



Development Management (Region 1)
Bernard.Kgosana@westerncape.gov.za | Tel: 021 483 0753

REFERENCE: 16/3/3/2/F5/16/2015/21
NEAS REFERENCE: WCP/EIA/0001011/2021
ENQUIRIES: Bernard Kgosana
DATE OF ISSUE: 28 February 2022

The Director
Black Orchid Farming (Pty) Ltd.
P.O. Box 6100
ROGGEBAAI
8012

Attention: Ms. M. van WykTel.: (021) 421 2129

Email: Mine.van.wyk@uff.co.za

Dear Madam

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 (AS AMENDED) FOR THE PROPOSED DEVELOPMENT OF AN IN-STREAM DAM ON PORTIONS 2 AND 3 OF THE FARM NO. 1100, BONATHABA, MALMESBURY.

- 1. With reference to the above application, this Department hereby notifies you of its decision to **grant** the Environmental Authorisation, 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 National Appeal Regulations, 2014 (as amended), which prescribes the appeal procedure to be followed. This procedure is summarised in the attached Environmental Authorisation below.

Yours faithfully

MR. ZAAHIR TOEFY

DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)

Copied to: (1) Mr. C. Geyser (EnviroAfrica cc)
(2) Ms. N. Ndobeni (Department of Water and Sanitation)

(3) Mr. J. Scholtz, (Swartland Municipality)

E-mail: clinton@enviroafrica.co.za



ENVIRONMENTAL AUTHORISATION

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 (AS AMENDED) FOR THE PROPOSED DEVELOPMENT OF AN IN-STREAM DAM ON PORTIONS 2 AND 3 OF THE FARM NO. 1100, BONATHABA, MALMESBURY.

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) and the Environmental Impact Assessment ("EIA") Regulations, 2014 (as amended), the Competent Authority herewith grants Environmental Authorisation and hereby adopts the River Maintenance Management Plan (dated July 2021) to the applicant to undertake the listed activities specified in section B below with respect to Layout Alternative 2 (i.e. the Preferred Alternative) as described in the Final EIA Report dated October 2021.

The granting of this Environmental Authorisation is subject to compliance with the conditions set out in section E below.

A. DETAILS OF THE APPLICANT FOR THIS ENVIRONMENTAL AUTHORISATION

The Director
Black Orchid Farming (Pty) Ltd.
c/o Ms Mine van Wyk
P.O. Box 6100
ROGGEBAAI
8012

Tel: (021) 421 2129

Email: Mine.van.wyk@uff.co.za

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

B. ACTIVITY AUTHORISED

Listed Activity

Describe the portion of the proposed development to which the applicable listed activity relates.

Listing Notice 1 of the EIA Regulations, 2014, (as amended):

Activity Number: 9
Activity Description:

The development of infrastructure exceeding 1 000 metres in length for the bulk transportation of water or storm water—

(if) with an internal diameter of 0,36 metres or more; or

(ii) with a peak throughput of 120 litres per second or more;

excluding where—

(a) such infrastructure is for bulk transportation 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.

Activity Number: 12 Activity Description:

The development of—

- (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—

- (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; —

excluding—

- (aa) the development of infrastructure or structures within existing ports or harbours 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

The proposed pipes associated with the proposed dam will exceed 1000m in length with an internal diameter of 0.36m or more.

The proposed dam will be located within a watercourse and will have a development footprint of approximately 19.2ha in extent.

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 development and where indigenous vegetation will not be cleared.

Activity Number: 19 Activity Description:

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;

but excluding where such infilling, depositing, dredging, excavation, removal or moving—

- (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.

Activity Number: 27 Activity Description:

The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for—

- (i) the undertaking of a linear activity; or
- (ii) maintenance purposes undertaken in accordance with a maintenance management plan.

The proposed dam will require the infilling or depositing of material of more than 10m^3 within a watercourse.

The proposed development will result in the clearance of approximately 8.8ha of disturbed indigenous vegetation.

