



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

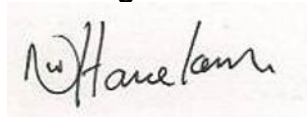
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WATER USE LICENCE APPLICATION SUMMARY

**NAME OF APPLICANT:
JARRAHNUP TRUST**

**Compiled by:
Nicolaas Willem Hanekom
Professional Registration
[Environmental Assessment Practitioner Association of South Africa (EAPASA)]
[2020/1146]**

Signature:

A handwritten signature in black ink, appearing to read 'N. Hanekom'.

**Date of Signature:
19 AUGUST 2026**

1. Applicant details

Name of applicant: JARRAHNUP FARM TRUST. Business Registration Number: IT1412/1993

Postal address: PO BOX 1765, HERMANUS, 7200

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2. Background and purpose

This is a water use licence application in terms of Section 40 and 41 of the National Water Act, Act No. 36 of 1998. The application is for section 21 (a), (e), (g) and (i) for the purpose of:

- Piggery infrastructure situated within 100 m from the artificial instream farm dam within the eastern tributary transecting the property. DW768 - Altering The Bed, Banks, Course Or Characteristics Of A Watercourse (i).
- Temporary storage of biodegradable industrial wastewater in underground containment facility (Loading Bay). DW767 - Waste Discharge Related Water Use In Terms Of Section 21(g) disposing of waste in a manner which may detrimentally impact on a water resource.
- Temporary storage of biodegradable industrial wastewater in canals underneath pig houses (FH2 & WH2). DW767 - Waste Discharge Related Water Use In Terms Of Section 21(g) disposing of waste in a manner which may detrimentally impact on a water resource.
- Temporary storage of biodegradable industrial wastewater in canals underneath pig houses (FH1 & WH1). DW767 - Waste Discharge Related Water Use In Terms Of Section 21(g) disposing of waste in a manner which may detrimentally impact on a water resource.
- Temporary storage of biodegradable industrial wastewater in canals underneath pig houses (AI & Office). DW767 - Waste Discharge Related Water Use In Terms Of Section 21(g) disposing of waste in a manner which may detrimentally impact on a water resource.
- Temporary storage of biodegradable industrial wastewater in canals underneath pig houses (GD & Boar Pen). DW767 - Waste Discharge Related Water Use In Terms Of Section 21(g) disposing of waste in a manner which may detrimentally impact on a water resource.
- Temporary storage of compost from mortality compost site for the purpose of removal/disposal. DW767 - Waste Discharge Related Water Use In Terms Of Section 21(g) disposing of waste in a manner which may detrimentally impact on a water resource.
- Temporary storage of biodegradable solids fraction (compost) for the purpose of removal/disposal. DW767 - Waste Discharge Related Water Use In Terms Of Section 21(g) disposing of waste in a manner which may detrimentally impact on a water resource.
- Temporary storage of biodegradable industrial wastewater in Sludge Pond for the purpose of disposal. DW767 - Waste Discharge Related Water Use In Terms Of Section 21(g) disposing of waste in a manner which may detrimentally impact on a water resource.
- Temporary storage of biodegradable industrial wastewater in pre-separation mixing sump. W767 - Waste Discharge Related Water Use In Terms Of Section 21(g) disposing of waste in a manner which may detrimentally impact on a water resource.
- Engaging in a controlled activity (irrigation with biodegradable industrial wastewater). DW765 - Waste Discharge Related Water Use In Terms Of Section 21(e) engaging in a controlled activity: irrigation of any land with waste or water containing waste generated through any industrial activity or by a waterwork.
- Abstraction of raw water from aquifer (Borehole 3). DW760 - Taking water from a water resource (a).
- Abstraction of raw water from aquifer (Borehole 2). DW760 - Taking water from a water resource (a).
- Abstraction of raw water from aquifer (Borehole 1). DW760 - Taking water from a water resource (a).

THE CURRENT WATER USE LICENSE (REFERENCE NUMBER 02/G40G/AGIAE/10115) AS AMENDED WILL EXPIRE ON 08/12/2025. IF APPROVED, THE RENEWAL COMES INTO EFFECT THE DAY AFTER THE CURRENT WUL EXPIRES AND THUS THE PERIOD CAN BE EXTENDED TO THE NEW APPROVED DATE. THE PROCESS FOLLOWS A NORMAL WATER USE LICENSE APPLICATION PROCEDURE AS PRESCRIBED IN SECTION 52 OF THE NATIONAL WATER ACT, 1998 (ACT 36 OF 1998) AND RELEVANT REGULATIONS. (NATIONAL REGISTER OF WATER USE REGISTRATION RECORD 22070198)

3. Location of water uses

The project in respect of which this water use licence application is submitted is located in the Western Cape Province, within the Overberg District Municipality and Theewaterkloof Local Municipality (Magisterial district) near Botrivier - 19.205, -34.2258 Town / City / Township. The water use will take place on RE of Farm No. 781 Caledon RD (Registration division Cape Town), which forms part of the G40F and G40G Quaternary Catchment, within the Breede Olifants Water Management Area. The geographic location at the property where the water uses will take place are -34.28662762754339 S ; 19.207789495410683 E.

Table 1: Property details

Property description	Title Deed	Owner
RE of Farm 781 Caledon RD (Registration division Cape Town)	T 31081-94	Jarrahnup Farm Trust

4. Reports and documents submitted by applicants:

4.1 Administrative documents:

4.1.1 WULA Summary Report

4.1.2 BBBEE Affidavit

4.1.3 Civil and Technical drawings

4.1.4 Updated Stormwater Management Plan

4.1.5 Proof of Public Participation / Comments and Responses Report

4.1.6 Service level agreement between licensee and tenants for both piggery and farming operations.

4.1.7 Proof of payment of licence processing fee/Letter of waiver from DWS

4.1.8 A copy of the properties relevant zoning certificate

4.1.9 Lease agreements with both piggery and farming tenant.

4.1.10 Lease agreements with both piggery and farming tenant.

4.1.11 Updated Waste and Water Quality Management Report

4.1.12 Section 27 Motivation

4.1.13 Proof from DEA&DP that Environmental Authorisation is not required

4.1.14 Proof that Water Use charges has been paid and is current.

4.1.15 As built plans and drawings for all on-site infrastructure

4.1.16 Freshwater Impact Assessment Report

4.1.17 Master Layout Plan

4.1.18 Audit Reports

4.1.19 Geohydrological Report

5. Project Description

The piggery is operated on remainder of Farm No. 781, Caledon, Title DEED number T1412/93, 510.64 ha in extent.

