

# REFERENCE: 16/3/3/1/B1/14/1044/20 NEAS REFERENCE: WCP/EIA/0000792/2020 ENQUIRIES: Bernadette Osborne DATE OF ISSUE: 15 April 2021

# ENVIRONMENTAL AUTHORISATION

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014: THE ENLARGEMENT OF KLIPBOSLAAGTE DAM B AND AGRICULTURAL EXPANSION ON KLIPBOSLAAGTE FARM, ROBERTSON.

With reference to your application for the abovementioned, find below the outcome with respect to this application.

# DECISION

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA") and the Environmental Impact Assessment ("EIA") Regulations, 2014, the Competent Authority herewith **grants Environmental Authorisation** to the applicant to undertake the listed activities specified in section B below with respect to the Preferred Design Alternative described in the Basic Assessment Report ("BAR"), dated December 2020.

The applicant for this Environmental Authorisation is required to comply with the conditions set out in section E below.

# A. DETAILS OF THE APPLICANT FOR THIS ENVIRONMENTAL AUTHORISATION

Smutsbrothers Agri (Pty) Ltd c/o Mr Grant Hamilton Smuts PO Box 6 **KLAASVOOGDS** 6707 Tel: (023) 626 2098 E-mail: grant@smutsbros.co.za

The abovementioned applicant is the holder of this Environmental Authorisation and is hereinafter referred to as "**the holder**".

# **B. ACTIVITY AUTHORISED**

Listed	d Activity	Project Description					
Listin	g Notice 1 –	The construction of a 400 mm					
Activ	ity Number: 9	diameter bulk pipeline of					
The o	development of infrastructure exceeding 1	approximately 5 km long from the					
000 n	netres in length for the bulk transportation of	Breede River to the enlarged dam. This					
wate	r or storm water—	pipeline has the potential of reaching					
(i)	with an internal diameter of 0,36 metres or	120 litres per second.					
	more; or						
(ii)	with a peak throughput of 120 litres per second						
	or more;						
eveli	Iding where-						
(a)	such infrastructure is for bulk transportation						
10)	of water or storm water or storm water						
	drainage inside a road reserve or railway						
	line reserve; or						
(b)	where such development will occur within						
(~)	an urban area.						
Listin	g Notice 1 –	The expansion of two smaller dams to					
Activ	ity Number: 19	create one larger dam and the					
	nfilling or depositing of any material of more	construction and realignment of					
	10 cubic metres into, or the dredging,	pipelines, would require the moving of					
	vation, removal or moving of soil, sand, s, shell grit, pebbles or rock or more than 10	more than 10m³ of material into and					
	c metres from a watercourse;	from a watercourse.					
0000							
	excluding where such infilling, depositing,						
	ging, excavation, removal or moving-						
(a)	Will occur behind a development						
(b)	setback; Is for maintenance purposes undertaken						
(~)	in accordance with a maintenance						
	management plan;						
(C)	Falls within the ambit of activity 21 in this						
(~)	Notice, in which case that activity applies.						
(d)	Occurs within existing ports or harbours						
	that will not increase the development footprint of the port or harbour; or						
(e)	footprint of the port or harbour; or Where such development is related to the						

case activity 26 in Listing Notice 2 of 2014 applies.	
Listing Notice 1 – Activity Number: 27 The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance if indigenous vegetation is required for – (i) The undertaking of linear activity; or (ii) Maintenance purposes undertaken in accordance with a maintenance	Approximately 9ha of indigenous vegetation will be cleared for the enlargement of the proposed dam.
management plan.	The expansion of two smaller dams to
Activity Number: 48 The expansion of- (i) canals where the canal is expanded by	create one larger dam and the construction/re-alignment of pipelines would occur within 32 m of a watercourse.
<ul> <li>100 square metres or more in size;</li> <li>(ii) channels where the channel is expanded by 100 square metres or more in size;</li> </ul>	
<ul> <li>(iii) bridges where the bridge is expanded by 100 square metres or more in size;</li> <li>(iv) dams, where the dam, including</li> </ul>	
infrastructure and water surface area, is expanded by 100 square metres or more in size;	
<ul> <li>(v) weirs, where the weir, including infrastructure and water surface area, is expanded by 100 square metres or more in size;</li> </ul>	
<ul> <li>(vi) bulk storm water outlet structures where the bulk storm water outlet structure is expanded by 100 square metres or more in size; or</li> </ul>	
(vii) marinas where the marina is expanded by 100 square metres or more in size;	
where such expansion or expansion and related operation occurs- (a) within a watercourse; (b) in front of a development setback; or	
(c) if no development setback exists, within 32 metres of a watercourse,	

