



24G Application: 14/2/4/2/1/F5/16/0032/21

ENVIRONMENTAL AUTHORISATION

The Trustees
DP Goosen Trust
P.O. Box 84
PRINS ALFRED HAMLET
6840

Email: tian@howbill.co.za
Tel: (023) 009 0992

Attention: Tian Erasmus

Dear Sir

APPLICATION IN TERMS OF SECTION 24G OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) ("NEMA"): UNLAWFUL CONSTRUCTION WITHIN A WATERCOURSE, JONKERSHOEK AND NEKTARIEN DAMS, ON FARM 1037, MALMESBURY

With reference to your application received by the Department on 12 August 2021 in terms of section 24G of the NEMA for the consequences of unlawful commencement of listed activities identified in terms of the NEMA, find below the decision in respect of your application.

A. DECISION

By virtue of the powers conferred by section 24G of the NEMA and the *Environmental Impact Assessment Regulations, 2014* ("EIA Regulations, 2014") (as amended), the competent authority herewith **grants environmental authorisation** to the applicant to continue with the listed activities specified in Section C below, as described in the application and environmental assessment.

The granting of this Environmental Authorisation is for the continuation, conducting or undertaking of the listed activities as described in Section C below and is subject to compliance with the conditions set out in Section G. This Environmental Authorisation shall only take effect from the date on which it has been issued.

The Environmental Authorisation does not exempt the holder thereof from compliance with any other applicable legislation.

B. DETAILS OF THE APPLICANT FOR THIS ENVIRONMENTAL AUTHORISATION

DP Goosen Trust
 C/o Mr Mr. Tian Erasmus
 P.O. Box 84
 PRINS ALFRED HAMLET
 6840

Cell: 082 575 5006
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The abovementioned applicant is the holder of this Environmental Authorisation and is hereinafter referred to as "the holder".

C. LIST OF ACTIVITIES AUTHORISED

Listed Activities	Activity/Project Description
<p>Government Notice No. R. 1182 of 1997 – Activity Number: Schedule 1_1. (i) Activity Description: <i>canals and channels, including structures causing disturbances to the flow of water in a river bed, and water transfer schemes between water catchments and impoundments;</i> <i>(j) dams, levees and weirs affecting the flow of a river.</i></p>	<p>The Jonkershoek Dam was constructed during 2001. The Jonkershoek Dam can be regarded as a "structure causing disturbance to the flow of water in a river bed" as it was constructed within a drainage line feeding into the Berg River.</p>
<p>Government Notice No. R386 of 2006 – Activity Number: 1 Activity Description: <i>The construction of facilities or infrastructure, including associated structures or infrastructure, for</i></p>	<p>The Nektarien Dam was constructed within a drainage line / drainage line which feeds into the Berg River. The height of the dam wall / embankment is estimated at 11m and the length at 170m. It can thus safely be assumed that</p>

<p>(m) any purpose in the one in ten year flood line of a river or stream, or within 32 metres from the bank of a river or stream where the flood line is unknown, excluding purposes associated with existing residential use, but including-</p> <p>(i) canals; (ii) channels; (iii) bridges; (iv) dams; and (v) weirs.</p>	<p>more than 5m³ of material/soil was moved and filled into the drainage line / drainage line in order to construct the wall / embankment.</p>
<p>Government Notice No. R386 of 2006 – Activity Number: 4 Activity Description: <i>The dredging, excavation, infilling, removal or moving of soil, sand or rick exceeding 5 cubic metres from a river, tidal lagoon, tidal river, lake, in-stream dam, floodplain or wetland.</i></p>	<p>The Nektarien Dam was constructed within a drainage line / drainage line which feeds into the Berg River. The height of the dam wall / embankment is estimated at 11m and the length at 170m. It can thus safely be assumed that more than 5m³ of material/soil was moved and filled into the drainage line / drainage line in order to construct the wall / embankment.</p>
<p>Government Notice No. R327 of 2017 Activity Number: 12 Activity Description: <i>The development of-</i> (i) <i>dams or weirs, where the dam or weir including infrastructure and water surface area, exceeds 100 square metres; or</i> (ii) <i>infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs –</i> (a) <i>within a drainage line;</i> (b) <i>in front of a development setback; or</i> (c) <i>in no development setback exists, within 21 metres of a drainage line, measures form the edge of a drainage line.</i></p>	<p>The Nektarien Dam (constructed 2007) as well as the Jonkershoek Dam (constructed 2001) were both constructed within a unnamed drainage line of the Berg River. The development footprint for the Nektarien Dam (constructed 2007) is estimated at 31 600m² and that of the Jonkershoek dam (constructed 2001) at 73 400m². The physical footprint of both dams exceeds 100m² and therefore Activity 12 is triggered.</p>
<p>Government Notice No. R327 of 2017 Activity Number: 19 Activity Description: <i>The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil,</i></p>	<p><u>Jonkershoek Dam (constructed 2001):</u> Approximate minimum volume filling material: Wall height (9m) X Wall length (277m) = 2 493m³.</p>

sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a drainage line.	<u>Nektarien Dam (constructed 2007):</u> Approximate minimum volume filling material: Wall height (11m) X Wall length (170m) = 1 870m ³ .
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The abovementioned list is hereinafter referred to as "the listed activities".

D. PROPERTY DESCRIPTION AND LOCATION

The activities commenced on Remaining Extent of Jonkershoek No. 1037, Malmesbury.

The SG digit code is: C04600000000103700000

The co-ordinates for the property boundary are:

Point	Latitude (S)	Longitude (E)
1	33° 25' 53.47" South	18° 55' 00.75" East
2	33° 26' 41.03" South	18° 55' 03.22" East
3	33° 26' 30.47" South	18° 52' 57.25" East
4	33° 25' 24.11" South	18° 53' 19.59" East

The co-ordinates for the site boundary are:

Point	Latitude (S)	Longitude (E)
1	33° 25' 39.13" South	18° 54' 06.71" East
2	33° 26' 08.54" South	18° 54' 35.29" East

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

Herein-after referred to as "the site".

E. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER (“EAP”)

The ECO Balance Planning Co.

c/o Ms Susan de Kock

P.O. Box 1596

UPINGTON

8800

Cell: 082 679 6760

Email: susandekock@oranjenet.net

F. DETAILS OF THE ACTIVITIES UNDERTAKEN

Jonkershoek RE/1037 is located within the West Coast District Municipal region and within the borders of the Swartland Municipality. The farm is zoned Agriculture I and thus the activity is within the land use rights. The Nektarien Dam was constructed during 2007 and the Jonkershoek Dam during 2001. DP Goosen Trust (the holder) acquired the property in 2020. The construction of both dams has been completed and no additional construction / infrastructure is required. The two dams are located in the same sub-catchment of a mostly dry drainage line. The overflow of the Nektarien Dam goes into the Jonkershoek Dam a kilometre further downstream through a manicured drainage line. The upper sub-catchment is 425 ha of surface area. The sub-catchment that feeds the Nektarien Dam is a part of the larger sub-catchment and is much smaller at only 46.5ha. From the top of the Nektarien drainage line to the confluence with the Berg River is 7.8km. Due to the prolonged cultivation in the property and surrounds, very few areas still contain vegetation associated with the Swartland Shale Renosterveld vegetation.

Jonkershoek Dam

The Jonkershoek Dam was constructed during 2001 by the Swartdam Trust (owner at that time). Very little specification detail is known from the pre-construction phase. The Jonkershoek Dam was constructed within an unnamed tributary of the Berg River. In August 2017 the Department of Water Affairs (Dam Safety Office) classified the Jonkershoek Dam as a Category 1 dam with a Low Hazard rating. The water in the Jonkershoek Dam is applied for irrigation of stone fruit.