The Jarrahnup Farm Trust, the owner of the Farm Remainder Erf 781 and the holder of the current Water Use License amended on 5/2/2025 to 02/G40G/AG1AE/10115 and File No. 27/2/1/G740/4/1. The Trust has an existing Lawful Use dated 10/08/2017. Registered No. 22070198. Ref No. 4/4/3CO1300000000078100000

The total combined borehole water use is:

Irrigation: 206 500 cubes per annum

Live Stock: 54 000 cubes per annum

The ground water abstraction for the piggery operations (drinking and wash water) will be from:

- Borehole 1 – 41 272m³/a
- Borehole 2 – 4 704m³/a
- Borehole 3 – 10 024m³/a

The entire system on each unit, from generation to application, is part of a wastewater irrigation system. Wastewater generated on platforms (sow and grower) is contained within a fenced off site and captured as a final collective wastewater. The wastewater generated from the Grower Unit is captured in cement canals and channelled to a concrete slurry collection pit from which a screen will produce a liquid fraction and a solids fraction. That generated on the Sow Unit is piped to the Grower Unit receiving sump and subjected to the same treatment stage.

The storage dam was designed to cater for an estimated 157 days holding capacity during the winter rainfall season and planting periods during which access to the agricultural lands may be limited and provides a 22% safety margin. The Liquid Fraction is thus temporarily held in plastic lined liquid fraction holding dam. Due to the premixing stage the liquid fraction entering the dams is predominantly a moisture-based wastewater of >98% (thus <2% solids) and thus handled as a liquid wastewater and not a semi-solid (4-20% solids) or solid (usually >20% solids) manure.

The solids fraction is:

- Initially captured onto a cement floor and bunded area directly below the screen.
- Stacked in windrows on a quarry aggregate compacted area yielding an impervious barrier.
- Composted for 12 – 16 weeks within an area with adequate protection from storm water runoff.
- Used as organic soil amendment on the property or made available as a saleable product with unrestricted use (as per the typical classification thereof in accordance with the stipulated guidelines).

Wastewater is generated from all areas is captured as a final collective wastewater. The wastewater is thus of a controlled quality representing manure and wash water and differs significantly from domestic wastewater which is largely uncontrolled.

Waste and Water Quality Management

A dam next to the separating plant which is lined with the recommended plastic sheeting measuring 75 meters long, 65 meters wide and a depth of 5 meters is used to store the sludge after solids are screened out. A fence has been erected on top of the dam walls with veldspan and barb wire with no access gate. There are signs attached to the fence stating No Entry, no drinking and no swimming. At strategic points there are escape ropes tied to the fence posts which hangs into the dam in the case of someone falling into the dam, they will be able to get out of the dam by climbing up with the ropes.

All solid waste from the pig buildings is collected and then transferred to the composting site. At the composting site there is a banking contour on the lower side to collect run off when it rains. Any excessive run off is collected by the tractor and tanker and taken to the separating plant.

The biodegradable water from the dam is mixed with fresh water at a ratio of 70% fresh and 30% biodegradable (sludge from dam) and is used to irrigate through a centre pivot in summer months when maize or crop will be planted or irrigating the land with a tractor and tanker. The 10 000-liter tanks are filled with the same ratio of fresh and biodegradable water. This enables also the spread of water during the summer months over the allocated 240 Ha.