	measured from the edge of a watercourse;	
exclu	uding-	
(a)	the expansion of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour;	
(b)	where such expansion activities are related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies;	
(c)	activities listed in activity 14 in Listing Notice 2 of 2014 or activity 14 in Listing Notice 3 of 2014, in which case that activity applies;	
(d)	where such expansion occurs within an urban area; or	
(e)	where such expansion occurs within existing roads or road reserves.	
Listin	g Notice 1 –	The high-water mark of the enlarged
Activ	rity Number: 66	dam will increase by more than 10 ha.
The e	expansion of a dam where-	
(i)	the highest part of the dam wall, as measured from the outside toe of the wall to the highest part of the wall, was originally 5 metres or higher and where the height of the wall is increased by 2.5 metres or more; or	
(ii)	where the high-water mark of the dam will be increased with 10 hectares or more.	

The abovementioned activities are hereinafter referred to as "the listed activities".

The holder is herein authorised to undertake the following alternative that includes the listed activities:

- The combination of two dams on the Remainder of Portion 1 and Portion 3 of Farm Kliphoogte No. 46 to form the enlarged Klipboslaagte Dam B. The enlarged dam will have a storage capacity of 1 000 000 m<sup>3</sup> and a 22 m high embankment.
- The construction of a 400 mm diameter bulk pipeline of approximately 5 km in length adjacent to an existing pipeline to pump water from the Breede River to Klipboslaagte Dam B. The first 285m section of the pipeline immediately downstream

of the dam will be placed at least 10m west from the stream and will be aligned along the existing farm road.

- The extension of an existing 315 mm diameter pipeline with approximately 0.5 km to Klipboslaagte Dam B.
- The expansion of cultivation areas by approximately 51 ha on previously cultivated land. These areas have been cultivated in the last 10 years.

# C. SITE DESCRIPTION AND LOCATION

The listed activities will be undertaken on the Remainder of Portion 1 of Farm Kliphoogte No. 46, the Remainder of Farm Klipbosch laagte No. 113, Portion 1 of Farm Klipbosch laagte No. 113, Portion 3 of Farm Kliphoogte No. 46, Farm No. 254, Farm Bakens Hoogte No. 114 and Portions 13, 22, 38 and 103 of Farm Goedemoed No. 128, Robertson and has the following co-ordinates:

Co-ordinates:	Latitu	de (S)		Long	itude (	E)
Center point of Klipboslaagte Dam B	33°	48'	5.51" South	19°	56'	16.00'' East
Pipeline 1: Start point	33°	48'	31.17" South	19°	56'	11.27" East
Pipeline 1: Middle point	33°	49'	38.65" South	19°	56'	19.06" East
Pipeline 1: End point	33°	50'	29.49" South	19°	56'	27.70'' East
Pipeline 2: Start point	33°	48'	12.51" South	19°	56'	14.47" East
Pipeline 2: Middle point	33°	48'	20.33'' South	19°	56'	16.92'' East
Pipeline 2: End point	33°	48'	24.21" South	19°	56'	9.41" East

The SG digit codes are: C0650000000004600001;

C0650000000011300000; C0650000000011300001; C06500000000025400000; C06500000000011400000; C0650000000012800013; C0650000000012800022; C0650000000012800038; and C0650000000012800103.

Refer to Annexure 1: Locality Map and Annexure 2: Site Plan.

The above is hereinafter referred to as "the site".

# D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

Holland and Associates Environmental Consultants c/o Mr Ross Holland PO Box 31108 **TOKAI** 7966 Cell: 072 601 0803 Email: ross@hollandandassociates.net

# E. CONDITIONS OF AUTHORISATION

### Scope of authorisation

- 1. The holder is authorised to undertake the listed activities specified in Section B above in accordance with and restricted to the Preferred Design Alternative described in the BAR dated December 2020 on the site as described in Section C above.
- 2. The holder must commence with the listed activities on the site within a period of **five years** from the date issue of this Environmental Authorisation.
- 3. The development must be concluded within **ten years** from the date of commencement of the listed activities.
- 4. The holder shall be responsible for ensuring compliance with the conditions by any person acting on his/her behalf, including an agent, sub-contractor, employee or any person rendering a service to the holder.
- 5. Any changes to, or deviations from the scope of the alternative described in section B above must be accepted or approved, in writing, by the Competent Authority before such changes or deviations may be implemented. In assessing whether to grant such acceptance/approval or not, the Competent Authority may request information in order to evaluate the significance and impacts of such changes or deviations, and it may be necessary for the holder to apply for further authorisation in terms of the applicable legislation.

