

REFERENCE: 16/3/3/1/F1/12/2038/21
NEAS REFERENCE: WCP/EIA/0000949/2021
DATE: 18 February 2022

The Trustees
Dasbosch Family trust
P. O. Box 39
PORTERVILLE
6810

Attention: Mr. S. Coldrey

Cell.: 082 327 2100
E-mail: admin@dasbosch.com

Dear Sir

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 EXPANSION OF THE EXISTING DASBOSCH DAM (PORTION 2 OF FARM DASCHBOSCHFONTEIN NO.16), THE REPAIR OF THE EXISTING DRIEBOS DAM (PORTION 1 OF FARM DRIEDASCHBOSCH NO.18), THE INSTALLATION OF A NEW PIPELINE BETWEEN THE TWO DAMS (FROM PORTION 1 OF FARM 19 THEN ALONG THE ROAD SERVITUDE OF THE PERIMETER BETWEEN THE REMAINDER OF FARM 410 AND PORTION 1 OF FARM 410 AND THEN ONTO PORTION 2 OF FARM 16) AND THE CONSTRUCTION OF ASSOCIATED INFRASTRUCTURE, PORTERVILLE.

1. With reference to the above application, this Department hereby notifies you of its decision to **grant** Environmental Authorisation, 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 Environmental Authorisation, that all registered interested and affected parties ("I&APs") are provided with access to 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 (as amended), which prescribes the appeal procedure to be followed. This procedure is summarised in the attached Environmental Authorisation.

Yours faithfully

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

Copied to: (1) Ms. Amanda Fritz-Whyte (PHS Consulting)
(2) Ms. Angila Joubert (Bergrivier Local Municipality)
(3) Mr. Derril Daniels (Department of Water and Sanitation)

E-mail: amanda@phsconsulting.co.za
E-mail: jouberta@bergmun.org.za
E-mail: danielsd@dws.gov.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: THE PROPOSED EXPANSION OF THE EXISTING DASBOSCH DAM (PORTION 2 OF FARM DASCHBOSCHFONTEIN NO.16), THE REPAIR OF THE EXISTING DRIEBOS DAM (PORTION 1 OF FARM DRIEDASCHBOSCH NO.18), THE INSTALLATION OF A NEW PIPELINE BETWEEN THE TWO DAMS (FROM PORTION 1 OF FARM 19 THEN ALONG THE ROAD SERVITUDE OF THE PERIMETER BETWEEN THE REMAINDER OF FARM 410 AND PORTION 1 OF FARM 410 AND THEN ONTO PORTION 2 OF FARM 16) AND THE CONSTRUCTION OF ASSOCIATED INFRASTRUCTURE, PORTERVILLE.

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 the Site alternative, described in the Final Basic Assessment Report ("BAR"), dated October 2021.

In terms of the NEMA and the EIA Regulations, 2014 (as amended), the Competent Authority hereby **adopts the Maintenance Management Plan** for the proposed expansion of the existing Dasbosch dam on Portion 2 of Farm Daschboschfontein No.16 and repair of the existing Driebos dam on Portion 1 of Farm Driedaschbosch No.18, Porterville and the installation of pipelines and associated infrastructure.

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

Dasbosch Family trust
c/o Mr. S. Coldrey
P. O. Box 39
PORTERVILLE
6810

Cell.: 082 327 2100
E-mail: admin@dasbosch.com

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

B. LIST OF ACTIVITIES AUTHORISED

Listed Activity	Activity/Project Description
<p>Listing Notice 1 of the EIA Regulations, 2014 (as amended)– 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, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse;</i> <i>but excluding where such infilling, depositing, dredging, excavation, removal or moving—</i> <i>(a) will occur behind a development setback;</i> <i>(b) is for maintenance purposes undertaken in accordance with a maintenance management plan;</i> <i>(c) falls within the ambit of activity 21 in this Notice, in which case that activity applies;</i> <i>(d) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or</i> <i>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”.</i></p>	<p>More than 10 cubic metres of material will be moved and deposited into watercourses and drainage lines as result of the proposed repair and expansion works as well as the maintenance activities.</p>
<p>Listing Notice 1 of the EIA Regulations, 2014 (as amended)– Activity Number: 48 Activity Description: <i>“The expansion of—</i> <i>(i) infrastructure or structures where the physical footprint is expanded by 100 square metres or more; or</i> <i>(ii) dams or weirs, where the dam or weir, including infrastructure and water surface area, is expanded by 100 square metres or more;</i> <i>where such expansion occurs—</i> <i>(a) within a watercourse;</i> <i>(b) in front of a development setback; or</i> <i>(c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse;</i> <i>excluding—</i> <i>(aa) the expansion of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour;</i> <i>(bb) where such expansion activities are</i></p>	<p>The existing Dasbosch dam will be expanded with a surface area exceeding 100 square metres (i.e., 35000 square metres) within non-perennial drainage lines.</p>

<p>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>Listing Notice 1 of the EIA Regulations, 2014 (as amended)– Activity Number: 66 Activity Description: “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 existing Dasbosch dam wall is approximately 10m and the existing dam wall will be raised to approximately 12.7m.</p> <p>The existing Driebos dam wall will be raised by approximately 1m.</p>

The abovementioned list 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 development proposal which entails the following:

- a. Expansion of the existing Dasbosch dam comprising -
 - raising the embankment of the existing dam by approximately 2.7m;
 - enlarging the storage capacity of the dam from 413 000m³ to approximately 710 500m³; and
 - increasing the footprint of the dam by approximately 35 000m², i.e., from 83 000m² to approximately 118 000m².
- b. Repairs to the existing Driebos dam comprising -
 - construction of a new core trench;
 - increasing the spillway freeboard by raising the embankment by approximately 1m; and
 - construction of a new outlet pipe with an approximate 200mm wide diameter.