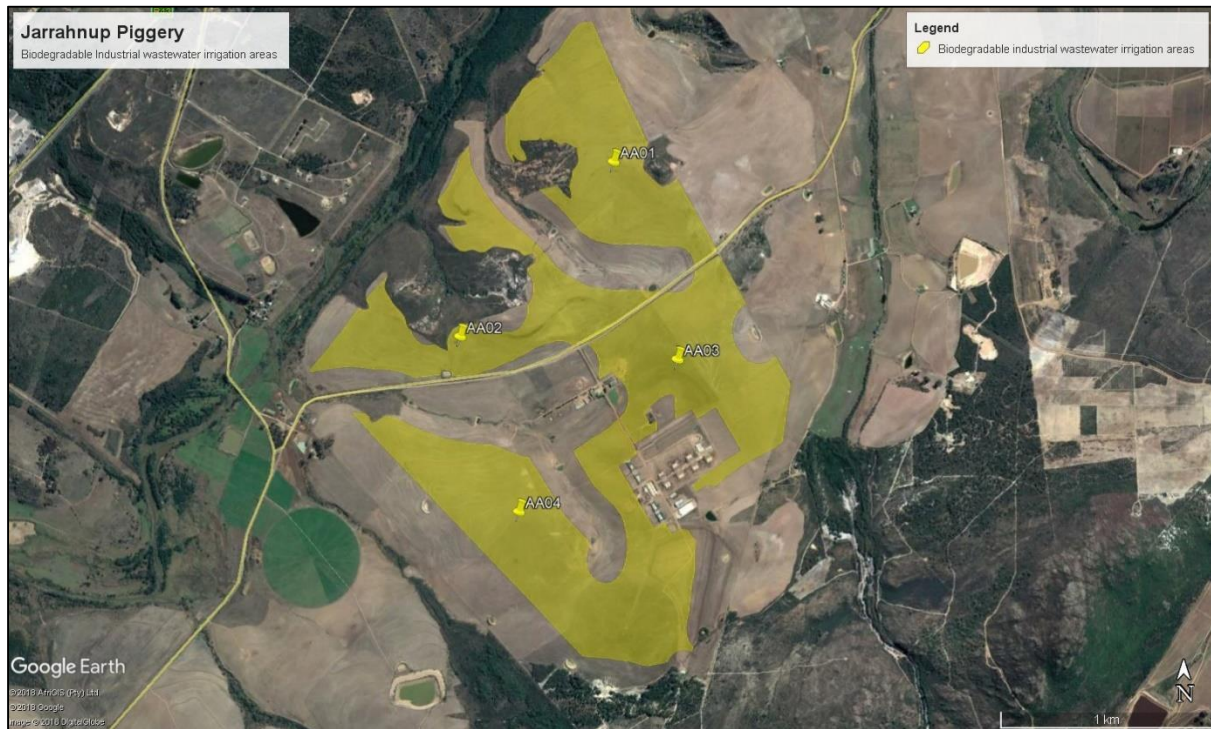


Figure 1: Jarrahnup Piggery Biodegradable Industrial Wastewater Irrigation Areas

Table 1: Agricultural land Application Areas at the Jarrahnup Piggery

Agricultural Land	Main Indicative Coordinates	Application Area Locality
The area of irrigation is hilly terrain and therefore does not have specific rectangular outlines		
Application Area 01 50.8 ha	▪ 34°15'56.16"S 19°12'8.84"E ▪ 34°16'5.34"S 19°11'58.62"E ▪ 34°16'10.38"S 19°11'54.53"E ▪ 34°16'16.64"S 19°11'56.85"E ▪ 34°16'13.15"S 19°11'58.78"E ▪ 34°16'15.48"S 19°12'8.07"E ▪ 34°16'22.90"S 19°12'6.66"E ▪ 34°16'21.66"S 19°12'1.52"E ▪ 34°16'29.31"S 19°12'12.94"E ▪ 34°16'30.21"S 19°12'27.36"E ▪ 34°16'31.90"S 19°12'31.62"E	 A satellite map from Google Earth showing a hilly landscape. A yellow-shaded area is located in the upper right, and a green-shaded area is in the lower left. The terrain is irregular and non-rectangular. A road and some buildings are visible in the background.
Application Area 02 48 ha	▪ 34°16'37.92"S 19°12'21.82"E ▪ 34°16'16.60"S 19°11'45.81"E ▪ 34°16'23.27"S 19°11'41.41"E ▪ 34°16'30.68"S 19°11'45.29"E ▪ 34°16'31.66"S 19°12'0.15"E ▪ 34°16'44.55"S 19°11'58.96"E ▪ 34°16'48.47"S 19°11'43.49"E ▪ 34°16'36.77"S 19°11'30.31"E ▪ 34°16'49.68"S 19°11'16.60"E	 A satellite map from Google Earth showing a hilly landscape, similar to the one above. A yellow-shaded area is in the upper right, and a green-shaded area is in the lower left. The terrain is irregular and non-rectangular. A road and some buildings are visible in the background.

Agricultural Land	Main Indicative Coordinates	Application Area Locality
The area of irrigation is hilly terrain and therefore does not have specific rectangular outlines		
Application Area 03 49.1 ha	▪ 34°16'32.44"S 19°12'33.80"E ▪ 34°16'45.66"S 19°12'10.26"E ▪ 34°16'50.08"S 19°12'12.46"E ▪ 34°16'52.18"S 19°12'17.26"E ▪ 34°17'0.25"S 19°12'18.46"E ▪ 34°16'53.65"S 19°12'22.91"E ▪ 34°16'54.63"S 19°12'28.63"E ▪ 34°16'55.20"S 19°12'34.37"E ▪ 34°17'2.84"S 19°12'39.68"E ▪ 34°17'7.89"S 19°12'29.95"E ▪ 34°17'0.47"S 19°12'45.46"E ▪ 34°16'51.61"S 19°12'46.94"E	 The satellite image shows a hilly landscape with a yellow highlighted area in the center. The terrain is irregular and hilly, consistent with the text stating it does not have specific rectangular outlines. The highlighted area is surrounded by brown and green patches, indicating different land uses or vegetation. A small 'Google Earth' logo is visible in the bottom left corner of the image, and a scale bar indicating 1 km is in the bottom right corner.

Application Area 04
82.3 ha

- 34°17'0.67"S 19°12'16.23"E
- 34°17'4.03"S 19°12'8.41"E
- 34°17'15.19"S 19°12'19.60"E
- 34°17'16.21"S 19°12'28.17"E
- 34°17'32.45"S 19°12'28.17"E
- 34°17'34.91"S 19°12'22.09"E
- 34°17'33.46"S 19°12'8.78"E
- 34°16'56.60"S 19°11'25.20"E
- 34°16'57.30"S 19°11'31.78"E
- 34°17'3.73"S 19°11'58.15"E
- 34°17'16.56"S 19°12'8.79"E
- 34°17'23.23"S 19°12'13.06"E



“The irrigation of biodegradable industrial wastewater to land must comply with the following conditions stipulated in subsection 1.10 (2) in the GN 665 of 06 September 2013 for Section 21 (e) activities:

1.10: (2) Suspended solids must be removed from any wastewater, and the resulting sludge disposed of according to the requirements of any relevant law or regulation, including the document Guidelines for the Utilisation and Disposal of Wastewater Sludge, Volumes 1 – 5, Water Research Commission Reports TT 261/06, 262/06, 349/09, 350/09, 351/09, as amended from time to time.”

Variables	Limit
pH	5.5 – 9.5
Electrical conductivity	1500 Ms/m
Nitrate (as N)	50 mg/L
Ammonia (as N)	900 mg/L
Chemical Oxygen Demand (COD)	5 000 mg/L
Faecal coli form	30 000 counts /ml
Orthophosphate	44 mg/L
Suspended Solids	3 000 mg/L
Potassium	4 000 mg/L
Chloride	1100 mg/L
Soap, oil or grease	250 mg/L

Disposing the sludge to land in line with these parameters and to the volumes and irrigation areas authorized and described by Dr James Meyer will not result in surface and ground water pollution.

As defined in the stipulated WRC Volume monitoring requirements extend to include wastewater, solids and liquid fractions, water resources and soil. According to Dr JA Meyer sludge disposal guideline document which is followed currently on the farm. Following extensive consultations and presentations by Dr Meyer and others to the Dept of Water & Sanitation, Dr Meyer have finally succeeded in DWS issuing a WUL amendment for wastewater irrigation that is based on typical nutrient content and not the restrictive GN 665 wastewater limit tables. This is good news as it aligns the practice of manure, slurry or the liquid fraction thereof, to be applied to land based on sustainable nutrient application rates, as opposed to having to first treat the wastewater to comply with what in effect amounted to discharge quality (section 21 f & h versus e Activities of the NWA). By implication a similar nutrient loading rate approach is implied for the solids fraction (compost). The WRC Guideline Classification for the compost solids fraction is unrestricted, enabling beneficial use thereof off-site. Classification: Pollutant Class: A: Thus: (a) Agricultural Use is an acceptable option. (b) No additional restrictions or requirement apply and (c) Could be used as a saleable product.

Typical Pig Slurry composition consists of 4.2kg/Nitrate/1000l, 41.4kg/Phosphate/1000l and 2.2kg/Potash/1000l. The raw wastewater generated on site will contain 4.2 kg N/1000L. The DWS Section 21 (e) Permitted Application Rates of 320 – 450 kg Nitrate (N)/ha/y. Therefore 128 000 l/ha/y at 320 kg N/ha/y and 180 000 l/ha/y at 450 kg N/ha/y can be irrigation. Take note that the

property is bigger, but that the available area for irrigation is 240 ha due to the exclusions of the 100m buffer areas. Thus, for the 240 ha available for disposal of sludge a total of 29 46 5600 l/y at 320 kg N/ha/y and 41 436 000 l/y at 450 kg N/ha/y can be irrigation. The facility will produce 54.86 m³/day (383.15 m³/week) of biodegradable industrial wastewater with a total of 19 924m³/a or 19 924 000 l/y. At the lower limit of the DWS Section (e) disposable rate the facility will irrigate 19 924 000 l/y which is much lower than the lower rate of 29 46 5600 l/y. This is well within the range that is stipulated by DWS in the guidelines for N and the irrigation of the expanded facility biodegradable industrial wastewater will not result in the pollution of the soil from an N parameters. The use of these fractions are preferred to the use of inorganic fertilisers as the N-fraction in the inorganic fertilisers is inorganic nitrate-N which represents a greater risk of leaching towards water resources when compared to the ammonia-N fractions from the biodegradable industrial wastewater. It should be noted that the wastewater generated by the piggery is significantly of lower risk than that generated from other industry sectors and domestic wastewater, predominantly as it is controlled and does not contain pollutants or contaminants (refer to the Water Research Commission on Dialogues of Contaminants of Emerging Concern 2015).