# Written notice to the Competent Authority

- 6. Seven calendar days' notice, in writing, must be given to the Competent Authority before commencement of construction activities.
  - 6.1 The notice must make clear reference to the site details and EIA Reference number given above.

6.2 The notice must also include proof of compliance with the following conditions described herein:

Conditions: 7, 8 and 12

# Notification and administration of appeal

- 7. The holder must in writing, within 14 (fourteen) calendar days of the date of this decision-
  - 7.1 notify all registered Interested and Affected Parties ("I&APs") of -
    - 7.1.1 the outcome of the application;
    - 7.1.2 the reasons for the decision as included in Annexure 3;
    - 7.1.3 the date of the decision; and
    - 7.1.4 the date when the decision was issued.
  - 7.2 draw the attention of all registered I&APs to the fact that an appeal may be lodged against the decision in terms of the National Appeals Regulations, 2014 detailed in Section F below;
  - 7.3 draw the attention of all registered I&APs to the manner in which they may access the decision;
  - 7.4 provide the registered I&APs with:
    - 7.4.1 the name of the holder (entity) of this Environmental Authorisation,
    - 7.4.2 name of the responsible person for this Environmental Authorisation,
    - 7.4.3 postal address of the holder,
    - 7.4.4 telephonic and fax details of the holder,
    - 7.4.5 e-mail address, if any, of the holder,
    - 7.4.6 the contact details (postal and/or physical address, contact number, facsimile and e-mail address) of the decision-maker and all registered I&APs in the event that an appeal is lodged in terms of the 2014 National Appeals Regulations.
- 8. The listed activities, including site preparation, may not commence within 20 (twenty) calendar days from the date of issue of this Environmental Authorisation. In the event that an appeal is lodged with the Appeal Authority, the effect of this Environmental Authorisation is suspended until the appeal is decided.

# Management of activity

9. The draft or Environmental Management Programme ("EMPr") submitted as part of the application for Environmental Authorisation is hereby approved and must be implemented.

- 10. The Maintenance Management Plan ("MMP") accepted as part of the EMPr must be implemented. Future maintenance activities must be undertaken in accordance with the accepted MMP.
- 11. The EMPr must be included in all contract documentation for all phases of implementation.

# Monitoring

- 12. The holder must appoint a suitably experienced environmental control officer ("ECO"), or site agent where appropriate, before commencement of any land clearing or construction activities to ensure compliance with the provisions of the EMPr and the conditions contained herein.
- 13. A copy of the Environmental Authorisation, EMPr, MMP, audit reports and compliance monitoring reports must be kept at the site of the authorised activities, and must be made available to anyone on request, including a publicly accessible website.
- 14. Access to the site referred to in Section C above must be granted, and the environmental reports mentioned above must be produced, to any authorised official representing the Competent Authority who requests to see it for the purposes of assessing and/or monitoring compliance with the conditions contained herein.

# Auditing

15. In terms of Regulation 34 of the NEMA EIA Regulations, 2014, the holder must conduct environmental audits to determine compliance with the conditions of the Environmental Authorisation, the EMPr, and the MMP. The Environmental Audit Report must be prepared by an independent person and must contain all the information required in Appendix 7 of the NEMA EIA Regulations, 2014.

The holder must undertake an environmental audit and submit an Environmental Audit Report to the Competent Authority once a year during the construction phase and a final Environmental Audit Report within three months after the development is completed.

The holder must, within 7 days of the submission of each of the above-mentioned reports to the Competent Authority, notify all potential and registered I&APs of the submission and make the report available to anyone on request and on a publicly accessible website (if applicable).

# Specific Conditions

16. Should any heritage remains be exposed during excavations or any other actions on the site, these must immediately be reported to the Provincial Heritage Resources

Authority of the Western Cape, Heritage Western Cape. Heritage remains uncovered or disturbed during earthworks must not be further disturbed until the necessary approval has been obtained from Heritage Western Cape.

Heritage remains include: meteorites, archaeological and/or palaeontological remains (including fossil shells and trace fossils); coins; indigenous and/or colonial ceramics; any articles of value or antiquity; marine shell heaps; stone artifacts and bone remains; structures and other built features with heritage significance; rock art and rock engravings; and/or graves or unmarked human burials including grave goods and/or associated burial material.

17. A qualified archaeologist and/or palaeontologist must be contracted where necessary (at the expense of the holder) to remove any heritage remains. Heritage remains can only be disturbed by a suitably qualified heritage specialist working under a directive from the relevant heritage resources authority.