Nektarien Dam

The Nektarien Dam was constructed during 2007 by the owner at that time of the property, Du Toit Agri Pty Ltd. As with the Jonkershoek Dam very little specification detail is available from the pre-construction / planning phase. The Nektarien Dam was constructed within the same unnamed drainage line as the Jonkershoek Dam. This drainage line flows in a south-eastern direction where it confluences with the Berg River. In August 2017 the Department of Water Affairs (Dam Safety Office) classified the Jonkershoek Dam as registered as a Category 1 dam with a Low Hazard rating. The water in the Nektarien Dam is applied for irrigation of stone fruit. Both dams are filled with water out of the Berg River. The pump station is located next to the R46 trunk road that connects Riebeek Kasteel with Hermon. Water is pumped up the incline to many farming establishments, among other Jonkershoek RE/1037. Water is pumped in three stages, with pumping stations in between each stage. The Berg River is 5 km away from the Jonkershoek Dam, but the pipeline is much longer, as it follows for most of its length the R46 trunk road.

G. CONDITIONS OF AUTHORISATION

The following are conditions of authorisation that are set and must be implemented for this Environmental Authorisation.

PART I

Scope of authorisation

1. The holder is authorised to undertake the listed activities specified in Section C above in accordance with and restricted to the implemented Alternative described in the application and assessment report on the site as described in Section D above.
2. 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.
3. Any changes to, or deviations from the scope of the alternative described in Section F 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 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.

PART II

Written notice to the competent authority

4. Seven (7) calendar days' notice, in writing, must be given to the competent authority before continuation of commencement of maintenance activities.

4.1 The notice must make clear reference to the site details and 24G Reference number given above.

4.2 The notice must also include proof of compliance with the following condition 5.

PART III

Notification and administration of an appeal

5. The holder must in writing, within 14 (fourteen) calendar days of the date of this decision—

5.1 notify all registered Interested and Affected Parties (“I&APs”) of –

5.1.1 the outcome of the application;

5.1.2 the reasons for the decision as included in Annexure 3;

5.1.3 the date of the decision; and

5.1.4 the date when the decision was issued.

5.2 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 I below.

5.3 draw the attention of all registered I&APs to the manner in which they may access the decision.

5.4 provide the registered I&APs with:

5.4.1 the name of the holder (entity) of this Environmental Authorisation;

5.4.2 name of the responsible person for this Environmental Authorisation;

5.4.3 postal address of the holder;

5.4.4 telephonic and fax details of the holder;

5.4.5 e-mail address, if any, of the holder; and

5.4.6 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 *National Appeal Regulations, 2014*.

6. The listed activities, including site preparation, may not commence within 34 (thirty-four) 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.

PART IV

Management of the activity/development

7. The draft Environmental Management Programme ("EMPr") dated 08 September 2021 compiled by Susan de Kock of the ECO Balance Planning Co. and submitted as part of the application for environmental authorisation is hereby approved and must be implemented.

8. The EMPr must be included in all contract documentation for all phases of implementation.

PART V

Monitoring

9. A copy of the Environmental Authorisation, EMPr, any independent assessments of financial provision for rehabilitation and environmental liability, closure plans, audit reports and compliance monitoring reports must be kept at the site of the authorised activity/ies, and must be made available to anyone on request, including a publicly accessible website (if applicable).

10. Access to the site referred to in Section D 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.

PART VI

Auditing

11. In terms of regulation 34 of the *EIA Regulations, 2014* the holder must conduct environmental audits to determine compliance with the conditions of the Environmental Authorisation, the

EMPr and the closure plan (where applicable) and submit Environmental Audit Reports to the competent authority upon receiving such request in writing from the competent authority. The Audit Report must be prepared by an independent person and must consider all the information required in Appendix 7 of the *EIA Regulations, 2014*.

PART VII

Activity/ Development Specific Conditions

12. 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.

13. 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.
14. The holder must ensure that the dams must not be allowed to empty completely at the end of the irrigation cycle, in order to allow for in ecological functioning.
15. The holder must ensure that adequate free board should be left when filling the dam to its capacity.
16. The holder must prevent erosion of the spill way (the spillways are open-channel), with no reinforcements to counter overflow erosion.