Since the liquid fraction should contain no solids/fibre, thus less crust should form (crusts contribute to anaerobic conditions and further purification of liquid and consequently odour issues). Several researchers have observed that NPK values for pig manure were similar between different countries (Conn et al., 2007; Moore et al., 2005; and Sanchez and Gonzalez, 2005). Fertilizer values for liquid and solid fractions are also viewed as similar. Differences are observed between various livestock types regarding manure composition.

Ruminant manure tends to have lower P compared to poultry and pig manure due to a better plant-bound P extraction ability (Bailey and Buckley, 1998). As reported by the authors pig manure, although subject to variation from production system factors, is regarded as generally having the following composition:

- 50 % N in the ammonium (inorganic) form
- 50% in the organic form (microbial, labile organic, stable

In terms of land application the considerations are a combination of benefits and potential concerns, thus balancing crop requirements with potential adverse environmental impacts. During the growing season 20% of the organic N form is reported to mineralize and thus be available for plant uptake. Of the inorganic fraction 25% of the ammoniacal N may be lost due to volatilization. Collectively this implies a net availability of ca. 50% of the applied N for crop production. NH₄-N losses may also vary largely, with 10 – 99% ranges recorded. Losses were the highest from anaerobic lagoons. Whilst P & K were viewed to be relatively stable with 5 – 15% losses reported, the highest potential loss was that of P (up to 50%) due to runoff and/or leaching. Kachanoski et al. (1997) reported that the ammonium form may be increased to 60 – 90%. organic). This is one of the reasons why Water resource quality monitoring emphasizes demonstrating that the storage of wastewater does not enter or cause impact on existing water resources, and why lagoons should be lined. According to Sutton et al. (1984) other concerns relate to dietary composition and potential increases to applied areas in NaCl and trace elements (As, Se, Cu, etc.). Similar concerns are noted by Lukehurst et al. (2010) and dealt with by the WRC TT Guidelines referred under the relevant sections of the NWA.

All water that is used for irrigation is documented and recorded by the water meters which has been installed. The piggery has its own reservoir and boreholes supplies the water for the piggery with a new meter installed and monitored monthly. The irrigation water used for the centre pivot

is supplied from the boreholes with its own meter which is separately licensed. The total amount of water used for the piggery and for irrigation is captured monthly and the total amount of biodegradable mixed with fresh water is monitored with a water meter.

When spreading biodegradable water onto the paddocks it is demarcated by GPS coordinates and given to the Piggery manager. The yearly soil tests indicate where spreading needs to take place (precision farming).

6. Methods statement (only for c and i activity)

All infrastructure within the c&i regulated zone is already constructed and in operations. No method statements required.

7. Water Uses applied for

The application includes the following water uses.

Table 2: Water Use Applied for

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

Table 1: Water use authorised

Farm	Water Use	Purpose	Co-ordinates	Volume m ³ /a
S21(a) Taking groundwater through the well fields and pit dewatering				
Remaining Extent of Farm No. 781 Caledon	Abstraction of raw water from aquifer (Borehole 1)	Irrigation and livestock (pig) water	34°17'36.59"S 19°12'27.41"E	41 272
Remaining Extent of Farm No. 781 Caledon	Abstraction of raw water from aquifer (Borehole 2)	Irrigation and livestock (pig) water	34°17'39.15"S 19°12'13.00"E	4 704
Remaining Extent of Farm No. 781 Caledon	Abstraction of raw water from aquifer (Borehole 3)	Irrigation and livestock (pig) water	34°17'43.78"S 19°12'24.47"E	10 024
Total groundwater through the boreholes				56 000
Total pit groundwater ingress abstraction volume:				

**Section 21(c) of the Act: Impeding or diverting the flow of water in a watercourse
and**

**Section 21(i) of the Act: Altering the bed, banks, course or characteristic of a
watercourse**

Farm	Water Use	Purpose	Details	Coordinates
Remaining Extent of Farm No. 781 Caledon	Piggery infrastructure situated within 100 m from the artificial instream farm dam within the eastern tributary transecting the property	Piggery infrastructure situated within 100 m from the artificial instream farm dam within the eastern tributary transecting the property	Length of artificial instream dam affected: 70.7 m	Start: 34°17'12.98"S 19°12'31.74"E End: 34°17'11.44"S 19°12'32.61"E

Section 21(e): Irrigation of 19 924 m³/annum on 240ha with treated wastewater (sludge) from piggery

Engaging in a controlled activity identified as such in section 37(1) or declared under section 38(1)	Irrigation of 19 924 m ³ with treated piggery sludge	240 ha	Remaining Extent of Farm No. 781 Caledon	34°15'56.16"S 19°12'8.84"E 34°16'5.34"S 19°11'58.62"E 34°16'10.38"S 19°11'54.53"E 34°16'16.64"S 19°11'56.85"E 34°16'13.15"S 19°11'58.78"E 34°16'15.48"S 19°12'8.07"E 34°16'22.90"S 19°12'6.66"E 34°16'21.66"S 19°12'1.52"E 34°16'29.31"S 19°12'12.94"E 34°16'30.21"S 19°12'27.36"E
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				34°16'31.90"S 19°12'31.62"E 34°16'37.92"S 19°12'21.82"E 34°16'16.60"S 19°11'45.81"E 34°16'23.27"S 19°11'41.41"E 34°16'30.68"S 19°11'45.29"E 34°16'31.66"S 19°12'0.15"E 34°16'44.55"S 19°11'58.96"E 34°16'48.47"S 19°11'43.49"E 34°16'36.77"S 19°11'30.31"E 34°16'49.68"S 19°11'16.60"E 34°16'32.44"S 19°12'33.80"E 34°16'45.66"S 19°12'10.26"E 34°16'50.08"S 19°12'12.46"E 34°16'52.18"S 19°12'17.26"E 34°17'0.25"S 19°12'18.46"E 34°16'53.65"S 19°12'22.91"E 34°16'54.63"S 19°12'28.63"E 34°16'55.20"S 19°12'34.37"E 34°17'2.84"S 19°12'39.68"E 34°17'7.89"S 19°12'29.95"E 34°17'0.47"S 19°12'45.46"E
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				34°16'51.61"S 19°12'46.94"E 34°17'0.67"S 19°12'16.23"E 34°17'4.03"S 19°12'8.41"E 34°17'15.19"S 19°12'19.60"E 34°17'16.21"S 19°12'28.17"E 34°17'32.45"S 19°12'28.17"E 34°17'34.91"S 19°12'22.09"E 34°17'33.46"S 19°12'8.78"E 34°16'56.60"S 19°11'25.20"E 34°16'57.30"S 19°11'31.78"E 34°17'3.73"S 19°11'58.15"E 34°17'16.56"S 19°12'8.79"E 34°17'23.23"S 19°12'13.06"E
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Section 21(g) of the Act: Disposing of waste in a manner which may detrimentally impact on a water resource