Listing Notice 2 of the EIA Regulations, 2014, (as amended): Activity Number: 16 The proposed dam will have a wall height of approximately 18m and cover an area of Activity Description: approximately 19.2ha in extent. The development of a dam where the highest part of the dam wall, as measured from the outside toe of the wall to the highest part of the wall, is 5 metres or higher or where the high-water mark of the dam covers an area of 10 hectares or more. Listing Notice 3 of the EIA Regulations, 2014, (as amended): Activity Number: 4 proposed development will include development of a road approximately 4m in width Activity Description: around the proposed dam. The development of a road wider than 4 metres with a reserve less than 13,5 metres. i. Western Cape i. Areas zoned for use as public open space or equivalent zoning; ii. Areas outside urban areas; (aa) Areas containing indigenous vegetation; (bb) Areas on the estuary side of the development setback line or in an estuarine functional zone where no such setback line has been determined: or iii. Inside urban areas: (aa) Areas zoned for conservation use; or (bb) Areas designated for conservation use in Spatial Development Frameworks adopted the competent by authority. Listing Notice 3 of the EIA Regulations, 2014, (as amended): The proposed development will result in the Activity Number: 12 clearance of more than 300m² of transformed/ Activity Description: indigenous disturbed vegetation within a Critically Endangered Vegetation Type (namely, the Swartland The clearance of an area of 300 square Shale Renosterveld). metres or more of indigenous vegetation clearance except where such indigenous vegetation is required for maintenance purposes undertaken in accordance with maintenance а management plan. i. Western Cape

- Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004;
- ii. Within critical biodiversity areas identified in bioregional plans;
- iii. Within the littoral active zone or 100 metres inland from high water mark of the sea or an estuarine functional zone, whichever distance is the greater, excluding where such removal will occur behind the development setback line on erven in urban areas;
- iv. On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning; or
- v. On land designated for protection or conservation purposes in an Environmental Management Framework adopted in the prescribed manner, or a Spatial Development Framework adopted by the MEC or Minister.

Activity Number: 14 Activity Description:

The development of—

- (i) dams or weirs, where the dam or weir, including infrastructure and water surface area exceeds 10 square metres; or
- (ii) infrastructure or structures with a physical footprint of 10 square metres or more;

where such development occurs—

- (a) within a watercourse;
- (b) in front of a development setback; or
- (c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse;

excluding the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour.

i. Western Cape

i. Outside urban areas:

(aa) A protected area identified in terms of NEMPAA, excluding conservancies;

(bb) National Protected Area Expansion

The proposed dam will exceed 10m² within a watercourse.

Strategy Focus areas;

- (cc) World Heritage Sites;
- (dd) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority;
- (ee) Sites or areas listed in terms of an international convention;
- (ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;
- (gg) Core areas in biosphere reserves; or
- (hh) Areas on the estuary side of the development setback line or in an estuarine functional zone where no such setback line has been determined.

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

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

The authorised development entails the development of an in-stream dam and associated infrastructure on Portions 2 and 3 of Farm No. 1100, Bonathaba, Malmesbury.

The proposed development will comprise the following:

- The development of an in-stream dam with a wall height of approximately 18m and a development footprint of approximately 19.2ha in extent. The storage capacity of the proposed dam will be approximately 1 000 000m³;
- A spillway of approximately 10m in width will be developed along the left abutment of the proposed dam;
- An outlet pipeline of approximately 500mm diameter will be developed in reinforced concrete
 underneath the dam embankment and will be connected to a new pump station located at the
 downstream toe of the embankment;
- A pipeline of approximately 600m in length and approximately 500mm diameter will be developed from the pump station to tie into the existing 400mm pipeline, which is connected to the existing pump station located on the banks of the Berg River;
- A 4m wide gravel access road will be developed around the dam basin and embankment; and
- A new pump station will be developed and will have a development footprint of approximately 150m².

Approximately 10.4ha of areas currently under permanent crops and approximately 8.8ha of previously disturbed indigenous vegetation will be lost as a result of the proposed dam.

C. PROPERTY DESCRIPTION AND LOCATION

The authorised listed activities will be undertaken on Portions 2 and 3 of Farm No. 1100, Bonathaba, Malmesbury. Access to the site will be gained through the Porseleinberg Road (entrance to the site at 33°31'25.62"S; 18°55'29.12"E).

The 21-digit Surveyor General Codes for the proposed site are:

Portion 2 of Farm No. 1100 (property extent = 48.76ha)	C0460000000110000002
Portion 3 of Farm No. 1100 (property extent = 60.57ha)	C0460000000110000003

Dam co-ordinates for the proposed site are as follows:

Middle point	33°	31'	13.66" South
	18°	55'	17.53" East

Refer to Annexure A: Locality Map and Annexure B: Site Layout Plan.

The said section of land is hereinafter referred to as "the site".