The footprint of the existing Driebos dam will be left unchanged.

- c. An approximately 160 mm diameter wide and approximately 2.4 km long pipeline will be constructed from the Driebos Dam to the Dasbosch dam.
- d. Water will be sourced as follows:
 - approximately 200 000m³ groundwater per/annum from existing boreholes;
 - approximately an additional 198 900m³ water per/annum run-off from the Driebos catchment area; and
 - and the permanent transfer of 98 600m³/annum winter canal water to Dasboschfontein Farm from Drie Das Bos farm.

The required material for the Dasbosch dam expansion and Driebos Dam repair will be obtained from an existing borrow area.

C. SITE DESCRIPTION AND LOCATION

The listed activities will be undertaken on Portion 2 of Farm Daschboschfontein No.16 (i.e., proposed expansion of the Dasbosch Dam), Portion 1 of Farm Driedaschbosch No.18 (i.e., repair of the existing Driebos dam) from Portion 1 of Farm No. 19 then along the road servitude of the perimeter between the Remainder of Farm No. 410 and Portion 1 of Farm No. 410 and then onto Portion 2 of Farm No. 16 (i.e., the new pipeline) in Porterville.

The SG digit codes are:

Portion 2 of Farm Daschboschfontein No.16, Porterville: C07500000000001600002

Portion 1 of Farm Driedaschbosch No.18, Porterville: C07500000000001800001

Remainder of Farm 410, Porterville: C07500000000041000000

The co-ordinates are:

Starting point of the new pipeline:
33° 6' 42.68" South; 19° 2' 30.94 " East

Middle point of the new pipeline:
33° 7' 2.54" South; 19° 1' 50.81" East

End point of the new pipeline:
33° 7' 29.58" South; 19° 2' 2.02" East

Portion 2 of Farm 16 Daschboschfontein:
33° 7' 22.70" South; 19° 2' 4.60" East

Portion 1 of Farm 18 Driedaschbosch:
33° 6' 40.04" South; 19° 2' 33.28" East

The existing borrow pit area:
33° 7' 49.70" South; 19° 2' 25.78" East

Refer to Annexure 1: Locality Plan.

Refer to Annexure 2: Layout Plan.

The above-mentioned properties are hereinafter referred to as "**the site**".

D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

PHS Consulting
c/o Ms. Amanda Fritz-Whyte
P. O. Box 1752
HERMANUS
7200

Tel.: (028) 312 1734
E-mail: amanda@phsconsulting.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 site alternative described in the Final BAR, dated October 2021 on the site as described in Section C above.
2. Authorisation of the activities are subject to compliance with the conditions set out in this Environmental Authorisation. 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.
3. The holder must commence with, and conclude, the listed activities within the stipulated validity period which this Environmental Authorisation is granted for, or this Environmental Authorisation shall lapse and a new application for Environmental Authorisation must be submitted to the competent authority.

This Environmental Authorisation is granted for–

- (a) A period of five (5) years, from the date of issue, during which period the holder must commence with the authorised listed activities.
 - (b) A period of ten (10) years, from the date the holder commenced with the authorised listed activities, during which period the authorised listed activities, must be concluded.
4. The activities that have been authorised may only be carried out at the site described in Section C above in terms of the approved "Environmental Management Programme" ("EMPr").
 5. Any changes to, or deviations from the scope of the description set out in Section B and Condition 2 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 such 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.

Notification of authorisation and right to appeal

6. The holder of the authorisation must in writing, within 14 (fourteen) calendar days of the date of this decision –
 - 6.1 notify all registered Interested and Affected Parties ("I&APs") of –
 - 6.1.1 the outcome of the application;
 - 6.1.2 the reasons for the decision;
 - 6.1.3 the date of the decision; and
 - 6.1.4 the date of issue of the decision;
 - 6.2 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);
 - 6.3 draw the attention of all registered I&APs to the manner in which they may access the decision; and
 - 6.4 provide the registered I&APs with:
 - 6.4.1 the name of the holder (entity) of this Environmental Authorisation;
 - 6.4.2 name of the responsible person for this Environmental Authorisation;
 - 6.4.3 postal address of the holder;
 - 6.4.4 telephonic and fax details of the holder;
 - 6.4.5 e-mail address, if any; and
 - 6.4.6 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).