Table 4: Water use activities

Water Use	Purpose	Details/Capacity	Property Description	Coordinates
21(g).1	Temporary storage of biodegradable industrial wastewater in Sludge Pond for the purpose of disposal	Volume stored at any given time: 1 500 m ³ Total yearly volume generated: 19 924 m ³ /annum	Remaining Extent of Farm No. 781 Caledon	34°16'56.71"S 19°12'23.37"E
21(g).2	Temporary storage of biodegradable solids fraction (compost) for the purpose of removal/disposal	Volume stored at any given time: 2 629 m ³ Total yearly volume generated: 12 461 m ³ /annum	Remaining Extent of Farm No. 781 Caledon	34°16'59.59"S 19°12'24.11"E
21(g).3	Temporary storage of compost from mortality compost site for the purpose of removal/disposal	Volume stored at any given time: 1 500 m ³ Total yearly volume generated: 427 m ³	Remaining Extent of Farm No. 781 Caledon	34°16'57.06"S 19°12'21.31"E
21(g).4	Temporary storage of biodegradable industrial wastewater in pre-separation mixing sump	Volume stored at any given time: 95 m ³ Total yearly volume generated: 19 924 m ³ /annum	Remaining Extent of Farm No. 781 Caledon	34°16'57.55"S 19°12'22.56"E
21(g).5	Temporary storage of biodegradable industrial	Volume stored at any given time: 38.9 m ³	Remaining Extent of Farm No. 781 Caledon	34°17'9.13"S 19°12'25.46"E

Water Use	Purpose	Details/Capacity	Property Description	Coordinates
	wastewater in canals underneath pig houses (GD & Boar Pen)	Total yearly volume generated: 1 055.972 m ³ /annum		34°17'9.98"S 19°12'27.19"E
21(g).6	Temporary storage of biodegradable industrial wastewater in canals underneath pig houses (AI & Office)	Volume stored at any given time: 110.6 m ³ Total yearly volume generated: 3 028.448 m ³ /annum	Remaining Extent of Farm No. 781 Caledon	
21(g).7	Temporary storage of biodegradable industrial wastewater in canals underneath pig houses (FH1 & WH1)	Volume stored at any given time: 224.8 m ³ Total yearly volume generated: 6 156.516 m ³ /annum	Remaining Extent of Farm No. 781 Caledon	34°17'8.68"S 19°12'22.36"E
21(g).8	Temporary storage of biodegradable industrial wastewater in canals underneath pig houses (FH2 & WH2)	Volume stored at any given time: 310 m ³ Total yearly volume generated: 8 467.7 m ³ /annum	Remaining Extent of Farm No. 781 Caledon	34°17'10.80"S 19°12'28.76"E
21(g).9	Temporary storage of biodegradable industrial wastewater in underground	Volume stored at any given time: 44.7 m ³	Remaining Extent of Farm No. 781 Caledon	34°17'1.11"S 19°12'30.05"E

Water Use	Purpose	Details/Capacity	Property Description	Coordinates
	containment facility (Loading Bay)	Total yearly volume generated: 1 215.364 m ³ /annum		

8. Impacts and mitigation measures

The potential impacts and mitigation measures that are expected from the proposed activities are presented in Table 3.

Table 3: Summary of impacts and mitigation measures

Water Use	Possible Impacts to the water resources	Possible Impacts to the water users	Mitigation Measures
Section 21 (f)	The water quality may deteriorate	Downstream water users will get water that does not meet their quality requirements	The water will be treated to meet the water quality objectives prior to discharge

9. Public participation

The applicant invited objections in terms of Section 41 (4) of the National Water Act, Act no 36 of 1998. The outcome of the process is summarised in Table 4.

Table 4: Outcome of the public participation

Person who commented	Comments (support or object)	Reasons for objection	Applicant's response to the objection
Stephan Delpert (neighbour) Josephskraal	No Objection	NA	NA
Volkmar Engelke Neighbour	No Objection	NA	NA
J Albertyn Neighbour	No Objection	NA	NA
Gerard Kurvers Neighbour	No Objection	NA	NA
Peter Stuart	No Objection	NA	NA

Neighbour			
E.R Adam Neighbour	No Objection	NA	NA
Melissa Nelsen Neighbour	No Objection	NA	NA
CE (Buks) Schutte 082 902 2947 // 021 883 8082 Obo Leeurivier Trading (Pty) Ltd	I write on behalf of my client - Leeurivier Trading (Pty) Ltd, the neighbours and owner of Farm 475/3 with reference to the letter received (and attached). My client wishes to register as an interested and affected party, and all relevant documentation please to be submitted soonest that official technical and legal comment can be prepared. You, as an environmental practitioner, will appreciate that no meaningful comment can be presented on the basis of the letter issued. You will also have intimate knowledge of my client's stance towards your client's history of blatantly ignoring the laws of our country, even punitive court orders. Amongst others, these orders also demand that my client must be informed of any application or supplementary information provided for any approvals and or licenses. You would	NA	This is to confirm receipt of your email and confirmation that you are registered as an Interested and Affected Party Your comments will be included and responded to. Furthermore, once the step 3 is open on e-wulaas and the technical documents list available and drafted, they will be send for 30 days comment before submission to BOCMA together with comments and responses thereto.

	know that my client does not receive this information. The view of my client will be to strongly oppose any update to the water use licence concerning the disposal of piggery wastewater, without sufficient information provided with respect to sustained disposal within legal limits and accepted agronomical practices. My client's previous objections remain. There are outstanding information requested that are not being presented to my client. The reason for non-presentation can only be to hide the ongoing pollution. The WU licence 2/GAOG/AGTAE/10115 stipulated, amongst others, quality thresholds of wastewater to be disposed as well as that the wastewater be irrigated on 230.2ha of pastures / grazing. Your data will show that the wastewater quality does not comply with the conditions as per license, transgressing these thresholds by many orders of magnitude. You will also need to consider on what area wastewater is		
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	practically disposed in the light of continued crop framing practices on almost all fields available. From our perspective the tanker that disposes wastewater does not dispose wastewater over the 230.2ha of land as stipulated. Your client has now also installed a pivot that can only be used to irrigate wastewater and concentrating pollutants on a fraction of the area permitted. (This pivot is the subject of a communication currently being prepared to be submitted to BOCMA and the Departments of Agriculture and Environmental Affairs, the Department of Health, and other I&AP included previously). Previous soil quality data already indicated that the soils are saturated with nutrients (P, K and high levels of Na) and hence the license to use 230.2ha of land. All our efforts to create a win-win solution by liaising with the specialists used by Jarrahnup had been blocked by your client. We remain open for technical discussions to advance this matter.		
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Rhett Smart CapeNature Land Use Scientist South Landscape	Please register CapeNature as an interested and affected party for the Water Use License Renewal for the Jarrahup Trust and free range piggery on Remainder of Farm 781, Bot River. Please advise if there are reports for review and where they are available for review.	NA	This is to acknowledge your email and to confirm that you are registered as an Interested and Affected Party. Once the technical documents are ready after the list was given by BOCMA in the e- wulaas process, they will be send for 30 days comment.
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Proof of advert, neighbours notice and site notice to inform Interested and Affected Parties of 30 day comment period on the Phase 3 Technical documents and comment received and responses thereto will be included below before submission to BOCMA

10. Other authorisations applicable to the activity

The applicant has already obtained confirmation from DEA&DP that an Environmental Authorisation is not required.