D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

EnviroAfrica Mr Clinton Geyser P.O. Box 5367 Helderberg 7135

Tel: (021) 851 1616 Fax: (086) 512 0154

Email: Clinton@enviroafrica.co.za

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 Layout Alternative 2 (i.e. the Preferred Alternative) described in the Final EIA Report dated October 2021 on the site described in Section C above.
- 2. The holder must commence with the listed activities on the site within a period of **five (5) years** from the date of issue of this Environmental Authorisation.
- 3. The development/construction activities must be concluded within **ten (10) years** from the date the commencement of the listed activities.
- 4. The holder must ensure 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 description set out in Section B must be 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. A minimum of 7 (seven) calendar days' notice, in writing, must be given to the Competent Authority before commencement of development 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 and 11.

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 Appeal 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:
 - 7.4. Provide the registered I&APs with:
 - 7.4.1. the name of the holder (entity) of this Environmental Authorisation;
 - 7.4.2. the name of the responsible person for this Environmental Authorisation;
 - 7.4.3. the postal address of the holder;
 - 7.4.4. the telephonic and fax details of the holder;
 - 7.4.5. the e-mail address if any, of the holder; and
 - 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 National Appeal Regulations, 2014 (as amended).
- 8. The listed activities, including site preparation, must not be commenced with within 20 (twenty) calendar days from the date the holder 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 be commenced with until the appeal is decided.

Management of activity

- 9. The Environmental Management Programme ("EMPr") (compiled by EnviroAfrica CC and dated May 2021) submitted as part of the application for Environmental Authorisation is hereby approved and must be implemented.
- 10. The River Maintenance Management Plan ("MMP") (compiled by EnviroAfrica cc and dated July 2021) adopted as part of this Environmental Authorisation must be implemented.
- 11. The EMPr including the 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") before commencing with development activities to ensure compliance with the provisions of the EMPr and the conditions contained in this Environmental Authorisation.

- 13. A copy of the Environmental Authorisation and the EMPr, Environmental Audit Reports and compliance monitoring reports must be kept on the site of the authorised listed activities during the development phase, whereafter it must be kept at the office of the holder and must be made available to any authorised person on request.
- 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 EIA Regulations, 2014 (as amended), the holder must conduct environmental audits to determine compliance with the conditions of the Environmental Authorisation and the EMPr and submit Environmental Audit Reports to the Competent Authority. The Environmental Audit Reports must be prepared by an independent person and must contain all the information required in Appendix 7 of the EIA Regulations, 2014 (as amended).
 - 15.1. The holder must undertake an environmental audit within 3 (three) months of the commencement of the listed activities and submit an Environmental Audit Report to the Competent Authority within 1 (one) month of the completion of the environmental audit.
 - 15.2. A final Environmental Audit Report must be submitted to the Competent Authority within 1 (one) month after the completion of the development/construction activities. This must include a report on any maintenance activities undertaken.
 - 15.3. The holder must, within 7 (seven) days of the submission of the Environmental Audit Report to the Competent Authority, notify all potential and registered I&APs of the submission and make the report available to an authorised person on request.

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; 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.

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.

- 17. The proposed site must be clearly demarcated prior to the commencement of construction activities and all areas outside of the demarcated construction site must be regarded as "no-go" areas.
- 18. The recommendations included in the Botanical Impact Statement (compiled by PB Consulting Environmental Management Services and dated 12 November 2020), as included in the EMPr, must be implemented.
- 19. The recommendations included in the Freshwater Assessment (compiled by Watson Africa and dated June 2020), as include in the EMPr, must be implemented.

- 20. The recommendations included in the Agricultural Compliance Statement (compiled by Digital Soils Africa and dated September 2021), as include in the EMPr, must be implemented.
- 21. Employment opportunities must be afforded to the local community (as far as possible) during all phases of the proposed development.

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 specified 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 must
 - 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 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 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 form/s must be submitted by means of one of the following methods:

By post: Attention: Mr. M. Venter

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. M. Venter (Tel: 021 483 3721)

Room 809

8th Floor Utilitas Building, 1 Dorp Street, Cape Town, 8001

5. The 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 DEADP.Appeals@westerncape.gov.za or URL http://www.westerncape.gov.za/eadp.

H. DISCLAIMER

The Western Cape Government, the holder, 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 greatly appreciated.