H. 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 or term of this Environmental Authorisation or EMPr may render the holder liable to criminal prosecution.
3. 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.

4. 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.

I. APPEALS

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

1. An appellant (if the holder) must –
 - 1.1 submit an appeal in accordance with regulation 4 *National Appeal Regulations, 2014* to the Appeal Administrator and a copy of the appeal to any registered I&APs, any Organ of State with interest in the matter and the decision maker within 20 (twenty) calendar days from the date the holder was notified by the competent authority of this decision.
2. An appellant (if NOT the holder) must –
 - 2.1 submit an appeal in accordance with regulation 4 *National Appeal Regulations, 2014* to the Appeal Administrator, and a copy of the appeal to the holder, any registered I&APs, any Organ of State with interest in the matter and the decision maker within 20

(twenty) calendar days from the date the holder notified the registered I&APs of this decision.

3. The holder (if not the appellant), the decision-maker, I&APs and 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. This appeal and responding statement must be submitted to the address listed below -

By post: Attention: Marius Venter
Western Cape Ministry of Local Government, Environmental Affairs &
Development Planning
Private Bag X9186, Cape Town, 8000; or

By facsimile: (021) 483 4174; or

By hand: Attention: Mr Marius Venter (Tel: 021-483 3721)
Room 809, 8th floor Utilitas Building
1 Dorp Street, Cape Town, 8000; or

By e-mail: DEADP.Appeals@westerncape.gov.za

Note: You are also requested to submit an electronic copy (Microsoft Word format) of the appeal and any supporting documents to the Appeal Administrator to the address listed above and/ or via e-mail to DEADP.Appeals@westerncape.gov.za

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

J. CONSEQUENCES OF NON-COMPLIANCE WITH CONDITIONS

Non-compliance with a condition or term of this Environmental Authorisation or EMPr may result in suspension or withdrawal of this Environmental Authorisation and may render the holder liable for criminal prosecution.

K. DISCLAIMER

The Western Cape Government, 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.