11. Section 27 (1)

The requirements contained in Section 27(1) of the National Water Act, 1998 (Act 36 of 1998) have been considered and are discussed further below.

a) Existing lawful water uses

An Existing Lawful Water Use as defined by Section 32 of the National Water Act, 1998 (Act No. 36 of 1998) is a water use that has taken place at any time during a period of two years immediately before the date of commencement of the Act and was authorised by a law before the date of commencement. Existing lawful abstraction of groundwater for irrigation purposes on the relevant property equates to 206 500 m³ per annum. Furthermore, a total amount of 29 671 m³ may be stored on the property under Existing Lawful Use.

The current water Use License (reference number 02/G40G/AGIAE/10115) as amended expire on 08/12/2025. An early renewal application is done. If approved, the renewal comes into effect the day after the renewed WUL is approved.

b) Need to redress the results of past racial and gender discrimination

Jarrahup Trust is committed to the continued upliftment of previously disadvantaged members within the local community and will always ensure a safe and rewarding work environment for all its employees. Jarrahup Trust is committed to continue to enhancing the skills level of all staff at

the Jarrahnup Piggery. The Trust strives to offer all employees, especially those previously disadvantaged, an opportunity to improve their skills through training and mentorship.

The Basic Training Programme will have three tiers, including:

- 1) Basic Training:
 - a. Technical pig production terms and their understanding;
 - b. Aspects of safety on the pig farm; and
 - c. Management of the various activities associated with the Jarrahnup Piggery.

Within each of the various topics there will be further individual areas of education. For example, in the farrowing house a list should be made of all the various tasks that are carried out – each of these would provide a short course of instruction followed by “doing”, followed by assessment.

Intermediate Training:

- This area of training is aimed at the experienced stockperson or the person responsible for a section of the farm or a trainee manager. It should involve attending day courses that included personnel management and more advanced training of the basic topics. Veterinary seminars on the understanding of diseases should be an important part of this. This can be carried out either on the farm at the veterinary visit, if there are sufficient people to justify this, or alternatively by the development of seminars at the veterinary practice or at the agriculture schools.

Advanced Training:

- This should be aimed at the under manager, the manager and the group farm manager. Instruction courses here would involve attending specific educational seminars. At a veterinary level these would include the topics already mentioned for intermediates but they would now be dealt with in a more detailed and scientific way and include a greater understanding, particularly of the epidemiology and the control of disease. Instruction techniques and the ability to teach people should be a major part of this training programme together with people management, business management and communication skills. Training in the areas of business management and the use of computers form an essential part of modern day pig production. The greatest complaint of people working on pig farms is style of management and lack of appreciation. The education of the manager in this respect is important.

Apart from the Basic Training Programme being implemented, each person employed at the Jarrahnup Piggery receives daily hands-on training and mentorship in their respective department. Through continual education and training employees will become more aware of their environment and more importantly their human impact on the local area. The Jarrahnup Trust further has ensured that a 51% B- BBEE shareholding compliance as per the current Water Use License to be amended has been achieved.

c) Efficient and beneficial use of water in the public interest

Water use in the piggery is effectively managed and monitored and water saving measures is implemented. The volumes of water used are documented and made available to the authorities should such be required.

Furthermore, Jarrahnup Trust will continuously monitor groundwater levels and groundwater and surface water quality to ensure that they do not impact on other water users in the area.

As indicated by the Geohydrological Assessment for the RE of Farm No. 781 Caledon RD, the firm yield of the Groundwater Response Unit (GRU) is far in excess of the predicted water demand. If the recommended abstraction rates are adhered to, aquifer over-abstraction is unlikely to occur. The volume required for the Jarrahnup Piggery is small in comparison to what the aquifer can deliver and will not have a significant impact on the groundwater resource.

A verification of the extent and lawfulness of water use on the RE of Farm 781 Caledon RD was determined by the Breede-Gouritz CMA during August 2017. Existing lawful abstraction of groundwater for irrigation purposes on the relevant property equates to 206 500 m³ per annum. Furthermore, a total amount of 29 671 m³ may be stored on the property under Existing Lawful Use.

“The irrigation of biodegradable industrial wastewater to land must comply with the following conditions stipulated in subsection 1.10 (2) in the GN 665 of 06 September 2013 for Section 21 (e) activities:

1.10: (2) Suspended solids must be removed from any wastewater, and the resulting sludge disposed of according to the requirements of any relevant law or regulation, including the document Guidelines for the Utilisation and Disposal of Wastewater Sludge, Volumes 1 – 5, Water Research Commission Reports TT 261/06, 262/06, 349/09, 350/09, 351/09, as amended from time to time.”

Variables	Limit
pH	5.5 – 9.5
Electrical conductivity	1500 Ms/m
Nitrate (as N)	50 mg/L
Ammonia (as N)	900 mg/L
Chemical Oxygen Demand (COD)	5 000 mg/L
Faecal coli form	30 000 counts /MI
Orthophosphate	44 mg/L
Suspended Solids	3 000 mg/L
Potassium	4 000 mg/L
Chloride	1100 mg/L
Soap, oil or grease	250 mg/L

Disposing the sludge to land in line with these parameters and to the volumes and irrigation areas authorized and described by Dr James Meyer will not result in surface and ground water pollution.

By renewing the Water Use License, the Jarrahnup Piggery can ensure safe and continuous employment opportunities and thus income to the local residents. By granting renewal of the water use license, the principle of "beneficial use in the public interest" of the National Water Act (NWA) will be achieved.

d) Socio-economic impact of the water use/s if authorised/of failure to authorise the water use or uses

i. Of the water use of uses if authorised

Continuation of piggery operations on site thus ensuring continued economic growth and employment.

ii. Of the failure to authorise the water use or uses

Without the renewal of the Water Use License, Jarrahnup Trust and piggery would not be able to continue and employment opportunities would be lost.

e) Any catchment management strategy applicable to the relevant water resource

The RE of Farm 781 Caledon RD falls within the boundaries of the Breede-Overberg Area within the Breede-Olifants Catchment Management Agency (BOCMA). A formal Catchment Management Strategy (CMS) has been compiled for the BOCMA and is available from their webpage. As mentioned in the CMS, in the past various studies have delineated the Breede-Overberg WMA in different ways. Building on these delineations, six management zones have been defined for development and implementation of the Breede-Overberg Catchment Management Strategy (CMS). The Jarrahnup Piggery falls within the Overberg West Management Zone.