Commencement

7. The listed activities, including site preparation, must not commence within 20 (twenty) calendar days from the date the applicant notified the registered I&APs of this decision.
8. In the event that an appeal is lodged with the Appeal Administrator, the effect of this Environmental Authorisation is suspended until such time as the appeal is decided. In the instance where an appeal is lodged the holder may not commence with the activities, including site preparation, until such time as the appeal has been finalised and the holder is authorised to do so.

Written notice to the competent authority

9. A minimum of seven calendar days' notice, in writing, must be given to the competent authority before commencement of construction activities. Commencement for the purpose of this condition includes site preparation.
 - 9.1 The notice must make clear reference to the site details and EIA Reference number given above.
 - 9.2 The notice must also include proof of compliance with the following conditions described herein:
Conditions: 6, 7, 14, 19.5 and 19.6.

Management of activity

10. The EMPr submitted, as dated October 2021 is hereby approved and must be implemented.
11. The Maintenance Management Plan ("MMP") dated October 2021 is hereby adopted and must be implemented.
12. An application for amendment of the EMPr must be submitted to the competent authority in terms of Chapter 5 of the EIA Regulations, 2014 (as amended), if any amendments are to be made to the outcomes of the EMPr and these may only be implemented once the amended EMPr has been authorised by the competent authority.
13. The EMPr, including the MMP, must be included in all contract documentation for all phases of implementation.

Monitoring

14. The holder must appoint a suitably experienced Environment Control Officer ("ECO"), for the duration of the construction phase and site rehabilitation phases of implementation.
The ECO must–
 - 14.1 be appointed prior to commencement of any land clearing or construction activities commencing;
 - 14.2 ensure compliance with the EMPr , MMP and the conditions contained herein; and
 - 14.3 keep record of all activities on site; problems identified; transgressions noted and a task schedule of tasks undertaken by the ECO.
15. A copy of the Environmental Authorisation EMPr and the MMP must be kept at the site where the listed activities will be undertaken. Access to the site referred to in Section C above must be granted and the Environmental Authorisation, EMPr and MMP must be produced to any authorised official representing the competent authority who requests to see these for the purposes of assessing and/or monitoring compliance with the conditions contained herein. The Environmental Authorisation, EMPr and MMP must also be made available for inspection by any employee or agent of the applicant who works performs work at the site.

Environmental audit reports

16. The holder must, for the period during which the Environmental Authorisation and EMPr remain valid –
 - 16.1 ensure that compliance with the conditions of the Environmental Authorisation and the EMPr is audited;
 - 16.2 submit at least two environmental audit reports to the relevant competent authority during the construction phase. The holder must submit one audit report three (3) months after commencement of the construction phase and another audit report six (6) months after completion of the construction phase; and
 - 16.3 submit an environmental audit report every five (5) years while the Environmental Authorisation remains valid.
17. The environmental audit report must be prepared by an independent person and must address the objectives and contain all the information set out in Appendix 7 of the EIA Regulations, 2014 (as amended).

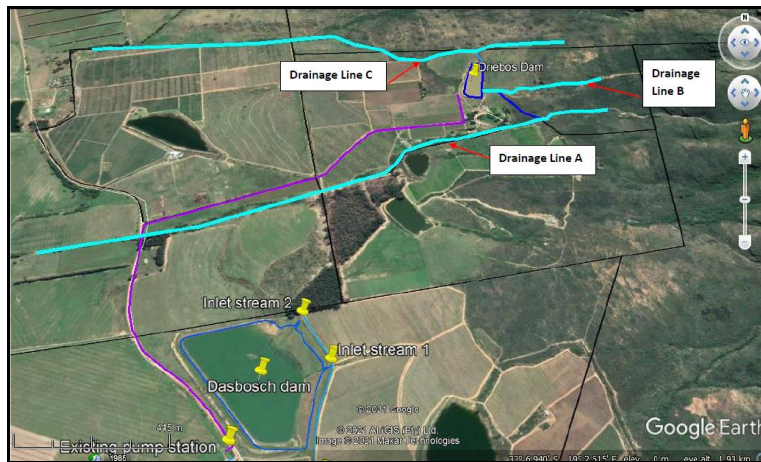
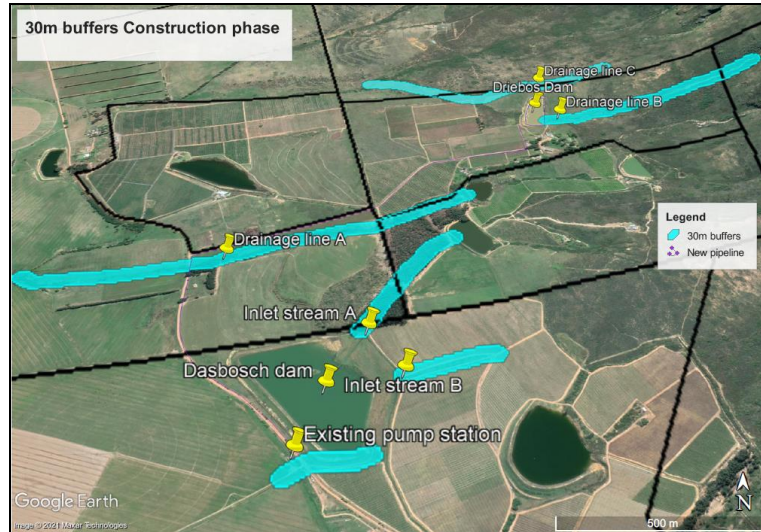
In addition to the above, the environmental audit report, must –

