



EIA REFERENCE: 16/3/3/1/B5/2/1086/18
NEAS REFERENCE: WCP/EIA/0000521/2018
ENQUIRIES: Ms. S. Adams
DATE OF ISSUE: 07-08-2014

The Board of Directors
Du Toit Agri (Pty) Ltd
P. O. Box 25
KOUÉBOKKEVELD
6836

Attention: Mr. Gys Du Toit

Tel: 023 317 0780

Fax: 023 317 0786

Dear Sir

APPLICATION FOR ENVIRONMENTAL AUTHORISATION AND THE ADOPTION OF A MAINTENANCE MANAGEMENT PLAN ("MMP") IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 (AS AMENDED): ENLARGEMENT OF TWO DAMS ON THE REMAINDER OF FARM KROMFONTEIN NO. 201, CERES

1. With reference to the above application, the Department hereby notifies you of its decision to **grant** Environmental Authorisation and **adopt** the Maintenance Management Plan, attached herewith, together with the reasons for the decision.
2. In terms of Regulation 4 of the Environmental Impact Assessment Regulations, 2014 (as amended), you are instructed to ensure, within 14 days of the date of the decision on the application, that all registered interested and affected parties ("I&APs") are provided with access to the decision and reasons for the decision, and that all registered I&APs are notified of their right to appeal.
3. Your attention is drawn to Chapter 2 of the Appeal Regulations, 2014, which prescribes the appeal procedure to be followed. This procedure is summarized in the attached Environmental Authorisation.

Yours faithfully

MR ZAAHIR TOEFY

DIRECTOR: DEVELOPMENT MANAGEMENT – REGION 1

CC: (1) Ms. E. Kühn (Pieter Badenhorst Professional Services)
(2) Mr. H. Taljaard (Witzenberg Municipality)
(3) Mr. S. Xongo (DWS)
(4) Ms. P. Huntly (Cape Nature)

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ENQUIRIES: Ms. S. Adams
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ENVIRONMENTAL AUTHORISATION

APPLICATION FOR ENVIRONMENTAL AUTHORISATION AND THE ADOPTION OF A MAINTENANCE MANAGEMENT PLAN ("MMP") IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 (AS AMENDED): ENLARGEMENT OF TWO DAMS ON THE REMAINDER OF FARM KROMFONTEIN NO. 201, CERES

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 (as amended), the Competent Authority herewith **grants Environmental Authorisation** to the applicant to undertake the listed activities specified in Section B below with respect to Alternatives 1D and 2B for the enlargement of the Eikebos and Klein-Waterval dams and associated infrastructure as described in the Basic Assessment Report ("BAR"), dated April 2019.

In terms of the NEMA, viz, the EIA Regulations, 2014 (as amended) (in Government Gazette No. 40772 of 7 April 2017) the Competent Authority hereby **adopts the Maintenance Management Plan ("MMP")** for development within two tributaries (referred to as Stream A and Stream B) of the Olifants River, included in the BAR dated April 2019.

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

The Board of Directors
Du Toit Agri (Pty) Ltd
% Mr. Gys Du Toit

P. O. Box 25
 KOUEBOKKEVELD
 6836

Tel: 023 317 0780
 Fax: 023 317 0786

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

B. LIST OF ACTIVITIES AUTHORISED

Listed activities	Activity/Project Description
<p>EIA Regulations Listing Notice 1 of 2014: Activity 12 The development of—</p> <ul style="list-style-type: none"> (i) dams or weirs, where the dam or weir, including infrastructure and water surface area, exceeds 100 square metres; or (ii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs— <ul style="list-style-type: none"> (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; — <p>excluding—</p> <ul style="list-style-type: none"> (aa) the development of infrastructure or structures within existing ports or harbour that will not increase the development footprint of the port or harbour; (bb) where such development activities are related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies; (cc) 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; (dd) where such development occurs within an urban area; (ee) where such development occurs within existing roads, road reserves or railway line reserves; or (ff) the development of temporary infrastructure or structures where such infrastructure or structures will be removed within 6 weeks of the commencement of 	<p>The construction of the pipeline and spillway associated with the Klein-Waterval Dam, exceeds 100 square metres and will be located within the tributary referred to as Stream B of the Olifants River.</p>