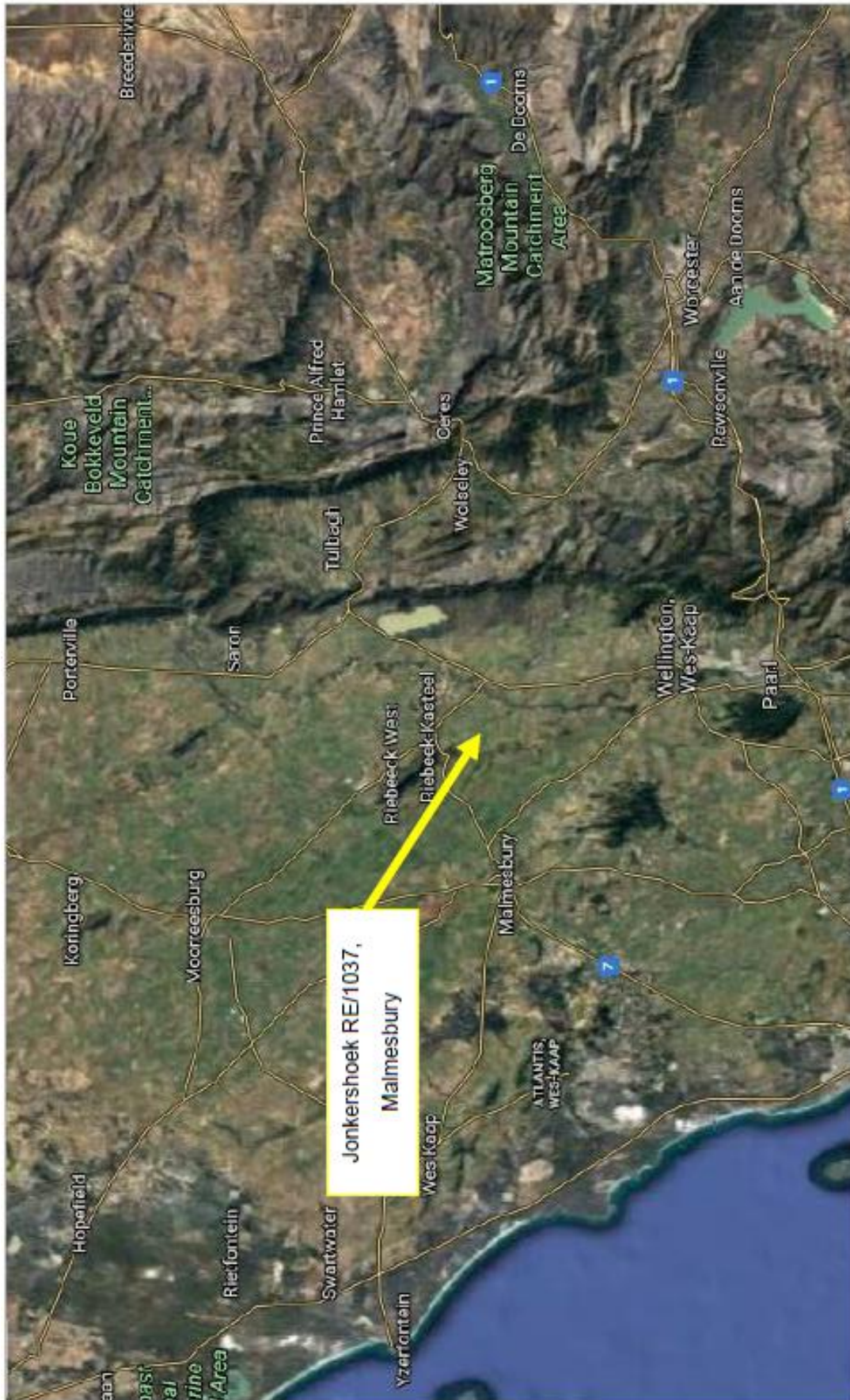
Yours faithfully

ADV. CHARMAINE MARÉ
DIRECTOR: ENVIRONMENTAL GOVERNANCE

Copied to: (1) Susan de Kock (EAP)

Email: susandekock@oranienet.net

ANNEXURE 1: LOCALITY MAP



ANNEXURE 2: SITE PLAN



FOR OFFICIAL USE ONLY:

S24G REFERENCE: 14/2/4/2/1/F5/16/0032/21

ANNEXURE 3: REASONS FOR THE DECISION

This Environmental Authorisation is in respect of the consequences of commencement of the afore-mentioned illegal activities. An Environmental Assessment Practitioner ("EAP") was appointed to submit a section 24G Environmental Impact Assessment ("EIA") to the Department to obtain this Environmental Authorisation. The EIA was considered adequate for informed decision-making. In addition, the holder paid an administrative fine of R50 000 (Fifty thousand Rand) to meet the requirements of section 24G of the *National Environmental Management Act, 1998* ("NEMA").

In reaching its decision, the competent authority, *inter alia*, considered the following:

- a) The information contained in the application form received by the Department on 12 August 2021.
- b) The Environmental Management Programme ("EMPr") 08 September 2021 submitted together with the application.
- c) Relevant information contained in the Departmental information base, including, the Guidelines on Public Participation and Alternatives.
- d) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the NEMA.
- e) The comments received from Interested and Affected Parties ("I&APs") and the responses provided thereto.
- f) The sense of balance of the negative and positive impacts and proposed mitigation measures.
- g) The site visit conducted on 07 April 2022 attended by officials from this Department.

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 which, according to the competent authority, were the most significant reasons for the decision is set out below.

1. Public Participation Process

In terms of section 24G(1)(vii)(dd) of the NEMA, "...a description of the public participation process followed during the course of compiling the report, including all comments received from interested and affected parties and an indication of how the issues raised have been addressed ...", is required.

The public participation process conducted by the EAP comprised of the following:

- An advertisement was placed in the **Swarland Gazette** newspaper on 26 January 2021;
- A site notice was erected; and
- Letters were sent to interested and affected parties ("I&APs") and the municipal ward councillor.
- I&APs were afforded the opportunity to provide comments on the application.