 - 17.1 provide verifiable findings, in a structured and systematic manner, on–
 - (a) the level of compliance with the conditions of the Environmental Authorisation and the EMPr and whether this is sufficient or not; and
 - (b) the extent to which the avoidance, management and mitigation measures provided for in the EMPr achieve the objectives and outcomes of the EMPr and highlight whether this is sufficient or not;
 - 17.2 identify and assess any new impacts and risks as a result of undertaking the activities;
 - 17.3 evaluate the effectiveness of the EMPr;
 - 17.4 identify shortcomings in the EMPr;
 - 17.5 identify the need for any changes to the avoidance, management and mitigation measures provided for in the EMPr;
 - 17.6 indicate the date on which the construction work was commenced with and completed or in the case where the development is incomplete, the progress of the development and rehabilitation;
 - 17.7 include a photographic record of the site applicable to the audit; and
 - 17.8 be informed by the ECO reports.
18. The holder must, within 7 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 anyone on request and, where the holder has such a facility, place on a publicly accessible website.

Specific conditions

19. The following measures recommended in the Specialist assessment of aquatic ecosystems dated September 2020, compiled by Dr. Liz Day of Liz Day Consulting: Specialist River and Wetland Consultant, as included in the EMPr, must be implemented:
 - 19.1 The disturbed riparian buffer areas must be suitably rehabilitated and replanted with appropriate riparian vegetation after completion of silt cleaning activities.
 - 19.2 Fixed access points must be allocated to access the dams and drainage lines.
 - 19.3 Construction vehicle and machinery operations must be restricted to previously disturbed areas, as far as possible.
 - 19.4 Material stockpiles must be set-back from the watercourses by a minimum distance of approximately 15m.
 - 19.5 The proposed site camp must be located on existing disturbed agricultural area, fenced off and clearly demarcated.

- 19.6 Buffer areas, i.e., approximately 30m from watercourse and approximately 15m from drainage lines A, B and C, as also displayed in the images below must cordoned off and be treated as no-go areas:



- 19.7 Stockpiles may be no closer than 30m from the edge of these watercourses.
- 19.8 Maintenance and refuelling of construction machinery and vehicles may only be done in the site camp, and with appropriate anti-spill measures in place.
- 19.9 Hazardous substances and chemicals must only be stored in the construction camp, at least 50m from any watercourse and on a bunded surface.
- 19.10 The pipeline must be attached to the culvert / roadside at the crossing, rather than being buried under the stream bed, or alternatively the pipeline must be secured within a reno mattress laid on the stream bed and set into the stream bank.
- 19.11 The area along the pipeline corridor must be shaped, with the exception of the reno mattress (if this option is utilised).
- 19.12 The stream bank in the vicinity of the pipeline where excavated / damaging has taken place must be reshaped so that it ties in with the existing bank.
- 19.13 Excavated soil from the affected river bank(s) and bed(s) must be stockpiled outside of the channel, so that it will not wash / fall into the channel.
- 19.14 Any erosion, sedimentation or other damage to watercourses must be rectified immediately, with rehabilitation activities that must include *inter alia* the removal of sediment, reshaping of banks and replanting where deemed necessary.

20. The following measure adapted from the correspondence of CapeNature dated 22 April 2021 compiled must be implemented:

- 20.1 No alien fish species must be introduced to the dams and the dams must continually be kept clear of alien fish species.
21. The following measures adapted from the Final BAR dated October 2021, as compiled by Ms. Amanda Fritz-Whyte of PHS Consulting must be implemented:
- 21.1 Topsoil must be harvested from the areas to be cleared and used for the reshape and rehabilitation of the sand borrow pit area.
- 21.2 The Dasbosch dam wall up to highest point must be suitably vegetated to reduce the levels of visibility.
22. An integrated waste management approach, which is based on waste minimisation and incorporates reduction, recycling, re-use and disposal, where appropriate, must be employed. Any solid waste must be disposed of at a waste disposal facility licensed in terms of the applicable legislation.
23. Should any heritage remains be exposed during excavations or any actions on the site, these must immediately be reported to the Provincial Heritage Resources Authority of the Western Cape, Heritage Western Cape (in accordance with the applicable legislation). 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: archaeological remains (including fossil bones and fossil shells); coins; indigenous and/or colonial ceramics; any articles of value or antiquity; marine shell heaps; stone artifacts and bone remains; structures and other built features; rock art and rock engravings and graves or unmarked human burials.

