

- 1.14 The quantity of water authorised to be taken in this licence may not be exceeded.
1.15 The quality of water authorised to be disposed and discharged in this licence may not be exceeded.
1.16 Any changes to the monitoring programmes should be approved by the Provincial Head/CEO

Reviewal of licences

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

Effecting of the Reserve

- 1.18 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

- 1.19 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.
1.20 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

- 1.21 The licensee is not indemnified from any detrimental effect that the dam(s) may have on other properties.
1.22 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.



- 1.23 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

- 1.24 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.
- 1.25 The licensee must adhere to any restrictions that are gazetted and imposed on the respective water resource.
- 1.26 The applicant is restricted to storing 50% (fifty percent) of their winter water allocation from the Lower Olifants River Water Users Association (LORWUA), equating to 477 020 m³/a, as per LORWUA operational rules.

Water measurement and reporting

- 1.27 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.

Stormwater Management

- 1.28 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.
- 1.29 The embankments along the river and further up the slope must be stabilised.
- 1.30 Loose sediments along with stormwater must not be allowed to enter the river. Runoff from farm roads along the vineyards should be provided with stormwater management infrastructure. Stormwater management plants should be considered as well.

Amendments

- 1.31 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

- 1.32 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:

2. GENERAL CONDITIONS

Administrative duties/obligations/responsibilities of the License

- 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 (7) days after the licensee commences with water use entitlement and again within thirty (30) days upon completion of the activity/ies.
- 2.4 The water uses authorised in this licence must be fully utilised within five (5) years from the date of issuance of this licence.
- 2.5 If the licensee cannot fully utilise the water use entitlement 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 entitlement.
- 2.6 If the above condition (2.5) is not adhered to, the water use entitlement may be cancelled or amended accordingly.

Change of details of licensee or property

- 2.7 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.
- 2.8 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).
- 2.9 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



- 2.10 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

- 2.11 The licensee must service all vehicles and other machinery outside the extent of the watercourse/s.
- 2.12 Oils and other potential pollutants must be disposed of at a licensed site, with the necessary agreement from the owner of such a site.
- 2.13 The licensee must handle, transport, store and use any hazardous substances according to the relevant legislation or South African National Standards (SANS).
- 2.14 Any incident that causes or may cause water pollution shall be reported to the Provincial Head/CEO 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 prevent pollution from continuing or recurring.
- 2.16 All incidents must be recorded in an incident register.

Water Conservation and Water Demand Management (WCWDM)

- 2.17 The licensee must establish and implement a continual process of raising awareness among itself, its workers and stakeholders with respect to WCWDM initiatives.
- 2.18 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.

Water measurement and reporting

- 2.19 The licensee shall install appropriate water measuring devices to measure the amount of water abstracted prior use of water.
- 2.20 The licensee shall ensure that all measuring 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.
- 2.21 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



- 2.22 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.

Stormwater Management

- 2.23 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.

Restrictions on access

- 2.24 Strict access procedures must be developed and followed in order to control access to the property.
- 2.25 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. Such notices must be worded in the official languages applicable in the area.

Auditing and reporting

- 2.26 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.
- 2.27 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) 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.

Compensative measures

- 2.28 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, appointed by the Provincial Head/CEO, and if investigations prove that the licensee has impaired the rights of other water users, the licensee must implement appropriate compensative measures determined by the Provincial Head/CEO.



APPENDIX II

Section 21 (b) of the Act: Storing water

1. Storing water

- 1.1. The licensee is authorised to store a maximum quantity of 92 000 m³ (ninety-two thousand cubic metres) of water in the facility in Table 3.

Table 3: Details of the water use(s) authorised

Water use description	Purpose	Properties	Capacity (m ³)	Dimensions W, D, L (m)	Co-ordinates	
					S	E
Section 21(b): Storing of water						
Construction of the New Wave Dam	Irrigation	Portion 101 of Melkboom 384, Vanrhynsdorp RD Portion 168 of Melkboom 384, Vanrhynsdorp RD	92 000	8 (wall height)	-31.86762	18.62968

- 1.2. The quantity of water stored must be recorded at the last day of each month and the records must be submitted to the Provincial Head/ CEO annually.