<p>development and where indigenous vegetation will not be cleared.</p>	
<p>Activity Number 19: The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse;</p> <p>but excluding where such infilling, depositing, dredging, excavation, removal or moving—</p> <ol style="list-style-type: none"> a. will occur behind a development setback; b. 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. where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies. 	<p>The proposal entails the expansion of existing instream dams and irrigation pipelines, which include the movement of more than 10 cubic metres of material.</p>
<p>Activity Number 27: The clearance of an area of 1 hectare or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for-</p> <ol style="list-style-type: none"> i. the undertaking of a linear activity; or ii. maintenance purposes undertaken in accordance with a maintenance management plan. 	<p>The expansion of the Eikebos and Klein-Waterval dams will entail the clearance of 3ha and 1.5ha of indigenous vegetation, respectively.</p>
<p>Activity Number: 48 The expansion of—</p> <ol style="list-style-type: none"> (i) infrastructure or structures where the physical footprint is expanded by 100 square metres or more; or (ii) dams or weirs, where the dam or weir, including infrastructure and water surface area, is expanded by 100 square metres or more; <p>where such expansion occurs—</p> <ol style="list-style-type: none"> (a) within a watercourse; (b) in front of a development setback; or (c) if no development setback exists, within 32 	<p>The existing storage dams will be expanded by more than 100m² within two tributaries (referred to as Stream A and Stream B) of the Olifants River.</p>

<p>metres of a watercourse, measured from the edge of a watercourse;</p> <p>excluding—</p> <p>(aa) the expansion of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour;</p> <p>(bb) 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;</p> <p>(cc) 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;</p> <p>(dd) where such expansion occurs within an urban area; or</p> <p>(ee) where such expansion occurs within existing roads, road reserves or railway line reserves.</p>	
<p>Activity Number: 66</p> <p>The expansion of a dam where—</p> <p>(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</p> <p>(ii) where the high-water mark of the dam will be increased with 10 hectares or more.</p>	<p>The development entails the expansion of the existing instream Eikebos Dam.</p>

The abovementioned list is hereinafter referred to as "**the listed activities**".

The holder is herein authorised to undertake the following alternative:

The proposal entails:

1. The enlargement of the Eikebos and Klein-Waterval dams within two tributaries (referred to as Stream A and Stream B) of the Olifants River.
2. The enlargement of the Klein-Waterval Dam entails the construction of associated infrastructure that includes two pipelines, a pump station and a new open spillway.
3. The decommissioning of the Pilaarkop Dam, through the removal of the embankment within Stream A.

C. SITE DESCRIPTION AND LOCATION

The development will take place on the Remainder of Farm Kromfontein No. 201, Ceres, which is located approximately 50km north of Ceres, off the R303 towards Citrusdal in the Western Cape.

The co-ordinates of the Eikebos Dam:

32° 58' 13.44" S

19° 14' 26.64" E

The co-ordinates of the Klein-Waterval Dam: 32° 57' 36.58" S 19° 13' 39.33" E

The SG digit code is: C01900020000020100000

Refer to:

- Annexure 1: Locality map depicting the location of the Remainder of Farm Kromfontein No. 201, Ceres; and
- Annexure 2: Site Layout Plan depicting the Eikebos and Klein-Waterval Dams including the buffer areas recommend by the freshwater specialist.

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

D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

Pieter Badenhorst Professional Services

% Ms. Elanie Kühn

P. O. Box 1058

WELLINGTON

7654

Mobile: 076 584 0822

Fax: 086 672 1916

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, respect to Alternative 1D and 2B for the enlargement of the Eikebos and Klein- Waterval dams and associated infrastructure as described in the final BAR dated April 2019 at the site as described in Section C above.
2. The holder must commence with the listed activities on site within a period of **five (5) years** from the date of issue of this Environmental Authorisation.
3. The development must be concluded within **10 years** from the date of commencement of the first listed activity.
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. The notice must:

6.1 make clear reference to the site details and EIA Reference number given above; and

6.2 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 (as amended) detailed in Section G below;

7.3 draw the attention of all registered I&APs to the manner in which they may access the decision; and

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; and

7.4.6 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 (as amended).

8. The listed activities, including site preparation, must not commence within 20 (twenty) calendar days from the date the applicant notifies the registered I&APs of this decision. 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 i.e. the listed activities, including site preparation, must not commence until the appeal is decided.