A qualified archaeologist must be contracted where necessary (at the expense of the applicant and in consultation with the relevant authority) to remove any human remains in accordance with the requirements of the relevant 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 the listed activities, 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 NEMA 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 NEMA 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 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 Interested and Affected Parties, 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 Interested and Affected Parties -
 - 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 Interested and Affected Party, 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 Interested and Affected Party and the Organ of State must submit their responding statements, if any, to the appeal authority and the appellant within 20 (twenty) calendar days from the date of receipt of the appeal submission.
4. The appeal and the responding statement must be submitted to the address listed below:

By post: Attention: Marius 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 Marius Venter (Tel: 021 483 3721)
Room 809
8th Floor Utilitas Building, 1 Dorp Street, Cape Town, 8001

Note: For purposes of electronic database management, you are 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 DEADP.Appeals@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. ZAAHIR TOEFY
DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)

DATE OF DECISION: 18 FEBRUARY 2022

Copied to: (1) Ms. Amanda Fritz-Whyte (PHS Consulting)
(2) Ms. Angila Joubert (Bergrivier Local Municipality)
(3) Mr. Derril Daniels (Department of Water and Sanitation)

E-mail: amanda@phsconsulting.co.za
E-mail: jouberta@bergmun.org.za
E-mail: danielsd@dws.gov.za

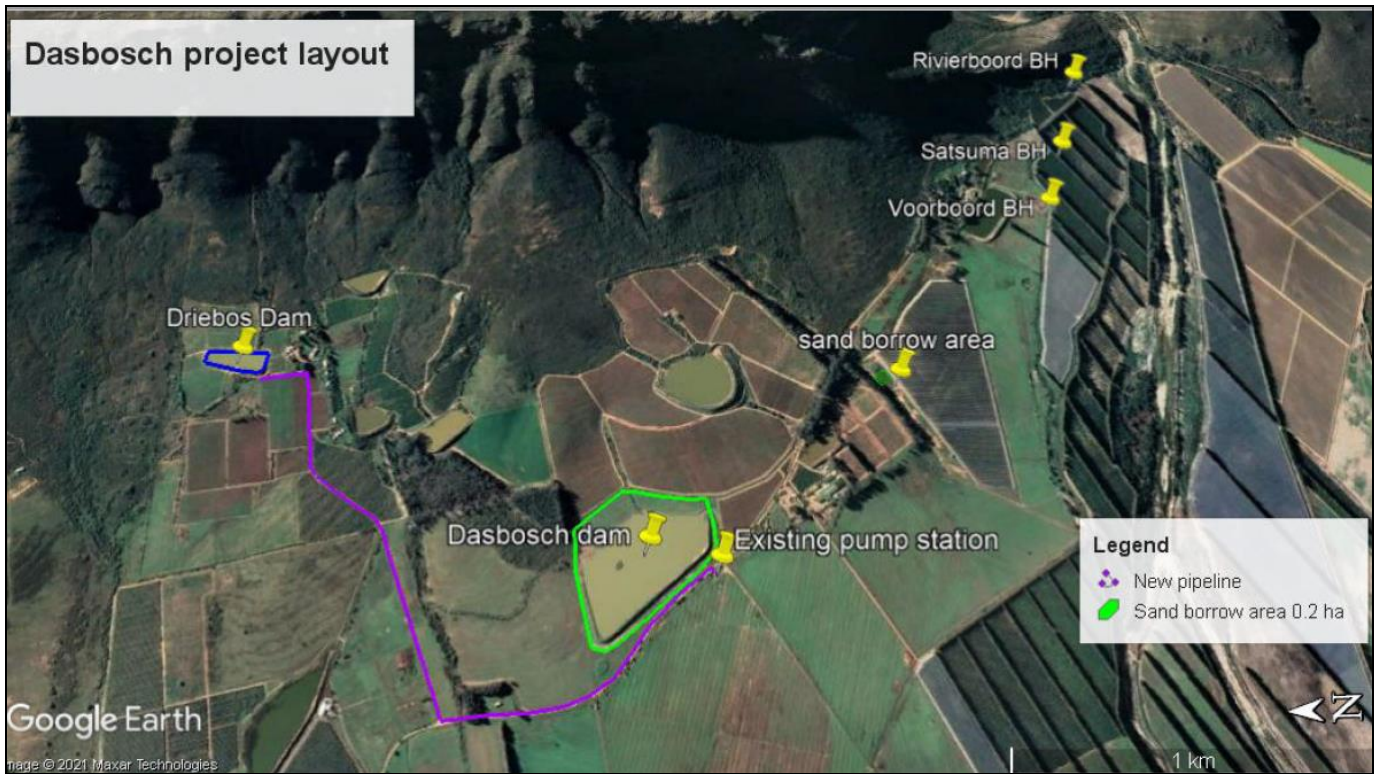
FOR OFFICIAL USE ONLY:

REFERENCE: 16/3/3/1/F1/12/2038/21
NEAS REFERENCE: WCP/EIA/0000949/2021

ANNEXURE 1: LOCALITY MAP



ANNEXURE 2: THE LAYOUT PLAN



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 9 July 2021, the Final BAR dated October 2021, the EMPr as dated October 2021 and the additional information received from the EAP on 11 January 2022.
- b) Relevant information contained in the Departmental information base, including the Guidelines on Public Participation, Alternatives (dated March 2013);
- c) The objectives and requirements of relevant legislation, policies and guidelines, including Section 2 of the NEMA; and
- d) The comments received from I&APs and responses to these, included in the Final BAR.