# F. GENERAL MATTERS

- 1. Notwithstanding this Environmental Authorisation, the holder must comply with any other statutory requirements that may be applicable when undertaking the listed activities.
- 2. Non-compliance with a condition of this Environmental Authorisation or EMPr may render the holder liable to criminal prosecution.
- 3. If the holder does not commence with a listed activity within the period referred to in Condition 2, this Environmental Authorisation shall lapse for that activity, and a new application for Environmental Authorisation must be submitted to the Competent Authority. If the holder wishes to extend the validity period of the Environmental Authorisation, an application for amendment in this regard must be made to the Competent Authority prior to the expiry date of the Environmental Authorisation.
- 4. The holder must submit an application for amendment of the Environmental Authorisation to the Competent Authority where any detail with respect to the Environmental Authorisation must be amended, added, substituted, corrected, removed or updated. If a new holder is proposed, an application for Amendment in terms of Part 1 of the EIA Regulations, 2014 must be submitted.

Please note that an amendment is not required if there is a change in the contact details of the holder. In this case, the Competent Authority must only be notified of such changes.

5. The manner and frequency for updating the EMPr is as follows: Amendments to the EMPr, must be done in accordance with Regulations 35 to 37 of the EIA Regulations 2014 or any relevant legislation that may be applicable at the time.

# G. APPEALS

Appeals must comply with the provisions contained in the National Appeal Regulations 2014.

- An appellant (if the holder of the decision) must, within 20 (twenty) calendar days from the date the notification of the decision was sent to the holder by the Competent Authority –
  - 1.1. Submit an appeal in accordance with Regulation 4 of the National Appeal Regulations 2014 to the Appeal Administrator; and
  - 1.2. Submit a copy of the appeal to any registered I&APs, any Organ of State with interest in the matter and the decision-maker i.e. the Competent Authority that issued the decision. -
- 2. An appellant (if NOT the holder of the decision) must, within 20 (twenty) calendar days from the date the holder of the decision sent notification of the decision to the registered I&APs-
  - 2.1. Submit an appeal in accordance with Regulation 4 of the National Appeal Regulations 2014 to the Appeal Administrator; and
  - 2.2 Submit a copy of the appeal to the holder of the decision, any registered I&AP, any Organ of State with interest in the matter and the decision-maker i.e. the Competent Authority that issued the decision.
- 3. The holder of the decision (if not the appellant), the decision-maker that issued the decision, the registered I&AP and the Organ of State must submit their responding statements, if any, to the appeal authority and the appellant within 20 (twenty) calendar days from the date of receipt of the appeal submission.
- 4. The appeal and the responding statement must be submitted to the address listed below:
  - By post: Western Cape Ministry of Local Government, Environmental Affairs and Development Planning Private Bag X9186 CAPE TOWN 8000

By facsimile: (021) 483 4174; or

By hand: Attention: Mr Marius Venter (Tel: 021 483 2659) Room 809 8<sup>th</sup> Floor Utilitas Building, 1 Dorp Street, Cape Town, 8001

**Note:** For purposes of electronic database management, you are also requested to submit electronic copies (Microsoft Word format) of the appeal, responding statement and any supporting documents to the Appeal Authority to the address listed above and/ or via e-mail to <u>DEADP.Appeals@westerncape.gov.za</u>..

5. A prescribed appeal form as well as assistance regarding the appeal processes is obtainable from Appeal Authority at: Tel. (021) 483 3721, E-mail <u>DEADP.Appeals@westerncape.gov.za</u> or URL http://www.westerncape.gov.za/eadp.

# H. DISCLAIMER

The Western Cape Government, the Local Authority, committees or any other public authority or organisation appointed in terms of the conditions of this Environmental Authorisation shall not be responsible for any damages or losses suffered by the holder, developer or his/her successor in any instance where construction or operation subsequent to construction is temporarily or permanently stopped for reasons of non-compliance with the conditions as set out herein or any other subsequent document or legal action emanating from this decision.

Your interest in the future of our environment is appreciated.