Management of activity

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

10. The MMP adopted as part of this Environmental Authorisation must be implemented.

11. The EMPr and MMP 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 EMPr, MMP 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 activity, and must be made available to anyone on request, including on a publicly accessible website.
14. Access to the site referred to in Section C 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 (as amended), the holder must conduct environmental audits to determine compliance with the conditions of the Environmental Authorisation, the EMPr and submit Environmental Audit Reports to the Competent Authority. 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 (as amended).

The ECO must conduct fortnightly site audits. Bi-monthly ECO Audit Reports must be submitted to the Competent Authority for the construction phase. The final Environmental Audit Report must be submitted to the Competent Authority three months after construction 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 paleontological remains (including fossil shells and trace fossils); coins; indigenous and/or colonial ceramics; any articles of value or antiquity; marine shell heaps; stone artefacts 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 the listed activities 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 (as amended) 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 (as amended) 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 (as amended).

1. An appellant (if the holder of the decision) must, within 20 (twenty) calendar days from the date on which 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 (as amended) 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 on which 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 (as amended) to the Appeal Administrator; and
- 2.2. submit a copy of the appeal to the holder of the decision, any registered I&AP, any Organs 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 Organs 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
8th 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 Marius.Venter@westerncape.gov.za.

5. A prescribed appeal form as well as assistance regarding the appeal processes is obtainable from the Appeal Authority at: Tel. (021) 483 3721, E-mail DEADP.Appeals@westerncape.gov.za 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. ZAHIR TOEFY

DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)

DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING

DATE OF DECISION: 07/08/2019

CC: (1) Ms. E. Kühn (Pieter Badenhorst Professional Services)
(2) Mr. H. Taljaard (Witzenberg Municipality)
(3) Mr. S. Xongo (DWS)
(4) Ms. P. Huntly (Cape Nature)