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

1. Public Participation

The public participation process included:

- notices regarding were sent to all I&APs on 1 March 2021 and 5 August 2021;
- notice boards were placed on site on 2 March 2021 as well as 5 August 2021;
- a notice was placed in the 'Swartland Gazette' newspaper on 2 March 2021;
- the pre-application BAR and associated information were made available on the EAP's website: www.phsconsulting.co.za from 2 March 2021 to 11 May 2021; and
- the Draft BAR and associated information were made available on the EAP's website: www.phsconsulting.co.za from 5 August 2021 to 7 September 2021.

During the public participation process comments were obtained from key authorities and members of the public. The key authorities included CapeNature, West Coast District Municipality, Western Cape Department of Transport and Public Works, Western Cape Department of Agriculture, this Department, Heritage Western Cape and the Bergrivier Local Municipality.

CapeNature on 22 April 2021 indicated that a plant, animal, and terrestrial biodiversity assessment is not required, the conclusions of the freshwater specialist are agreed to, the development is supported if existing water use rights and that alien fish species should not be introduced to the dams. CapeNature on 7 September 2021 indicated that a terrestrial compliance statement is required and that conclusions of the freshwater specialist are agreed to.

The West Coast District Municipality on 4 August 2021 indicated that the municipality does not wish to offer any comments regarding the proposal.

The Western Cape Department of Transport and Public Works on 9 April 2021 indicated that it has no objections to an environmental authorisation being granted.

This Department's Pollution and Chemicals Management Directorate on 10 May 2021 indicated that certain requirements with regards general on-site construction management must be met.

The Western Cape Department of Agriculture on 8 November 2021 confirmed that it has no comment.

Heritage Western Cape indicated in correspondence dated 18 August 2020 that there is no reason to believe that the proposed development will impact on heritage resources.

The Bergrivier Municipality on 25 May 2021 indicated that the groundwater use will have impact on the water table of the Berg River catchment area, while further abstraction from the Berg River, or catchment or groundwater is not encouraged.

The EAP noted all of the abovementioned comments from the key authorities. It was also confirmed that additional requirements, as highlighted by the authorities will be included in the EMPr and that the required Terrestrial Biodiversity Compliance Statement was compiled.

Regarding the groundwater use and further water abstraction, the EAP confirmed that the due process in terms of the Water Use Licence was being followed and proof thereof along with the Water Use Licence Report, as compiled by HDL Consulting was included in the BAR. It was also confirmed in the said report that the groundwater use will not be excessive and within the safe yield.

The comments from the public related to objections against an already constructed dam sluice and the requirements that should have been met, including registration. Clarity was sought regarding the parties who are abstracting from the river canal, and the impacts on water rights of those downstream users.

The EAP responded to the abovementioned by highlighting that the proposed development entails the transfer of existing water use from one property to another. It was further explained that of the determined 340 000m³/annum Mean Annual Runoff ("MAR"), only the additional 198 000m³/annum will be taken.

The EAP also confirmed that the new 2011 sluice was installed above the Dasbosch Nuwe Dam for the taking of the winter water downstream, while the sluice is appropriately closed and locked after the dam is full, otherwise the dam would overflow. It was further confirmed that the sluice also formed part of a previous environmental authorisation issued by this Department on 4 June 2010 (E12/2/3/2-F5/15-0408/08). A formal application will also be lodged to open the sluice in order to transfer the water which is to be released through this 2011 sluice.

This Department is satisfied that the Public Participation Process that was followed met the minimum legal requirements. All the comments and responses made were included in the Final BAR.

2. Alternatives

The preferred site alternative as well as the no-go alternative were assessed.

Site alternative (Preferred by the applicant and herewith authorised)

The only site alternative is for the following development proposal to be undertaken on Portion 2 of the Farm Dasboschfontein No.16 (i.e., proposed expansion of the Dasbosch Dam), Portion 1 of Farm Driedasbosch No.18 (i.e., repair of the existing Driebos dam) from Portion 1 of Farm 19 then along the road servitude of the perimeter between the Remainder of Farm 410 and Portion 1 of Farm 410 and then onto Portion 2 of Farm 16 (i.e., the new pipeline), Porterville. The proposed development includes the following components:

- a. Expansion of the existing Dasbosch dam comprising -
 - raising the embankment of the existing dam by approximately 2.7m;
 - enlarging the storage capacity of the dam from 413 000m³ to approximately 710 500m³; and
 - increasing the footprint of the dam by approximately 35 000m², i.e., from 83 000m² to approximately 118 000m².
- b. Repairs to the existing Driebos dam comprising -
 - construction of a new core trench;
 - increasing the spillway freeboard by raising the embankment by approximately 1m; and
 - construction of a new outlet pipe with an approximate 200mm wide diameter.

The footprint of the existing Driebos dam will be left unchanged.