Yours faithfully

# MR. ZAAHIR TOEFY DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)

DATE OF DECISION: 15 APRIL 2021

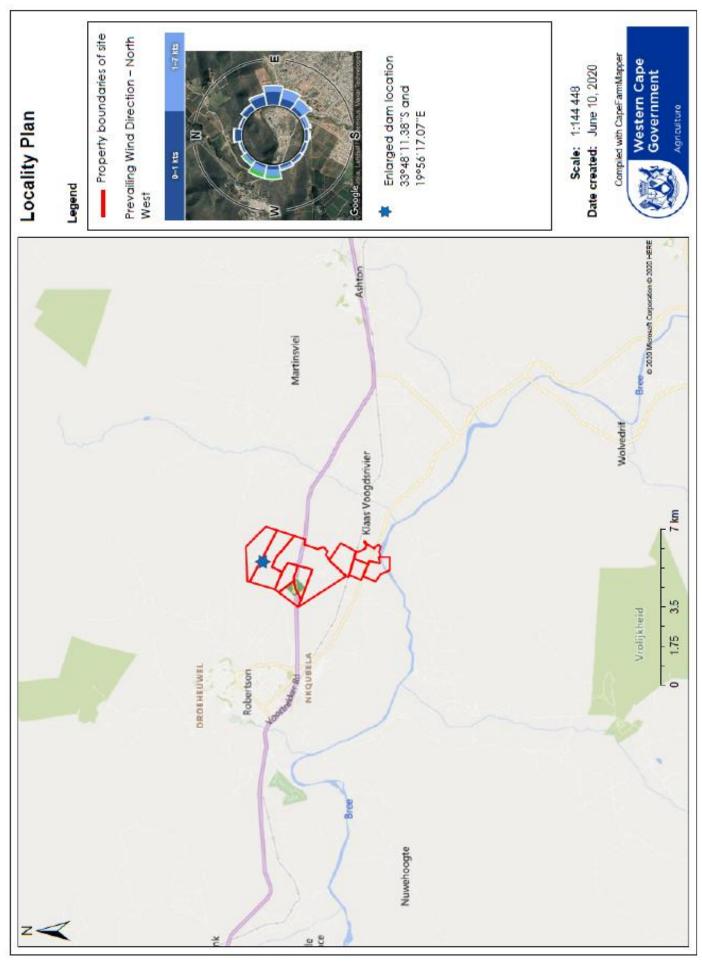
Cc: (1) Mr Ross Holland (Holland and Associates Environmental Consultants)

- (2) Ms Tracy Brunings (Langeberg Municipality)
- (3) Ms Philippa Huntly (CapeNature)

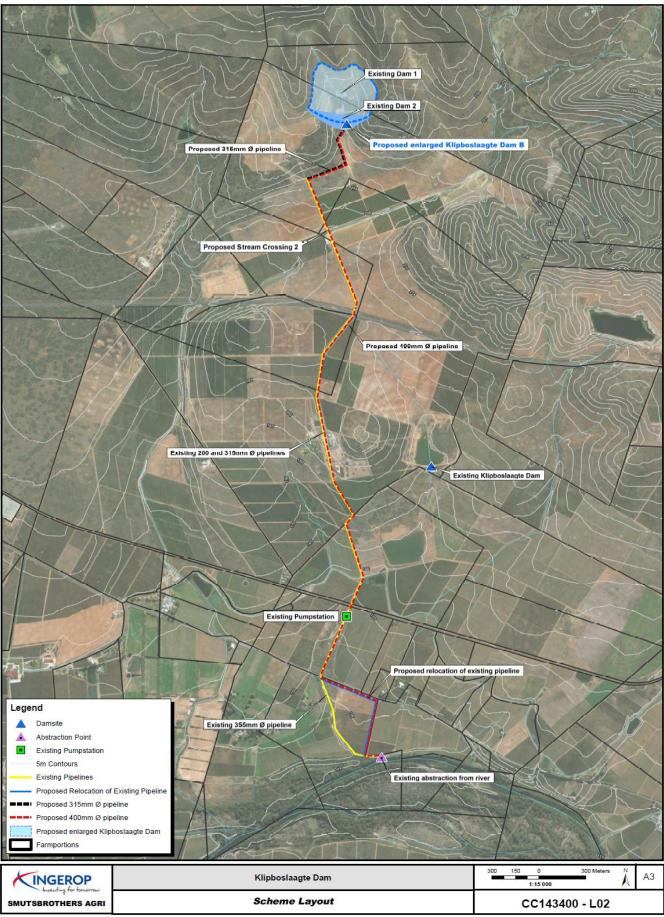
(4) Ms Elkerine Rossouw (Breede-Gouritz Catchment Management Agency)

E-mail: ross@hollandandassociates.net E-mail: tbrunings@langeberg.gov.za E-mail: phuntly@capenature.co.za E-mail: erossouw@bgcma.co.za