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ANNEXURE 1: LOCALITY MAP

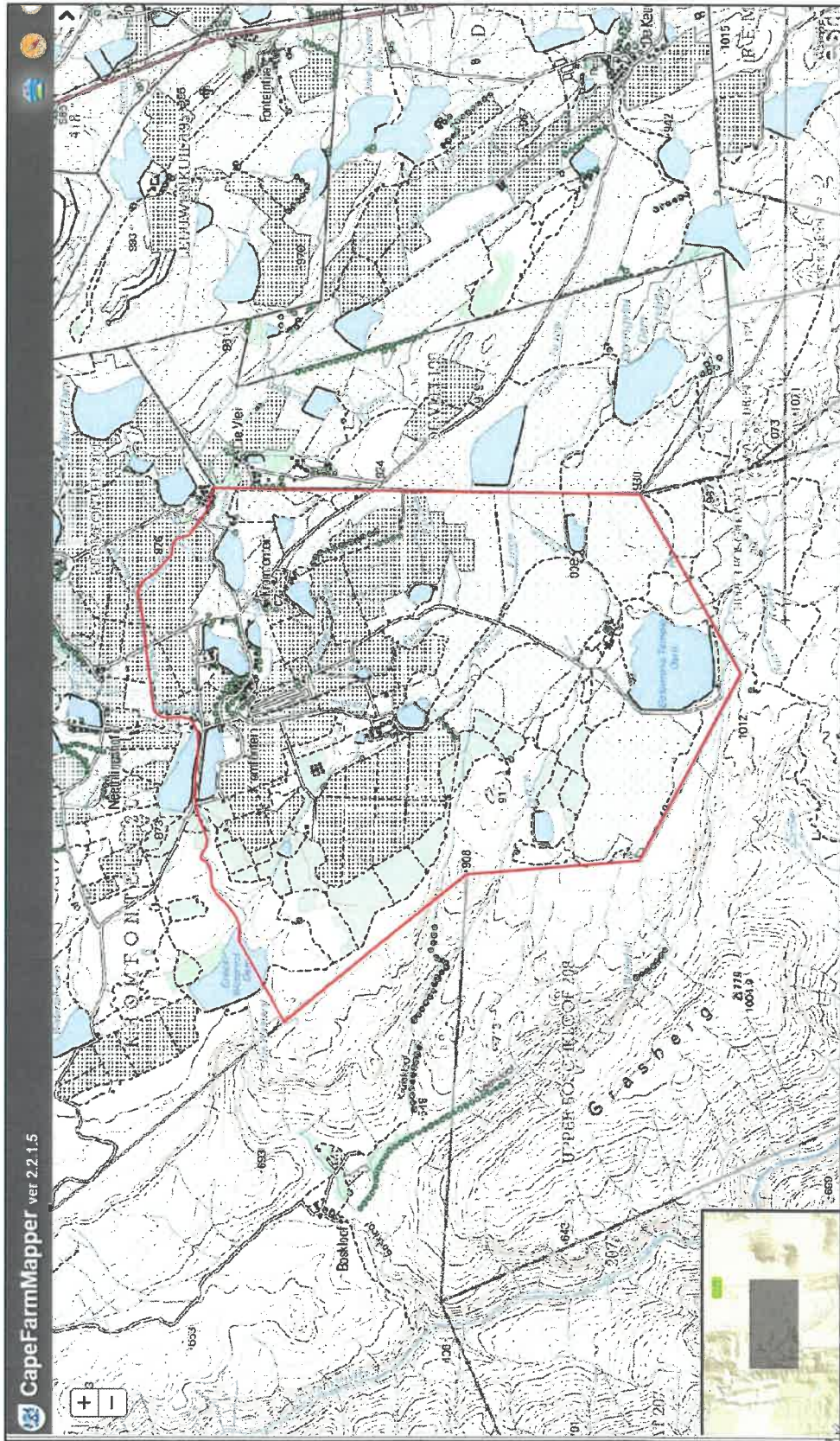


Figure 1: Locality map depicting the location of the Remainder of Farm Kromfontein No. 201, Ceres