- c. An approximately 160 mm diameter wide and approximately 2.4 km long pipeline will be constructed from the Driebos Dam to the Dasbosch dam.
- d. Water will be sourced as follows:
 - approximately 200 000m³ groundwater per/annum from existing boreholes;

- approximately an additional 198 900m³ water per/annum run-off from the Driebos catchment area; and
- and the permanent transfer of 98 600m³/annum winter canal water to Dasboschfontein Farm from Drie Das Bos farm.

The required material for the Dasbosch dam expansion and Driebos Dam repair will be obtained from an existing borrow area.

This is the preferred alternative by the applicant based on the following reasons:

- the proposed Dasbosch dam expansion, repair works and new pipeline would be more cost-effective when compared with the option of only extending the wall Driebos dam with a total dam surface area of approximately 5ha;
- the proximity of the dam expansion, repair works and new pipeline also allows for the storage of water which can be pumped back to Driebos dam, when needed; and
- the pipeline route allows for this easy movement of water between the two affected properties as well as the more effective use of winter irrigation water.

Site Alternative (Rejected by the applicant)

During the initial project development phase, the applicant considered the enlargement of the Driebos dam on Portion 1 of Farm Driedasbosch No. 18. This was in order to accommodate the additional irrigation water in Driebos dam. The design would entail extending the dam wall with a total surface area of approximately 5ha. This option was however scoped out and rejected, as it would be more costly when compared with the option of expanding the Dasbosch dam, repairing the Driebos dam and constructing a new pipeline.

No-go alternative (rejected by the applicant):

The no-go alternative entails maintaining the *status quo*, i.e., not expanding the Dasbosch dam, not repairing the Driebos dam nor constructing a new pipeline and all associated infrastructure/components.

The no-go alternative was rejected based on the following reasons:

- less employment opportunities will be created; and
- no additional storage volume will be created and water supply will not be secured for summer irrigation.

3. Impact Assessment and Mitigation measures

3.1 Activity need and desirability

The proposed dam expansion and repair works are required to ensure that sufficient capacity exist to store winter irrigation water for use in summer for crop irrigation. Enabling the continuation and intensifying of the on-site agricultural activities will ensure that the land available for agriculture is optimally used which will furthermore secure existing future employment opportunities. This is in line with the Western Cape Provincial Spatial Development Framework (2014) objectives of enabling economic opportunities where appropriate, as well as one of the strategic goals of the Bergrivier Fourth generation Integrated Development Plan 2017 to 2022, i.e., facilitate an enabling environment for economic growth as well as the Bergrivier Spatial Development Framework 2019 – 2024, which recognises agriculture as an important primary sector of the local economy. The Bergrivier Spatial Development Framework 2019 – 2024 further recognises that agricultural potential is linked to available irrigation water, hence the proposal aims to ensure that suitable storage capacity exists to efficiently utilise the existing and allocated winter irrigation water in summer to intensify and improve the agricultural output of the farm. The proposed development will also take place on already transformed agricultural land and along the existing disturbed road reserves, which is further in line with the central goal of the Environmental Management Framework as contained in the Bergrivier Spatial Development Framework of minimising transformation of land so as to promote *inter alia* biodiversity conservation.

The proposed development is therefore regarded to be consistent with the forward planning and strategic context.

The proposed development includes a transfer of existing water rights from Driebos to Dasbosch and additional 198 900 m³ water proposed to be abstracted from the Driebos catchment. The Water Use Authorisation Report dated July 2021 in this regard confirmed that the MAR of 340 000m³/annum will be sufficient to yield enough water to enable the required water abstraction. According to the Water Use Authorisation Report dated July 2021, the taking of the 198 900 m³ water forms part of the 297 500m³ per annum of water from the Twenty Four Rivers Irrigation Board allocated for use in the Driebos Dam. The 198 900 m³ of water will therefore gravitate from the Driebos Dam to the newly expanded Dasbosch Dam.

3.2 Regional/Planning Context

The site is zoned Agriculture and the proposed development is a permitted land use.

3.3 Botanical Impacts

The proposed activities will take place on a brownfield site comprising existing farmland. No indigenous terrestrial vegetation will be removed for the enlargement of Dasbosch dam, while the proposed repair works to Driebos dam are all contained within the existing dam footprint, which contains no terrestrial indigenous vegetation. The proposed sand borrow-pit area supports some wetland vegetation (e.g. *Juncus acutus* and various seasonal grasses). The proposed pipeline runs along existing disturbed road reserves and is therefore not expected to result in any significant biophysical impacts. It is for such reasons that no significant negative botanical impacts are expected.

3.4 Freshwater Impacts

A Specialist Assessment of Aquatic Ecosystems was conducted by Liz Day Consulting to assess the potential freshwater impacts associated with the development. The aquatic ecosystems associated with the Dasbosch Dam expansion includes the drainage lines on which the dam was constructed and associated unchanneled valley bottom wetlands. The aquatic ecosystems associated with the proposed pipeline includes one watercourse that will be crossed. The aquatic ecosystems associated with the Driebos Dam repair includes two watercourses. The proposed location of the sand borrow pit shown comprises a natural, but modified drainage line as well as an inundated area of moderate habitat diversity that supports wetland vegetation.