2. Monitoring requirements.

- 2.1. All water supplied to the dam must be metered and recorded.
- 2.2. All the abstraction points and the outlet pipe from the dam must be provided with a water meter. The volume of water abstracted or let out must be metered and recorded.
- 2.3. The volume of water in the dam must be recorded on monthly interval with the aid of water depth measuring plate and the depth storage curve determined through the "As built" survey of the storage basin.
- 2.4. A copy of the records must be included in the annual internal Audit and compliance report as per Appendix I paragraph 2.26.
- 2.5. The Licensee shall install appropriate water measuring devices to measure and record the amount of water abstracted from the Olifants River within six months of the licence being issued. The Licensee shall ensure that all measuring devices are properly maintained and in good working order and must be easily accessible. This shall include a programme of



checking, calibration, and/ or renewal of measuring devices. All water taken from the resource shall be measured, recorded and reported as follows:

- 2.5.1. The daily quantity of water taken must be metered or gauged and the total recorded on a weekly basis;
- 2.5.2. 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 year.

3. Dam safety requirements

- 3.1 The construction, operation and maintenance of all dam facilities classified as a dam with a safety risk, must be carried out under supervision of an Approved Professional Person (APP), registered under the Engineering Professional of South Africa Act, 1990 (Act 114 of 1990).
- 3.2 The Licensee through the APP must provide a Design Report with all relevant information to Dam Safety Office to obtain a licence to construct. Provide a completion report to obtain a licence to impound. Provide Dam Safety Evaluation reports at the required intervals. All in adherence to the Regulations regarding the safety of dams in terms of section 123(1) of the Act published under Government Notice R138 of 24 February 2012, read with Chapter 12 of the Act.
- 3.3 The licensee must supply any information, drawings, specifications, design assumptions, calculations, documents, and test results when requested by the Provincial Head/CEO.

4 Site Specific conditions

- 4.1 Abstraction of water from the Bulshoek Dam canal in terms of the Licensee's scheduled listed water allocation for storage in the dam must not exceed 50% (fifty percent) of the winter allocation as per the Lower Olifant's River Water Users Association's operational rules.
- 4.2 During seasons with shortfalls, surface water may not be augmented from groundwater resources unless authorised.
- 4.3 The maximum annual abstraction volumes for Portions 72, 101, 168 and 205 of Melkboom 384 from the Bulshoek Dam canal may not exceed the scheduled volumes for the properties subject to the annual quotas determined by the operating authority. These maximum annual abstraction volumes include the volumes to be stored in the proposed dam.
- 4.4 The scheduled listed water allocation from the Lower Olifants River Water Users Association will be subject to Compulsory Licensing, when called upon, and can be adjusted as per the outcome of the Compulsory Licensing which may also reduce the authorisation for storage.
- 4.5 As the outcome of the Validation and Verification (V&V) of Water Use is subject to an Appeals process, in the event that there is an appeal against the final Confirmed/Declared



finding of Existing Lawful Water Use and the new assessment has a new finding, the volume associated may be adjusted accordingly and can reduce the volume authorised for storage.

- 4.6 In the event that any of the properties change ownership, the Licensee must register storage servitude rights in favour of:

C0780000000038400072 of 512 400 m³/a and;
C0780000000038400205 of 220 820 m³/a

- 4.7 The dam must be fitted with calibrated depth gauges.



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 uses

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

Table 4: Details of water uses authorised

Water Use description	Purpose	Properties	Extent/Dimensions (m)	Coordinates
Section 21 (c) water uses				
Infilling within the regulated area of the Olifants River	Dam construction	Portion 101 of Melkboom 384, Vanrhynsdorp RD Portion 168 of Melkboom 384, Vanrhynsdorp RD		Lat.: -31.86751 Lon.: 18.62958
Section 21 (i) water uses				
Infilling within the regulated area of the Olifants River	Dam construction	Portion 101 of Melkboom 384, Vanrhynsdorp RD Portion 168 of Melkboom 384, Vanrhynsdorp RD		Lat.: -31.86752 Lon.: 18.62957

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

- 1.2.1 WULA Report by Sarel Bester Consulting Engineers dated June 2022.
- 1.2.2 Freshwater Report by Watsan Africa dated September 2021.