ANNEXURE 2: SITE LAYOUT PLAN

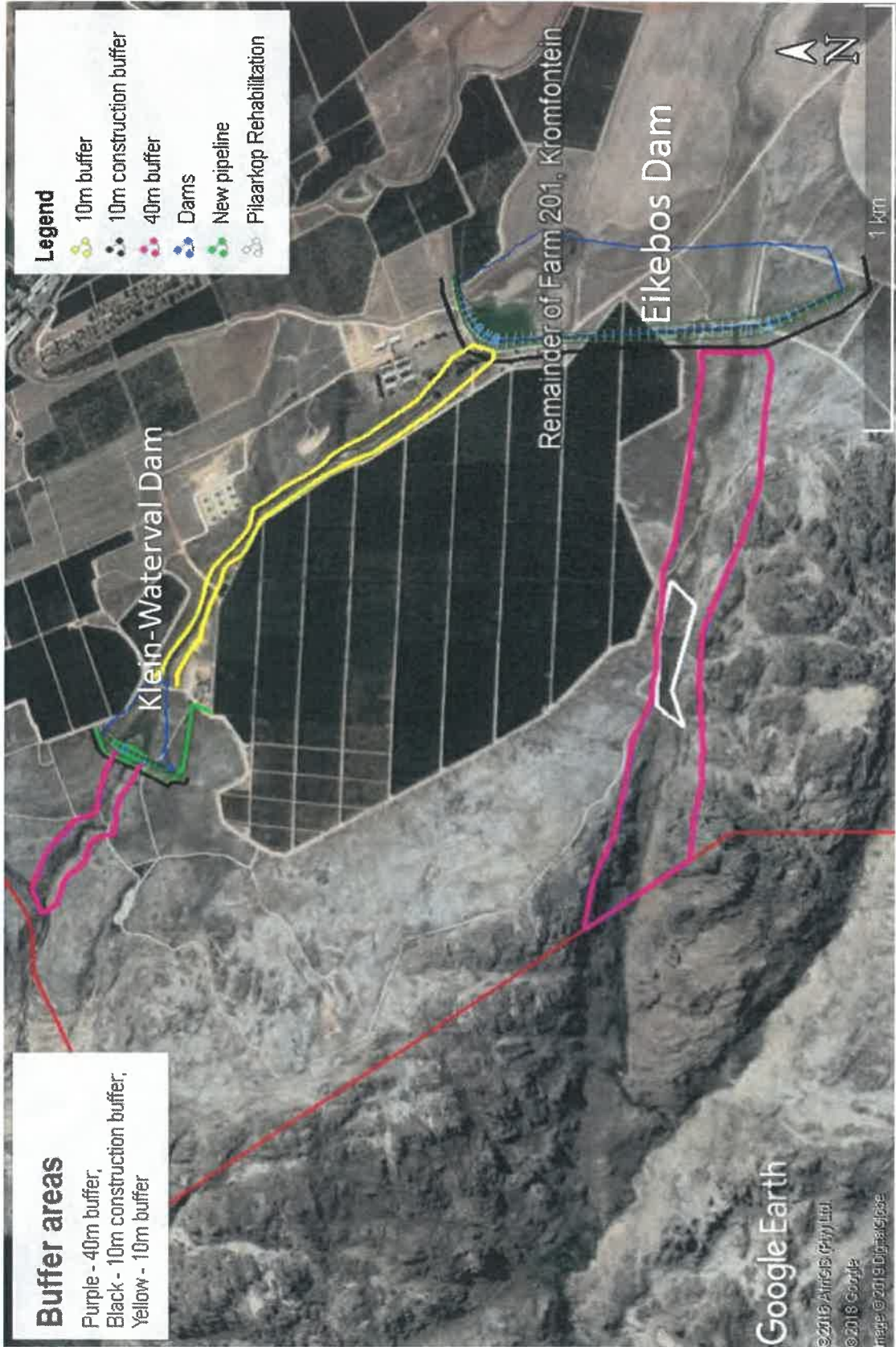


Figure 2: Site Layout Plan depicting the Eikebos and Klein-Waterval Dams including the buffer areas recommend by the freshwater specialist.

ANNEXURE 3: REASONS FOR THE DECISION

In reaching its decision, the Competent Authority considered, amongst others, the following:

- a) The information contained in the Application Form and the draft BAR dated 7 November 2018, the second draft BAR dated 11 March 2019, the final BAR dated April 2019, the amended Application Form and EMPr submitted together with the final BAR and the amended EMPr dated 2 May 2019;
- 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 NEMA;
- d) The comments received from I&APs and responses to these, included in the final BAR dated April 2019; 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 during 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;
- fixing of a notice board at the entrance of the farm on 9 November 2018;
- 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 9 November 2018;
- the placing of a newspaper advertisement in the '*Witzenberg Herald*' on 9 November 2018; and
- making the BAR available to I&APs for public review on 9 November 2018 and 12 March 2019.

All the concerns raised by I&APs were responded to and addressed during the public participation process. Specific management and mitigation measures have been considered in this Environmental Authorisation EMPr and in the MMP, in order to address the concerns raised.

The Competent Authority notes the Environmental Assessment Practitioner's responses to the issues raised during the public participation process and has included appropriate conditions in this Environmental Authorisation and in the EMPr.

2. Alternatives

Location Alternatives

Four location alternatives were investigated for the proposed enlargement of existing dams and construction of new dams on the property. The alternatives are discussed below:

1. Location Alternative 1A:

This alternative entails the expansion of the instream dam, the Pilaarkop Downstream Dam. This alternative is not feasible as it is located in close proximity to an environmentally sensitive wetland and rocky outcrop areas.

2. Location Alternative 1B:

This alternative entails the construction of a new instream dam, the Pilaarkop Middle Dam. This alternative is not economically feasible as the construction of a new dam would require additional geotechnical review as the site is located in close proximity to a wetland area and within a rocky outcrop area.

3. Location Alternative 1 C:

This alternative entails the construction of the Pilaarkop Upstream Dam. It is not feasible as the development costs would be much higher than the expansion of an existing dam.

4. Location Alternative 1D (herewith approved):

This alternative entails the repair and enlargement of the existing Eikebos Dam, the existing Klein-Waterval Dam and the decommissioning of the Pilaarkop Dam.

This alternative is preferred as the enlargement of existing dams is the more economically feasible option. From an ecological perspective, this option is preferred because it includes the decommissioning of the Pilaarkop Dam (through the removal of the embankment within Stream A), which supports the rehabilitation of the downstream wetland.

Design Alternatives

Two design alternatives were investigated for the proposed enlargement of existing dams on the property. The alternatives are discussed below:

1. Design Alternative 2A:

This alternative entails the enlargement of the Eikebos and Klein-Waterval Dams with the following design specifications:

Eikebos Dam	Existing Dam	Enlargement Specifications
Maximum Dam Wall Height	7m	9.7m
Maximum Storage Capacity	130 000m ³	600 000m ³
Water Surface Area at FSL	5.3ha	17.5ha

Klein-Waterval Dam	Existing Dam	Enlargement Specifications
Maximum Dam Wall Height	7m	16.1m
Maximum Storage Capacity	42 000m ³	465 000m ³
Water Surface Area at FSL	0.3ha	10ha

This alternative is not preferred as the Eikebos Dam does not meet the storage capacity requirements. The enlargement of the Klein-Waterval Dam to have a full supply level of 10ha, is also not preferred from a botanical and freshwater perspective, as it has a higher negative impact on the aquatic vegetation downstream.