Yours faithfully

MR. ZAAHIR TOEFY

DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)

DATE OF DECISION: 28 FEBRUARY 2022

Copied to: (1) Mr. C. Geyser (EnviroAfrica cc)

(2) Ms. N. Ndobeni (Department of Water and Sanitation)

(3) Mr. J. Scholtz, (Swartland Municipality)

E-mail: clinton@enviroafrica.co.za

E-mail: NdobeniN2@dwa.gov.za

E-mail: joggies@swartland.org.za

ANNEXURE 1: LOCALITY MAP:

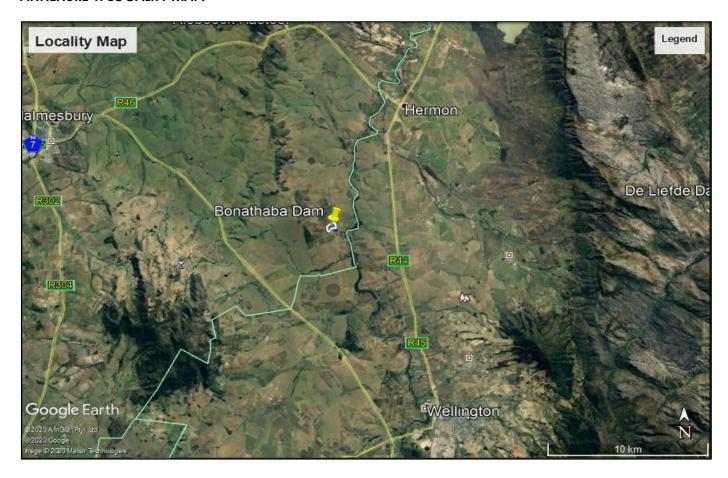


Figure 1: Locality map depicting the location of proposed in-stream dam on Portion 2 and 3 of the Farm No.1100, Bonathaba, Malmesbury.

ANNEXURE 2: SITE LAYOUT PLAN

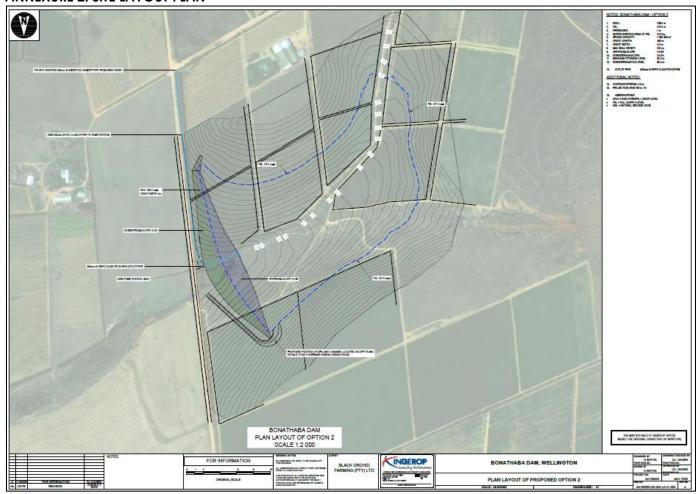


Figure 2: Site plan depicting the proposed winery on the Farm No. 1120, Malmesbury.

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 and received by the Competent Authority on 07 April 2021, the Final Scoping Report dated May 2021 and received by the Competent Authority on 17 May 2021, the Final EIA Report dated October 2021 and EMPr dated May 2021 and received by the Competent Authority on 18 October 2021;
- b) Relevant information contained in the Departmental information base, including, the Guidelines on Public Participation, Alternatives and Need and Desirability (dated March 2013);
- c) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the NEMA;
- d) The comments received from I&APs and responses to these, included in the Final EIA Report dated October 2021 and the Comments and Responses Report submitted together with the EIA Report;
- e) The balancing of negative and positive impacts and proposed mitigation measures; and
- f) 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 which, according to the competent authority, were the most significant reasons for the decision, is set out below.

1. Public Participation

The public participation process ("PPP") was undertaken in accordance with an approved Public Participation Plan (approved on 09 July 2020) and entailed the following:

- identification of and engagement with I&APs;
- 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 07 April 2021 and 15 September 2021;
- the placing of a newspaper advertisement in the "Swartland Gazette" on 28 July 2020;
- fixing notice boards at the site where the listed activities are to be undertaken on 05 June 2020;
- The draft Scoping Report and draft EIA Report was made available electronically on the Environmental Assessment Practitioner's website for commenting purposed;
- A draft Scoping Report was released for a 30-day comment period from 07 April 2021; and
- A draft EIA Report was released for a 30-day comment period from 15 September 2021.

All of the concerns raised by I&APs were responded to and adequately addressed during the public participation process. This Department is satisfied that the PPP that was followed met the minimum legal requirements and all the comments and responses report thereto were included in the comments and responses report. Specific management and mitigation measures have been considered in this Environmental Authorisation and in the EMPr to adequately address the concerns raised.