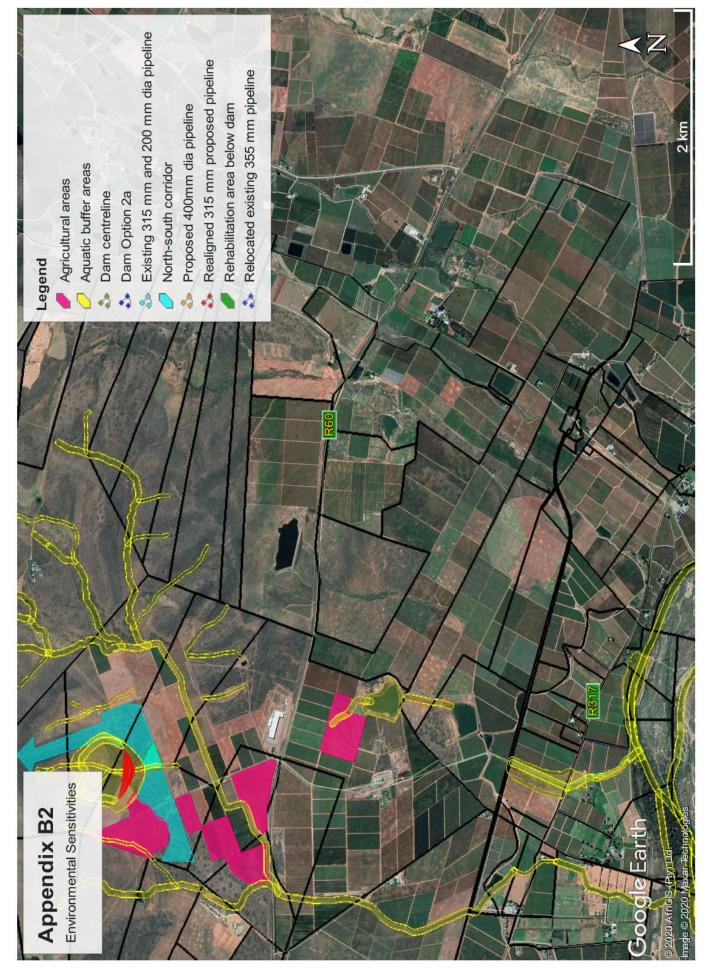
# **ANNEXURE 1: LOCALITY MAP**



### **ANNEXURE 2: SITE PLAN**



### **ENVIRONMENTAL SENSITIVITIES MAP**



# **ANNEXURE 3: REASONS FOR THE DECISION**

In reaching its decision, the Competent Authority considered, inter alia, the following:

- a) The information contained in the Application Form dated 22 September 2020, the draft Basic Assessment Report received by the Department on 21 October 2020, the EMPr (including an MMP for future maintenance activities) submitted together with the final Basic Assessment Report dated December 2020 and received on 11 December 2020;
- b) Relevant information contained in the Departmental information base, including the Guidelines on Public Participation and Alternatives (dated March 2013);
- c) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998);
- d) The comments received from I&APs and responses to these, included in the Basic Assessment Report received on 11 December 2020; and
- e) The balancing of negative and positive impacts and proposed mitigation measures.

No site visits were conducted. The Competent Authority had sufficient information before it to make an informed decision without conducting a site visit.

All information presented to the Competent Authority was taken into account in the consideration of the application for Environmental Authorisation. A summary of the issues that were considered to be the most significant for the decision is set out below.

# 1. Public Participation

The public participation process included:

- identification of and engagement with I&APs;
- Notices were placed at the site;
- giving written notice to the owners and occupiers of land adjacent to the site where the listed activities are to be undertaken, the municipality and ward councillor, and the various organs of state having jurisdiction in respect of any aspect of the listed activities on 1 October 2019;
- the placing of a newspaper advertisement in the 'Breederivier Gazette' on 1 October 2019;
- making the pre-application draft BAR available for comment from 3 October 2019; and
- making the in-process draft BAR available for comment from 23 October 2020.

The Department is satisfied that the Public Participation Process that was followed met the minimum legal requirements and the comments raised and responses thereto were included in the comments and response report.

Specific alternatives, management and mitigation measures have been considered in this Environmental Authorisation and EMPr to adequately address the concerns raised.