2. Design Alternative 2B (herewith approved):

This alternative entails the enlargement of the Eikebos Dam which has an existing outlet pipeline and pump station with connection pipelines to the existing irrigation network. The enlargement of the Klein-Waterval Dam requires the construction of associated infrastructure which includes the

construction of two 200mm pipelines (0.5m and 0.2km in length), a new pump station and a new open spillway. The enlargement of the two dams entails the following design specifications:

Eikebos Dam	Existing Dam	Enlargement Specifications
Maximum Dam Wall Height	7m	10.5m
Maximum Storage Capacity	130 000m ³	700 000m ³
Water Surface Area at FSL	5.3ha	18.3ha

Klein-Waterval Dam		
Maximum Dam Wall Height	7m	9m
Maximum Storage Capacity	42 000m ³	100 000m ³
Water Surface Area at FSL	0.3ha	3.5ha

This alternative is preferred as it promotes better water management strategies within the ambit of the existing lawful use associated with the property. It is also preferred from a botanical perspective as the proposed expansion of the dams will occur in previously cultivated areas and will not result in the disturbance nor clearance of critically endangered or endangered vegetation.

"No-Go" Alternative

The "no-go" alternative was considered and entails the continued operation of the farm which does not have sufficient water storage capacity for production in summer months. The current lack of water supply negatively affects the operational functionality of the farm and therefore, the no-go alternative is not preferred.

3. Impact Assessment and Mitigation measures

3.1 Activity Need and Desirability

Currently the farm experiences a water shortage during drier summer months as the dams do not have efficient water storage capacity. The proposed enlargement of the dams is primarily to increase the efficiency of water storage within the ambit of the existing lawful water use on the farm. This will increase the productivity of the farm and contribute to the job security of employees that will result in a positive impact on the local economy.

3.2 Biophysical Impacts

The freshwater features within the study area consist of two unnamed tributaries (referred to as Stream A and Stream B) of the Olifants River, with associated wetlands. According to the freshwater impact assessment dated October 2018, compiled by Jeanne Snyman from everWater, the two unnamed tributaries affected by the development are in a highly degraded state. The impact significance of the proposed development on the freshwater features is considered low with the implementation of the recommendations and mitigation measures of the specialist (included in the EMPr and accepted in Section E: Condition 9). To manage the possible over abstraction of freshwater which may affect downstream users, the freshwater specialist recommends the implementation of a metering system which will be audited bi-annually (included in the EMPr and accepted in Section E: Condition 9).

A Water Use Licence Application ("WULA") in terms of the National Water Act, 1998 (Act 38 of 1998) has been submitted to the Department of Water and Sanitation, for the proposed enlargement of the two dams.

A MMP has been compiled to address future maintenance activities taking place in the affected watercourses. The maintenance of the structures authorised in this Environmental Authorisation forms part of this MMP. It must be noted that the accepted maintenance activities only relate to the activities described in the 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 and to ensure that the necessary Environmental Authorisation is obtained.

The fact that the MMP is adopted by the Competent Authority does not absolve the applicant from its general "duty of care" set out in Section 28(1) of the NEMA, which states that "*Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment.*" (Note: When interpreting the "duty of care" responsibility, cognisance must be taken of the principles of sustainability contained in Section 2 of NEMA).

The development will result in both negative and positive impacts.

Negative Impacts:

- The enlargement of the dams will take place in previously disturbed areas only.
- The development will result in a low negative impact on water quality within the freshwater features on site. However, with the effective implementation of the recommended mitigation measures of the specialist, this impact can be further reduced.

Positive impacts:

- The proposed development will increase the volume of water supplied to the operation of the farm.
- Temporary employment opportunities will be created during the construction phase.
- The decommissioning of the Pilaarkop Dam will improve the wetland functionality of the downstream wetland areas.

4. National Environmental Management Act Principles

The NEMA 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 NEMA and that any potentially detrimental environmental impacts resulting from the listed activities can be mitigated to acceptable levels.

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