In terms of the Dasbosch Dam expansion, the impacts during the construction phase include sedimentation as a result of the placement of fill material, water quality impairment and biota loss. The proposed pipeline will be developed within the existing road reserve but will cross one watercourse on the easterly side and then cross under the road and pass alongside to the pump station at Dasbosch dam. In terms of the pipeline, the impacts during the construction phase include disturbance to the affected bed and banks, disturbance and loss of trees and downstream sedimentation as well as degradation. In terms of the sand borrow pit, the impacts during the construction phase include sedimentation of the drainage line and inundated area, loss of wetland vegetation and disturbance and the creation of a larger area of standing water habitat. The impacts during the operational phase include loss of riparian habitat and function, erosion and sedimentation. In terms of the pipeline, the impacts during the operational phase would be limited to the accidental breakage or wear.

In addition to the above, impacts will potentially result due to the proposed maintenance activities. The impacts of the maintenance activities relating to the Dasbosch dam expansion and Driebos Dam repairs include disturbance of instream habitat, sediment loading into the dams, water quality impairment in the dams and biota loss. The impacts of the maintenance activities relating to the pipeline includes disturbance to the bed and banks of Driebos drainage line, disturbance and loss of trees to allow pipeline excavation, passage of sediment into the stream, water quality impairment and erosion.

According to the Specialist assessment of aquatic ecosystems dated September 2020, the abovementioned freshwater impacts can be readily mitigated or largely managed to levels that are of low to very low negative significance. Some of the mitigation measures include treating most of the abovementioned watercourses as no-go areas in the form of established buffer areas. The recommended buffer areas to minimise disturbance of watercourses during

construction and maintenance phases were therefore included as part of the provisions of the EMPr and MMP as well as the conditions of this environmental authorisation. Further mitigation measures includes *inter alia*, re-vegetating exposed areas, possibly undertaking the proposed works and maintenance activities during the drier summer months and outside of main bird breeding / nesting periods, the implementing of the approved EMPr to manage the on-site construction related activities, reshaping and vegetating the disturbed river banks, minimising disturbances to the freshwater elements as far as possible, stabilising the affected river banks and beds and ensuring that vegetation and sediment removal be carried out using manual labour rather than machinery, as far as possible. These measures were therefore included in this environmental authorisation, the approved EMPr and the MMP.

The MMP approved as part of this authorisation contains the measures and guidance as to how the maintenance activities will be undertaken. All the measures contained in the MMP aims to avoid and/or mitigate any negative impacts on the watercourses during the maintenance activities.

No direct impacts to the wetlands and other watercourses downstream of Dasbosch Dam are expected.

Since the proposed development includes both a transfer of existing water rights from Driebos to Dasbosch and additional 198 900 m³ water proposed to be abstracted from the Driebos catchment, it was determined that the calculated MAR will be sufficient for the proposed taking of 198 900m³/annum to fill the Driebos Dam.

Using the stored winter irrigation water for irrigation in summer is considered the best option, as summer months are drier, with more strain on available water resources. In this sense the proposed development will avoid placing an additional strain on the available water resources during the dry summer months.

3.5 Geotechnical

Suitable material for the dam expansion will be obtained from an existing borrow pit area. Since the development (with the exception of the new pipeline) comprises the expansion of an existing dam and also the repair of an existing dam, it is expected that existing suitable founding conditions exist to accommodate the proposed expansion and repair works.

3.6 Visual/Sense of place

No significant visual impacts are expected, as the proposed expansion, repair works and pipeline will take place in an existing agricultural setting. These works will therefore not be out of character with the immediate surrounds. The Daschbosch dam wall up to highest point must also be suitably vegetated to reduce the levels of visibility and thereby mitigate the visual impact.

3.7 Heritage

No areas containing sensitive heritage resources will be impacted. Heritage Western Cape indicated in correspondence dated 18 August 2020 that there is no reason to believe that the proposed development will impact on heritage resources and such no further action under Section 38 of the National Heritage Resources Act (Act No. 25 of 1999) is required.

3.8 Services

Electrical services are required and the current spare capacity from an existing pump station is sufficient. Eskom indicated in the correspondence dated 6 May 2019 that sufficient spare capacity exists to provide the required electricity.

3.9 Nuisance

Nuisance related impacts such as dust and noise will be temporary and limited to the construction phase, which will be managed in accordance with the measures included in the EMPr.

3.10 Socio-economic

The proposed expansion will provide produce for the local and export market and thereby create direct and indirect employment opportunities during the construction and operational phases.

The development will result in both negative and positive impacts.

Negative Impacts:

- Disturbance to the freshwater systems.

Positive impacts:

- Provision of employment opportunities during construction and the operational phases.
- Intensify and improving the agricultural output of the farm.

4. National Environmental Management Act Principles

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

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

5. Conclusion

In view of the above, the NEMA principles, compliance with the conditions stipulated in this Environmental Authorisation, and compliance with the EMP, 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 your 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."

-----END-----