The economy of the Breede-Overberg region is primarily agricultural, supported by localised tourism mainly along the coastal strip. Most of the manufacturing, construction, trade and services economies of the various small towns in the region fundamentally support agriculture and the associated agro- processing industries. This region is thus largely dependent upon its agricultural economy, which itself is predominantly based on high-value fruit cultivation supported by grains and livestock. About a third of the current billion economic output is directly linked to agriculture. When the associated manufacturing, construction and services are considered, a total of about three quarters of the economy is dependent upon agriculture. The remainder of the economy is related to coastal residential retirement and tourism.

f) Likely effect of the water use to be authorised on the water resource and on other water users

Water use in the piggery is effectively managed and monitored and water saving measures is implemented. The volumes of water used are documented and made available to the authorities should such be required. Jarrahnup Trust will continuously monitor groundwater levels and groundwater and surface water quality to ensure that they do not impact on other water users in the area. As indicated by the Geohydrological Assessment for the RE of Farm No. 781 Caledon RD, the firm yield of the Groundwater Response Unit (GRU) is far in excess of the predicted water demand. If the recommended abstraction rates are adhered to, aquifer over-abstraction is unlikely to occur. The volume required for the Jarrahnup Piggery is small in comparison to what the aquifer can deliver and will not have a significant impact on the groundwater resource.

Organic Sludge generation management is in place to protect surface and ground water pollution and surrounding land users. All generated piggery sludge is handled in concrete channel encased in plastic to avoid any seepage. Sludge flows after plug is pulled into underground conservancy tanks. From the conservancy tank it is spread onto the agricultural dry lands in summer as per the sludge disposal management plan and in winter all sludge is transported to the holding dam from where it goes through the separator and solids are removed and the residue is pumped into the holding dam. The screened solids are composted. Further channels and catchment ponds were constructed to catch rainwater runoff from the paddocks and compost facility, and prevent seepage into the surrounding agricultural fields. Runoff into these ponds is collected with the honey sucker tank and disposed at the waste screen and into the sludge pond. The sludge is stored during winter months and then spread onto the approximate 230 ha lands available and licensed as per the existing license irrigation areas. A 25m Buffer on all drainage channels and 45 m from the Bot River is implemented in the authorized irrigation areas to protect surface water and seepage into the surrounding environment. The Sludge spread onto the lands meet the current amended water use license quality parameters as well as disposal volumes per ha. These parameters and rate per hectare were calculated by Dr James Meyer who is known and well respected in the pork industry and also represent the South African Pork Association Industrial on the National Water Research committee.

g) Class and the resources quality objectives of the water resources

The riparian ecological integrity was assessed for the 'B' section channels using the Riparian Vegetation Response Assessment Index (VEGRAI). Results from the lower and upper zones of the riparian vegetation are then combined and weighted with a value that reflects the perceived importance of that particular criterion in determining habitat integrity, allowing this to be numerically expressed in relation to the perceived benchmark. These values are then summed to produce a score that reflects the overall habitat integrity of the riparian unit. The score is then placed into one of six classes. For the resource class of the drainage lines associated with the Jarrahnup Piggery refer to **Table 1** below.

Table 1: Riparian Ecological Category Scores

Unit	Score (%)	Class	Confidence
'B' Section Channel	26.2	E	3.5
'B' Section Channel	36.4	E	3.5

The riparian habitat associated with the 'B' Section channels has been classified as seriously modified, Class E with a large loss of natural habitat, biota and basic ecosystem functions due to extensive crop farming and the removal of indigenous vegetation.

The findings of the IHIA assessment further revealed that instream and riparian habitat associated with the channel assessed is Seriously Modified (Class E) for the 'B' section streams (**Table 2**). Direct disturbance from the extensive crop farming, cattle trampling, overgrazing and extensive erosion in the area, and alien vegetation in the riparian and instream zone were the main impacts on the channels.

Table 2: The average IHIA scores calculated for both the instream and riparian habitat for both the 'B' section channels

Instream Criteria	WEIGHT	Channel 1	Channel 2	Average	Score
Water abstraction	14	18	17	17.5	9.80
Flow modification	13	18	18	18.0	9.36
Bed modification	13	16	14	15.0	7.8
Channel modification	13	19	18	18.5	9.62
Water quality	14	9	8	8.50	4.76
Inundation	10	5	5	5.00	2.00
Exotic macrophytes	9	19	17	18.0	6.48
Exotic fauna	8	20	20	20.0	6.40
Solid waste disposal	6	12	12	12.0	2.88
TOTAL	100				40.9
Riparian Zone Criteria	WEIGHT	Channel 1	Channel 2	Averag	Score
Indigenous vegetation	13	24	22	23.0	11.96
Exotic vegetation	12	20	20	20.0	9.60
Bank erosion	14	15	12	13.5	7.56
Channel modification	12	20	18	19.0	9.12
Water abstraction	13	18	16	17.0	8.84
Inundation	11	8	7	7.50	3.30
Flow modification	12	18	16	17.0	8.16
Water quality	13	10	10	10.0	5.20
TOTAL	100				36.26
IHIA Score					38.58

It is very important to note that no surface water will be abstracted for use in piggery activities. As per the NWRS, a management class and associated Reserve and Resource Quality Objectives (RQOs) have been set and approved for every significant water resource in the country. Resource Quality Objectives are regularly monitored for compliance, which informs enforcement and a strategic adaptive management cycle. It is the responsibility of the DWS and BOCMA to provide these specific Resource Quality Objectives, if applicable to the study area.

The key strategic objectives for water resource management are to:

- Ensure sustainable management of the water resources through resource directed measures and source directed controls;
- Protect and maintain existing freshwater ecosystem priority areas in good condition and well-functioning water resource ecosystems by managing riparian and wetland buffers and critical groundwater recharge areas;
- Carry out rehabilitation of strategic water ecosystems;
- Ensure prevention of water resources from point source and non-point source pollution by managing at source;
- Create awareness among communities, business and decision makers about the value of water and ensure commitment to sustainable water use practices.

- Create an enabling environment for water resource protection through incentive-based approach to water resource management; and
- Monitor the ecological health of our resources through an Integrated Information Management System.

h) Investments already made and to be made by the water user in respect of the water use in question

It should be noted that the Jarrahnup Piggery is an existing enterprise producing country reared pigs under free range conditions. To supply free range pork the Jarrahnup Piggery is kept to strict production methods and specifications which is audited by its intended market (client base) on a regular basis. Agreements with such clients are already in place by means large-scale investments based on supply and off-take contracts. Affluent housing infrastructure have been built on strict conditions relating to the wellbeing of the animals and to meet the animal's behavioural needs i.e. appropriate freedom of movement and comfort. The Jarrahnup Piggery have invested in a comprehensive Management Plan, Standard Operating Procedures and Training Programmes to ensure the compliance of the company and its employees. Annual external audits of the Water Use License and operations were undertaken and will continue to be undertaken. A water purification system was constructed to ensure that drinking water to the pigs conforms to the SANS241-1:2015 drinking water standards.