2. Alternatives

Five site alternatives, two layout alternatives and the "no-go" alternative were investigated for the proposed development and are discussed below.

2.1. Site Alternatives:

Five site alternatives were initially identified for the proposed development. However, based on the steep topography, expensive construction estimates and the environmental impact of these sites on virgin land, four site alternatives were screened out. The preferred site alternative is therefore an instream dam over Portions 2 and 3 of Farm No. 1100, Bonathabo, Malmesbury.

2.2. Layout Alternatives:

Two layout alternatives were investigated and are discussed below:

<u>Layout Alternative 1</u>

Layout Alternative 1 entailed the development of a dam with a maximum wall height of approximately 16m with a storage capacity of approximately 715 000m³. The development footprint associated with Layout Alternative 1 will be approximately 16.2ha in extent.

Although the development footprint associated with Layout Alternative 1 is smaller than Layout Alternative 2, the cost/storage ratio is not considered viable relative to the irrigational requirements of the property and the site conditions. Layout Alternative 1 was therefore not deemed as the preferred.

The Layout Alternative 2 (the Preferred Alternative - herewith authorised)

Layout Alternative 2 entails the development of an in-stream dam and associated infrastructure on Portions 2 and 3 of Farm No. 1100, Bonathaba, Malmesbury.

The proposed development will comprise of the following:

- The development of an in-stream dam with a wall height of approximately 18m and a development footprint of approximately 19.2ha in extent. The storage capacity of the proposed dam will be approximately 1 000 000m³;
- A spillway of approximately 10m in width will be developed along the left abutment of the proposed dam;
- An outlet pipeline of approximately 500mm diameter will be developed in reinforced concrete underneath the dam embankment and will be connected to a new pump station located at the downstream toe of the embankment;
- A pipeline of approximately 600m in length and approximately 500mm diameter will be developed from the pump station to tie into the existing 400mm pipeline, which is connected to the existing pump station located on the banks of the Berg River;
- A 4m wide gravel access road will be developed around the dam basin and embankment;
 and
- A new pump station will be developed and will have a development footprint of approximately 150m².

Approximately 10.4ha of areas currently under permanent crops and approximately 8.8ha of previously disturbed indigenous vegetation will be lost as a result of the proposed dam.

Layout Alternative 2 was deemed the preferred alternative since the proposed site is suitable for the development of a dam, is preferred from an agricultural perspective, is preferred from a botanical perspective and is preferred from a geotechnical perspective. In addition, the proposed development will enable a larger output of agricultural produce due to a secure water source.

2.3. "No-Go" Alternative

The "no-go" alternative will result in the *status quo* being maintained. This will result in the property potentially not having a secure water source during periods of drought as water is directly obtained from the Berg River and irrigated onto the agricultural crops, Since the proposed development will not result in unacceptable environmental impacts, the "no-go" alternative was not warranted.

3. Impacts, assessment and mitigation measures

3.1. Activity Need and Desirability

Although the property has existing water use allocation rights, the property currently does not have a secure water supply for the irrigation of agricultural crops as water is pumped directly from the Berg River onto the crops. The proposed development will therefore result in a secure water source during periods of drought that may be experienced in the Western Cape.

The proposed development will result in the loss of some agricultural land, which is currently under permanent cultivation However. the proposed development will ensure the long-term economic viability and sustainability of the production of table grapes and citrus through a reliable water supply from the dam. The proposed development will optimize the use of the land to its higher potential and will result in positive benefits for the agricultural activities and local community. The farm is part of a development plan to double its productive hectares of agricultural output on a large-scale citrus and grape operation. The proposed development will therefore assist in this regard and will in turn retain existing employment and create additional employment opportunities.

3.2. Agricultural Impacts

According to the Screening Report (generated from the Screening Tool developed by the National Department of Environmental Affairs and dated 13 October 2020), the proposed site was mapped to be located within a high sensitivity area from an agricultural perspective. Digital Soils Africa was appointed to provide an Agricultural Compliance Statement in terms of the Protocols.

The Agricultural Compliance Statement (dated September 2021) indicated that approximately 3ha of lemons, approximately 2.2ha of grapes, approximately 2.5ha of magenta, approximately 1.5ha sugra and approximately 1.2ha of crimson will be lost as a result of the proposed development. The specialist further indicated that the agricultural crops, which will be lost are either old (in terms of tree age), have low income yields and/or a low quality of fruit. Approximately 10.4ha of agricultural crop area will be lost, but approximately 6.6ha of new crop have already been planted on other areas of the property.