Dam	Storage	Full	Free	Wall	Crest	Surface	Enlarged	Water/	R/m³		
options	capacity	Supply	board	height	length	area at	wall	wall	storage		
	(m3)	Level	(m)	(m)	(m)	FSL (ha)	volume	ratio			
		(m)					(m3)				
	Klipboslaagte Dam B										
1	2 000 000	43.0	1.0	27.0	632	20.5	330 550	5.55	8.54		
1a	1 000 000	38	1.0	22.0	460	13.6	164 000	5.39	9.28		
2	1 850 000	44.5	1.0	26.5	570	18.8	340 000	5.04	9.39		
2a	1 000 000	40	1.0	22	450	13.3	200 000	4.52	10.87		
(preferred)											
3	2 260 000	42	1.0	26	705	22.9	390 000	5.35	8.79		
	Klipboslaagte Dam A										
4	2 000 000	191	1.0	27.0	685	32.2	350 000	4.9	9.64		

# 2. Alternatives

**Desian Alternatives** 

From the different dam options considered in the table above, the botanical specialist initially noted that dam Option 2 would have the lowest impact on the surrounding sensitive vegetation. The indigenous vegetation found to the south of the dam is completely intact. It contains at least one Species of Conservation Concern ("SCC") and is thus considered to be of medium to high sensitivity. The SCC is the Near Threatened Euphorbia nesemannii species. A few scattered individuals were found in this area and hence the specialist did not consider them to be a regionally significant population at that location. The dam alternative that resulted in the lowest loss of this vegetation type was considered as the most appropriate from a botanical perspective. Dam Option 2 would equate a loss of 6.8 ha, as opposed to Option 1 of 8.4 ha (engineer's preferred option) and Option 3 of 10.7 ha. Dam Option 2 was therefore preferred by the botanical specialist.

Of the design options presented, the freshwater ecologist also assessed Option 2 as having the lowest impact on the downstream aquatic features when compared to the other options. In addition, the freshwater ecologist recommended that the watercourse downstream of the dam should not be disturbed for the first 285 m section immediately below the enlarged dam. As such, it was proposed that the 400 mm pipeline downstream of the dam is placed at least 10 m west from the stream below the dam and aligned along the existing adjacent farm road.

As a result of the recommendations from the specialist reports as stated above, the proposed dam options were updated to include Option 2a (with the target capacity of 1 000 000 m<sup>3</sup> and a 22 m high embankment). The design of the pipelines which would extend for the first 285 m immediately downstream of the enlarged dam has been re-aligned to follow the existing farm road as far as possible. The new preferred alternative is thus Option 2a.

# Preferred Design Alternative (Herewith authorised)

The preferred alternative that includes the re-aligned 400mm diameter pipeline route below the dam includes the following:

- The combination of two dams on the Remainder of Portion 1 and Portion 3 of Farm Kliphoogte No. 46 to form the enlarged Klipboslaagte Dam B. The enlarged dam will have a storage capacity of 1 000 000 m<sup>3</sup> and a 22 m high embankment.
- The construction of a 400 mm diameter bulk pipeline of approximately 5 km in length adjacent to an existing pipeline to pump water from the Breede River to Klipboslaagte Dam B. The first 285m section of the pipeline immediately downstream of the dam will be placed at least 10m from the stream and aligned along the existing farm road.
- The extension of an existing 315 mm diameter pipeline with approximately 0.5 km to Klipboslaagte Dam B.
- The expansion of cultivation areas by approximately 51 ha on previously cultivated land. These areas have been cultivated in the last 10 years.

A follow-up statement compiled by the botanist dated 31 May 2019 confirmed that Option 2a would impact on 1 ha less of the intact indigenous vegetation (5.8 ha) and is supported and preferred. A follow-up statement compiled by the freshwater ecologist dated 4 June 2019 also confirmed that Option 2a would have a potential freshwater impact of low significance on the downstream aquatic features for all phases of the project as long as a buffer of 50m is maintained around the Full Supply Level, upslope of the dam. This has been incorporated into the preferred alternative herewith authorised.

# The No-go Alternative

This alternative represents the status quo and is not deemed preferred from a socioeconomic perspective since it will not increase the financial viability of the farm or ensure employment security. The opportunity for riverine rehabilitation would not be implemented and the degradation of the remaining ecosystems on the site would continue.

# 3. Impact Assessment and Mitigation measures

# 3.1 Activity need and desirability

The site is zoned Agricultural Zone 1 and thus the development is accommodated within the property's existing land use rights. The development is in line with the Integrated Development Plan of the Langeberg Municipality (2017 – 2022). The dam will store water in accordance with the Existing Lawful Water Use rights, which will increase the financial viability of the farm and ensure employment security. The dam will also provide access to irrigation water during summer when the Breede River is most stressed.