1.2.3 Preliminary Dam Design Report by Sarel Bester Consulting Engineers dated September 2021.

- 1.3 No activity must take place within the extent of a watercourse/s, unless authorised by this licence.
- 1.4 No fundamental alterations of the work method statement, site plan/s and drawings are allowed, unless a modification is requested and granted by the Responsible Authority in writing.

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 6 (months) months of completion of construction for both new and existing water uses from the date of issuance 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 alterations to watercourse/s on the property/ies.

3. PROTECTIVE MEASURES

3.1 Storm Water Management

- 3.1.1 Storm water management practices must be constructed, operated and maintained in a sustainable manner throughout the project and for the water use activities set out in Condition 1.1 and as detailed in the Storm Water Management Plan to be compiled;
- 3.1.2 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 any watercourse/s;
- 3.1.3 Storm water must be diverted from construction site and must be managed in such a manner as to disperse runoff and to prevent the concentration of storm water flow;
- 3.1.4 The velocity of storm water discharges must be attenuated and the banks of the watercourse/s protected; and
- 3.1.5 Storm water leaving the licensee's premises must 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 or spilled on the premises.

3.2 Structures, Construction Plant and Materials

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



- 3.2.3 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.

3.3 Water Quality

- 3.3.1 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:
- 3.3.1.1 pH;
 - 3.3.1.2 Electrical conductivity (mS/M);
 - 3.3.1.3 Suspended solids (mg/l);
 - 3.3.1.4 Turbidity;
 - 3.3.1.5 Total dissolved solids (mg/l)
- 3.3.2 Monitoring must be undertaken as set out in Condition 4.
- 3.3.3 Activities must be scheduled to take place during the dry seasons when flows are lowest where reasonably possible.
- 3.3.4 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.

3.4 Riparian and Instream Habitat (Vegetation and Physical Structure)

- 3.4.1 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.
- 3.4.2 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.
- 3.4.3 Activities must not occur in sensitive riffle habitats unless authorised by this licence.
- 3.4.4 Indigenous riparian vegetation, including dead trees, outside the limits of disturbance indicated in the site plans referred must not be removed from the area.
- 3.4.5 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.
- 3.4.6 Soils that have become compacted through the water use activities must be loosened to an appropriate depth to allow seed germination.
- 3.4.7 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.
- 3.4.8 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.



3.7 Biota

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

3.8 Rehabilitation and Management

- 3.8.1 A Rehabilitation Plan, which includes a Plant Species Plan, must be drawn up and submitted to the Regional office for approval and implemented by the applicant.
- 3.8.2 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;
- 3.8.3 The rehabilitation must be implemented according to the approved Rehabilitation Plan.
- 3.8.4 A photographic record must be kept as follows and submitted with reports as set out in Condition 4:
 - 3.8.4.1 Dated photographs of all the sites to be impacted before construction commences.
 - 3.8.4.2 Dated photographs of all the sites during construction on a monthly basis
 - 3.8.4.3 Dated photographs of all the sites after completion of construction, seasonally.
- 3.8.5 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.

4. MONITORING AND REPORTING

- 4.1 A monitoring plan must be drafted and submitted for approval to the regional office.
- 4.2 The monitoring plan must be implemented and reporting for the Provincial Head/CEO be done as stipulated in Condition 4.3.
- 4.3 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 Provincial Head/CEO.

5. SITE SPECIFIC CONDITIONS

- 5.1 A Rehabilitation Plan, which includes a Plant Species Plan, must be drawn up and submitted to the Regional office for approval and implemented by the applicant.
- 5.2 A Stormwater Management Plan must be drawn up and submitted to the Regional office for approval and implemented by the applicant.
- 5.3 Designs must include appropriate flood protection measures.



- 5.4 Designs must include appropriate erosion protection measures. The upstream slope of the dam wall must be protected against erosion from wave action.
- 5.5 A maintenance plan must be compiled and implemented by the applicant.
- 5.6 Present Ecological State (PES) must not be lowered.

[END OF LICENCE]