The specialist therefore concluded that although the proposed development will occur on high agricultural sensitive areas, the small loss in agricultural production will be more beneficial in the gaining of a secure water supply. The specialist has recommended mitigation measures for implementation during the development phase of the proposed dam. The recommendations have been included in the EMPr.

In addition, the Western Cape Department of Agriculture indicated (in their comment dated 01 April 2021) that in principle, long-term sustainable development is supported.

3.3. Botanical Impacts

The Screening Report (generated from the Screening Tool developed by the National Department of Environmental Affairs and dated 13 October 2020) indicated that the proposed site was mapped to be located in a high sensitivity area from a terrestrial biodiversity perspective. Therefore, a Botanical Compliance Statement (compiled by PB Consult Environmental Management Services and dated 12 November 2020) was undertaken in terms of the Protocols.

The area in which the dam is located was historically covered by Swartland Shale Renosterveld, which is now considered Critically Endangered in terms of the National Environmental Management: Biodiversity Act, 2004 (Act. No. 10 of 2004). The proposed site is not mapped as a Critically Biodiversity Area, but it overlaps mapped Ecological Support Areas associated with the watercourse. The specialist indicated that the middle portion of the proposed site was last cultivated in 2006 and may contain some indigenous vegetation. No protected or red-listed plant species were found on the proposed site. Due to previous agricultural activities, very little indigenous vegetation is found on the proposed site. Few indigenous Olea Europa trees are located within the development footprint of the proposed dam and the specialist as recommended that these trees be transplanted next to the proposed dam. All recommendations of the specialist have been included as a condition set in this Environmental Authorisation and in the EMPr. In addition, CapeNature (comment dated 20 October 2021) has no objection to the proposed development since the proposed development will have a low impact from a botanical perspective.

3.4. Freshwater impacts

A Freshwater Assessment (compiled by Watson Africa and dated June 2020) was compiled to assess the potential impacts on the watercourse associated with the proposed development. The specialist indicated that the soil conditions contain some clay, but erosion upstream of the proposed site is evident. The watercourse/drainage line (a tributary of the Berg River) to be impacted is currently overgrown with vegetation and will require some maintenance. The watercourse Present Ecological Status has been categorised as E, which indicates that the water course is significantly altered with loss of ecological functioning. The proposed dam will likely create new aquatic habitat, which may result in a slight improvement to the watercourse.

The potential impacts associated with the proposed development is anticipated to be of low negative significance post mitigation. Mitigation measures have been included in the EMPr.

The requirements of the National Water Act, 1998 (Act No. 36 of 1998) will be met. Proof of submission of the pre-application e-WUL application has been submitted along with the final EIA Report. in addition, the Bergrivier Irrigation Board indicated (in their comment dated 29 April 2021) that they do not object to the proposed development. The Bergrivier Irrigation Board further confirmed that the proposed site has existing water use allocation rights for irrigation purposes.

3.5. Geotechnical considerations

A Geotechnical Report (compiled by Ingeprop and dated 17 August 2020) was undertaken to determine the suitability of the proposed site for a dam. Test pits were excavated and soil samples were taken. The specialist indicated that the foundations appear to be acceptable for the proposed dam provided that the core trenches are taken sufficiently deep. The proposed site also contains sufficient clay. The recommendations of the specialist have been included in the EMPr.

3.6. Heritage/Archaeological Impacts

A Notice of Intent to Develop was submitted to Heritage Western Cape ("HWC"). HWC indicated (in their comment dated 21 March 2021) that since there is no reason to believe that the proposed construction of an in-stream dam will impact on heritage resources, no further action under Section 38 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) will be required.

3.7. Dust, noise and visual impacts

Potential construction related dust, noise and visual impacts are anticipated during the construction phase of the proposed development. However, mitigation measures have been included in the EMPr.

The development will result in both negative and positive impacts.

Negative Impacts include:

- Potential noise and dust impacts during the construction phase; and
- A limited loss in agricultural land.

Positive impacts include:

- Secure water supply for irrigation purposes;
- Some employment opportunities;
- · Economic gain for the applicant; and
- An addition to food security.

4. National Environmental Management Act Principles

The National Environmental Management Act 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.

You are reminded of the general duty of care towards the environment in terms of Section 28(1) of the NEMA which states: "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."