# 3.2 Biophysical Impacts

According to findings of the Botanical Impact Assessment dated November 2018 compiled by Botanical Surveys and Tours, the site originally supported Breede Alluvium Renosterveld vegetation, which is classified as Vulnerable, Breede Shale Renosterveld vegetation, which is classified as Least Threatened, Robertson Karoo vegetation, which is classified Least Threatened and Muscadel Riviere vegetation, which is classified as Critically Endangered. The current condition of the indigenous vegetation present on the entire site varies from intact to completely transformed. The agricultural expansion areas appear to be completely transformed through previous cultivation (within the last 10 years) and the significance of this expansion impact would be Low Negative. The area for the dam enlargement with the preferred design alternative 2a would affect 5.8 ha of intact Breede Alluvium Renosterveld and one SCC, Euphorbia nesemannii, which is classified as Near Threatened. The new pipeline alignment occurs within already transformed areas and one small and disturbed area that is mapped as a Critical Biodiversity Area. No sensitive vegetation occurs along the pipeline alignment. The significance of the impact associated with the pipeline alignment would be Low Negative. The dam enlargement would impact on the north-south connectivity of the surrounding natural and near natural areas, which would have a negative impact on the ecological functioning of the area. Without mitigation, this impact would have a Medium Negative significance. Mitigation would include the establishment of a connectivity corridor and a portion of this area (2.42 ha) would need to be rehabilitated along with the dam wall. The study also recommended that a 'search and rescue' for translocatable plant species from the dam basin should be undertaken. This must include the Near Threatened Euphorbia nesemannii and other succulents and bulbs. The mitigation measures and recommendations provided by the Botanical Impact Assessment were included in the preferred design alternative and in the EMPr that is approved in Condition 9 of this Environmental Authorisation.

Watercourses are present on the site and according to the findings of the Freshwater Impact Assessment the site is in the middle reaches of the Breede River, largely within the catchment of two of its minor tributaries (Western and Eastern Tributaries). The middle reaches of the Western Tributary are in a moderately to largely modified ecological condition, while the lower reaches of the Eastern Tributary are more degraded and are in a largely to seriously modified ecological condition. The Breede River at the site is largely to seriously modified. The mitigation measures and recommendations provided by the Freshwater Impact Assessment were included in the preferred design alternative and in the EMPr that is approved in Condition 9 of this Environmental Authorisation. An application for a Water Use License in terms of the National Water Act, 1998 (Act 38 of 1998) has been submitted to the Department of Water and Sanitation, which will further investigate the watercourse related impacts.

Furthermore, a MMP has also been compiled to address routine maintenance activities taking place in the affected stretch of the watercourse. It must be noted that the accepted maintenance activities only relate to the activities described in the MMP. The ongoing maintenance activities may therefore only be undertaken in accordance with the accepted MMP. Should any new activities and associated infrastructure, not included in the MMP, require maintenance and if any of the applicable listed activities are triggered, an Environmental Authorisation must be obtained prior to the undertaking of such activities. It remains the responsibility of the proponent to determine if any other listed activities are triggered.

The development will result in both negative and positive impacts.

# Negative Impacts:

The development will have a negative biophysical impact due to the loss of indigenous vegetation and the potential impacts on the watercourses present on the site. These impacts will however be mitigated to a satisfactory level with the implementation of the recommended mitigation measures, the preferred design alternative and adherence to the EMPr.

# Positive impacts:

- The development will provide access to irrigation water during the dry summer months and will contribute to the agricultural potential of the property.
- It provides an opportunity for rehabilitation and improvement of the aquatic and terrestrial habitats.
- The development will create additional temporary, permanent and seasonal employment opportunities.

# 4. National Environmental Management Act Principles

The National Environmental Management Principles (set out in section 2 of the NEMA, which apply to the actions of all organs of state, serve as guidelines by reference to which any organ of state must exercise any function when taking any decision, and which must guide the interpretation, administration and implementation of any other law concerned with the protection or management of the environment), *inter alia*, provides for:

- the effects of decisions on all aspects of the environment to be taken into account;
- the consideration, assessment and evaluation of the social, economic and environmental impacts of activities (disadvantages and benefits), and for decisions to be appropriate in the light of such consideration and assessment;
- the co-ordination and harmonisation of policies, legislation and actions relating to the environment;
- the resolving of actual or potential conflicts of interest between organs of state through conflict resolution procedures; and
- the selection of the best practicable environmental option.

# 5. Conclusion

In view of the above, the NEMA principles, compliance with the conditions stipulated in this Environmental Authorisation, and compliance with the EMPr, the Competent Authority is satisfied that the proposed listed activities will not conflict with the general objectives of integrated environmental management stipulated in Chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and that any potentially detrimental environmental impacts resulting from the listed activities can be mitigated to acceptable levels.

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