1.1 Consultation with organs of state in terms of section 24O of the NEMA

- CapeNature
- This Department's Directorate: Pollution & Chemicals Management (PCM)

At the end of the public participation process, comments were received from CapeNature. A summary of their comments and the responses thereto follows below.

CapeNature

CapeNature stated that it is understood that the drainage lines have been severely impacted, and the freshwater specialist suggests that no environmental release is necessary because the ongoing operation of the dams will not compromise the drainage lines any further. Rehabilitation measures should be implemented including environmental releases and revegetation of the drainage lines affected by the Nektarien and Jonkershoek dams, to restore riparian habitat and functioning and salvage some biodiversity from the damage that has already been done by the construction of the dams and the transformation of the drainage lines.

A freshwater specialist should develop a rehabilitation plan in this regard that is to be implemented. The freshwater assessment has also indicated that there are remnants of riparian vegetation above the Jonkershoek dam that would have provided habitat for biodiversity.

Unfortunately, based on available google earth imagery, there is uncertainty on whether the vegetation from 2001-2008 between the Jonkershoek and Nektarien dam is indigenous vegetation or the result of farming. However, the same band of vegetation can be seen in

imagery from 1985. One could then deduct that the vegetation from 2001-2008 was indigenous vegetation which would have been riparian vegetation and renosterveld. One could then conclude that the overall impact of development is the destruction of renosterveld vegetation as well as riparian vegetation which was present prior to construction.

Cumulative impact of these dams in relation to other dams abstracting from the Berg River must be quantified and discussed. CapeNature agreed with the mitigation measures as proposed by the freshwater specialist. They should, however, be further elaborated. For example, regarding the mitigation measure indicating that the dams should not be allowed to dry out to maintain ecological functioning – indicate the water level to be maintained – this will be determined by the biota in the dam to which the mitigation is referring.

Response from Freshwater specialist

The loss of riparian habitat should be prevented and wherever possible, when disturbed it should be restored. However, the drainage line downstream of the Nekarien Dam and the Jonkershoek Dam has been heavily disturbed, not only by the dams, but by agriculture at large. The land belongs to various landowners. A rehabilitation plan is going to be a multi-faceted and long-term undertaking. A hat trick would be required to get all landowners on board. This is way beyond the scope of the run-of-the-mill water use licence application. The Department of Water and Sanitation often requires river management plans. This drainage line would demand a similar approach on a smaller scale. It is between CapeNature and the landowners if they want to pursue this route. Moreover, most if not all drainage lines in the Middle Berg River have significantly been altered. It makes little sense to single out any single one. If possible, a regional approach is required. The enlarged dam would drown a small surface area of the drainage line upstream of the dam. This is miniscule and negligible, compared to the available habitat upstream of the dam.

According to Google Earth images taken prior to 1985, remnants of Renosterveld were present. This was destroyed since then because of agriculture, not only because of the dams. Much of the land has been ploughed over and is currently heavily grazed. It is not realistic to single out the dams as the only cause for the current situation.

The Department of Water Affairs (DWA) and current legislation specifies the Ecological Reserve. Dams in the Middle Berg River have been assessed against the requirements of the Ecological Reserve, following specified and scientific methodology. Likewise, addition storage capacity of the dams now under discussion have, no doubt, been evaluated against these legal requirements. It is not for the freshwater specialist to cast doubt on the DWA's decisions. It is recommended that 400mm of water remains in the dam at the end of the irrigation season to maintain at least some ecological functioning.

PCM

This Department's Directorate: PCM stated that mitigation measures for the adequate control of erosion or siltation of the open-channel spillways should be incorporated into the operational lifespan of the two dams.

The EAP responded by stating that the mitigations measures associated with erosion and siltation has been incorporated into the operational phase EMPr.

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

The competent authority concurs with the EAP'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

2.1 Site/Activity Alternatives

Alternative 1 (Herewith authorised)

This entails the construction of two water storage dams.