- Piggery fully functional and capital value already spend to build infrastructure for operation of the piggery under Water Use Authorization which this renewal is being applied for;
- On-going monitoring of water used at the piggery as well as quality of the water resource;
- Appointment environmental consultants;

i) Strategic importance of the water use to be authorised

The renewal of the license and the water resource would prove to be beneficial to the district who is currently a major economic and job creator. As mentioned above, no significant impacts are expected to occur on either water resources or other water uses within the area.

The main benefits of the Jarrahnup Piggery in the public's interest includes direct and indirect job creation, revenue generation, tax and transport contributions and contribution to food security. It is important to note that Country Reared Free Range food provides an element of consumer choice to an ever-increasing population of individuals choosing to live a healthier lifestyle as well as individuals choosing to take animal welfare into account when purchasing food.

If the water use license is not renewed at the Jarrahnup Piggery, employment opportunities (both direct and indirect) created will be lost and subsequently no upliftment of previously disadvantaged individuals. The Applicant would not be allowed the opportunity to contribute more to food production and security, specifically taking the country reared free range market into account and will not increase its contribution to local economic growth.

j) The quality of water in the water resource which may be required for the reserve and for meeting international obligations

The conditions of the non-perennial river close to the piggery is largely in degraded state as a result of cumulative impacts from farming land use practices in the vicinity. These agriculturally-related impacts also result in a water quality deterioration in the Bot River, both in terms of *e-coli* concentrations and nutrient enrichment. Provided that the management and monitoring requirements, as well as spready of sludge that meet the disposal rate per hectare and amended water use license parameters on the licensed irrigation areas, then the impact on ground and surface water will be within the current water quality standards and rivers health that are available from the monitoring results the last 5 years. The continue operation within the amended and requested renewal license will not result in the deterioration of the ground and surface water quality in the area.

k) Probable duration of any undertaking for which a water use is to be authorised

The piggery is a permanent facility which will require the renewal of the water use license for production and operation for the foreseeable future. As such the applicable water use should be considered as permanent as well. The applicant would be satisfied with the maximum period for

which a renewal of the license can be issued. At the expiry of the renewed license applicability period the water user would undertake the necessary updates and request a review / apply for a renewal for the authorisation.

SUMMARY OF SUGGESTED SPECIAL CONDITIONS

No special conditions yet.

Motivation for the Renewal of the Water Use License – Section 27

The Jarrahnup Farm Trust, the owner of the Farm Remainder Erf 781 and the holder of the current Water Use License amended on 5/2/2025 to 02/G40G/AG1AE/10115 and File No. 27/2/1/G740/4/1. The Trust has an existing Lawful Use dated 10/08/2017.

Registered No. 22070198

Ref No. 4/4/3CO1300000000078100000

The total combined water use is:

Irrigation: 206 500 cubes per annum

Live Stock: 54 000 cubes per annum

Both Bore holes No. 1 and No.2 have been inspected and all parts including electrical cables and have been replaced in May 2025 by De Villiers Visser Besproeiing CC.

The Jarrahnup Farm Piggery employees 27 permanent staff including the management and office staff.

Each week 440 pigs are being delivered to the Malmesbury Abattoir which equates to 23 000 pigs per year.

The food security for the country's population is paramount.

Traceability, sustainability and bio security is also of utmost importance.

Due to the high input cost it is estimated that 20% of Piggeries have been forced to close down and thereby reducing the number of pigs for slaughter significantly.

With the current diseases of Foot and Mouth and African Swine Fever being experienced in the country at the present moment, strict entrance to the farm is by appointment only and all vehicles that enter the farm must go through the spray race.

All personal will be required to shower in and shower out according to strict bio security measures.

The piggery has a contract with a local Taxi in Botriver to transport the staff to and from the farm each day including weekends.

All clothing for the staff is supplied by the piggery and clean clothing is supplied each day.

All staff operating in the piggery must shower in on arriving at the farm and shower out when leaving the farm without exception.

The piggery has constructed a contour around the outside of the boundary fences of the piggery to collect any runoff of water from the piggery paddocks. The water is directed into 2 holding dams especially during the wet Winter months. These dams are emptied using a tractor and tanker and taking to the separating plant.

Waste and Water Quality Management plan

The Trust has built a new dam next to the separating plant which is lined with the recommended plastic sheeting. The dam measure 75 meters long, 65 meters wide and a depth of 5 meters.

A fence has been erected on top of the dam walls with veldspan and barb wire with no access gate. There is signs attached to the fence stating No Entry, no drinking and no swimming.

At strategic points there are escape ropes tied to the fence posts which hangs into the dam in the case of someone falling into the dam, they will be able to get out of the dam by climbing up with the ropes.

The bio degradable water from the dam is mixed with fresh water at a ratio of 70% fresh and 30% bio degradable and is used to irrigate through a centre pivot in Summer months when maize will be planted.

When irrigating the land with a tractor and tanker, we fill the 10 000 liter tanks with the same ratio of fresh and bio degradable water . This enable us to spread more water per hectare during the Summer months over the allocated 240 Ha.

All water that is used for irrigation is documented and recorded by the water meters which has been installed. The piggery has it's own reservoir and bore hole no. 2 supplies the water for the piggery with a new meter installed and monitored monthly.

The irrigation water used for the centre pivot is supplied by bore hole no. 1 with it's own meter.

See attached photographs showing the meters and the plumbing necessary to mix the water.

The total amount of water used for the piggery and for irrigation is captured monthly and the total amount of bio degradable mixed with fresh water is monitored with a water meter.

In Mr Hanekom's Audit report, it will verify annual water used for the piggery and the irrigation.

All solid waste from the pig buildings is collected and then transferred to the composting site.

At the composting site there is a banking contour on the lower side to collect run off when it rains.

Any excessive run off is collected by the tractor and tanker and taken to the separating plant.

When spreading bio degradable water onto the paddocks it is demarcated by GPS co ordinates and given to the Piggery manager.

The yearly soil tests indicate where spreading needs to take place. (precision farming)

Due to the spreading of African swine fever in the Western Cape at present, all Jarrahnup pigs which are sold to the abattoir are tattooed with the Registered brand JFT.

This ensures that every pig is traceable from the farm to the consumer.

In conclusion, the enormous costs to establish a 854 sow unit, excluding the live stock, is a R120 000 000. This is the present cost today. Without the renewal of our Water Use License, the farm would not be able to operate.

The application to renew the license is expensive and extensive and therefore we are applying for a period of 20 years.

[END OF WATER USE LICENCE APPLICATION SUMMARY]