Jonkershoek Dam

Approximate minimum volume filling material: Wall height (9m) X Wall length (277m) = 2493m³.

The Jonkershoek Dam was constructed during 2001 by the Swartdam Trust (owner at that time). Very little specification detail is known from the pre-construction phase. The Jonkershoek Dam was constructed within an unnamed tributary of the Berg River. In August 2017 the Department of Water Affairs (Dam Safety Office) classified the Jonkershoek Dam as a Category 1 dam with a Low Hazard rating. The water in the Jonkershoek Dam is applied for irrigation of stone fruit.

Nektarien Dam

Approximate minimum volume filling material: Wall height (11m) X Wall length (170m) = 1 870m³.

The Nektarien Dam was constructed during 2007 by the owner at that time of the property, Du Toit Agri Pty Ltd. As with the Jonkershoek Dam very little specification detail is available from the pre-construction / planning phase. The Nektarien Dam was constructed within

the same unnamed drainage line as the Jonkershoek Dam. This drainage line flows in a south-eastern direction where it confluences with the Berg River. In August 2017 the Department of Water Affairs (Dam Safety Office) classified the Jonkershoek Dam was registered as a Category 1 dam with a Low Hazard rating. The water in the Nektarien Dam is applied for irrigation of stone fruit.

Both dams are filled with water out of the Berg River. The pump station is located next to the R46 trunk road that connects Riebeek Kasteel with Hermon. Water is pumped up the incline to many farming establishments, among other Jonkershoek RE/1037. Water is pumped in three stages, with pumping stations in between each stage. The Berg River is 5 km away from the Jonkershoek Dam, as the crow flies, but the pipeline is much longer, as it follows for most of its length the R46 trunk road.

Alternative 2

No activity alternatives are put forward since the project consists of the completed construction of 2 water storage dams.

2.2 The option of not implementing or continuing with the activity ("No-Go" Alternative)

The Nektarien Dam is in operation for 14 years and the Jonkershoek Dam in operation for 20 years. These two dams have a combined storage capacity of 448 000m³ and the water is applied for the irrigation of approximately 74ha stone fruit. Should the activity be ceased, it will result in an enormous negative economic impact for the property as the farm unit will have to be closed.

3. Environmental Impact Assessment (EIA) and Mitigation Measures

In reaching its decision, the competent authority, considered the following in respect of the EIA and mitigation measures:

3.1. Activity Need and Desirability and Regional Planning Context

The proposed development is a private initiative and thus not applicable to any timeframes as set out by the Spatial Development Framework. The enlarged dam is regarded as a secure water source for continued farm production.

3.2. Biophysical and Biodiversity Impacts

No botanical scrutiny was done prior to construction; however, the site is mapped as an Ecological Support Area. Both dams were constructed within a drainage line which feeds into the Berg River. Construction of both dams commenced without any botanical

assessment. It is thus unclear whether any important biodiversity features were present. However, from aerial photography it can be assumed that approximately 95% of the footprint (including full supply levels) of both dams were completely transformed as a result of wheat land cultivation. The middle section of the Nektarien Dam is a classified Ecological Support Area (ESA). The upper middle section of the Jonkershoek Dam is an ESA while the lower middle section is a terrestrial Critical Biodiversity Area (CBA) with a very small portion being a classified aquatic CBA.

Ecological Importance of the Drainage Lines

The Jonkershoek RE/1037 drainage line is devoid of permanent water. There is no fish in the drainage lines, or for that matter, any other plant or animal that are endangered in any way. Perhaps there were some prior to human impact. Hence the drainage lines, in its current state, cannot be considered as being ecologically important.

Ecological Sensitivity of the Drainage Lines

According to the conclusions from the assessment, it seems unlikely that the drainage lines on the farm, as many other in the district, would ever recover if agriculture was to cease and nature was to be left at its own devices. The current impact is of such a nature and scope that recovery seems not possible.

4. NEMA 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.

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 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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