

ENVIRONMENTAL IMPACT ASSESSMENT

APPLICATION IN TERMS OF SECTION 24G OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) TO RECTIFY THE UNLAWFUL CONSTRUCTION OF 3 DAMS ON REMAINDER PORTION 3 OF FARM WILDSCHUTSKRAAL 13372, NEAR CITRUSDAL.

BACKGROUND INFORMATION DOCUMENT (BID)

AND INVITATION TO PARTICIPATE

March 2019

DEA&DP REFERENCE No: 14/2/4/1/F2/4/0005/18

1. PURPOSE OF THIS DOCUMENT

The purpose of this document is to:

- Provide stakeholders with information about the unlawful construction of 3 dams on Remainder Portion 3 of Farm Wildschutskraal 13372, near Citrusdal in Western Cape Province.
- Introduce and explain the Section 24(G) and Public Participation process to be followed for the proposed development, in terms of applicable environmental legislation (National Environmental Management Act (NEMA), (Act No.107 of 1998), as amended;
- Invite all stakeholders to register and comment on any aspect related to the proposed development between the **11th of March and the 15th of April 2019.**

2. PROJECT DESCRIPTION

The applicant have constructed three dams on Remainder of Portion 3 of Farm Wildschutskraal 13372 without having obtained the required approvals in terms of the National Environmental Management Act 107 of 1998 (NEMA) and the National Water Act 36 of 1998 (NWA). The applicant obtained the required approval from the Citrusdal Water Users Association and obtained letters of no objection from the surrounding land owners for the construction of the dams. These approvals were issued mainly given the fact that the dams would not impact on any existing water rights downstream as the water would only be harvested during winter flows.

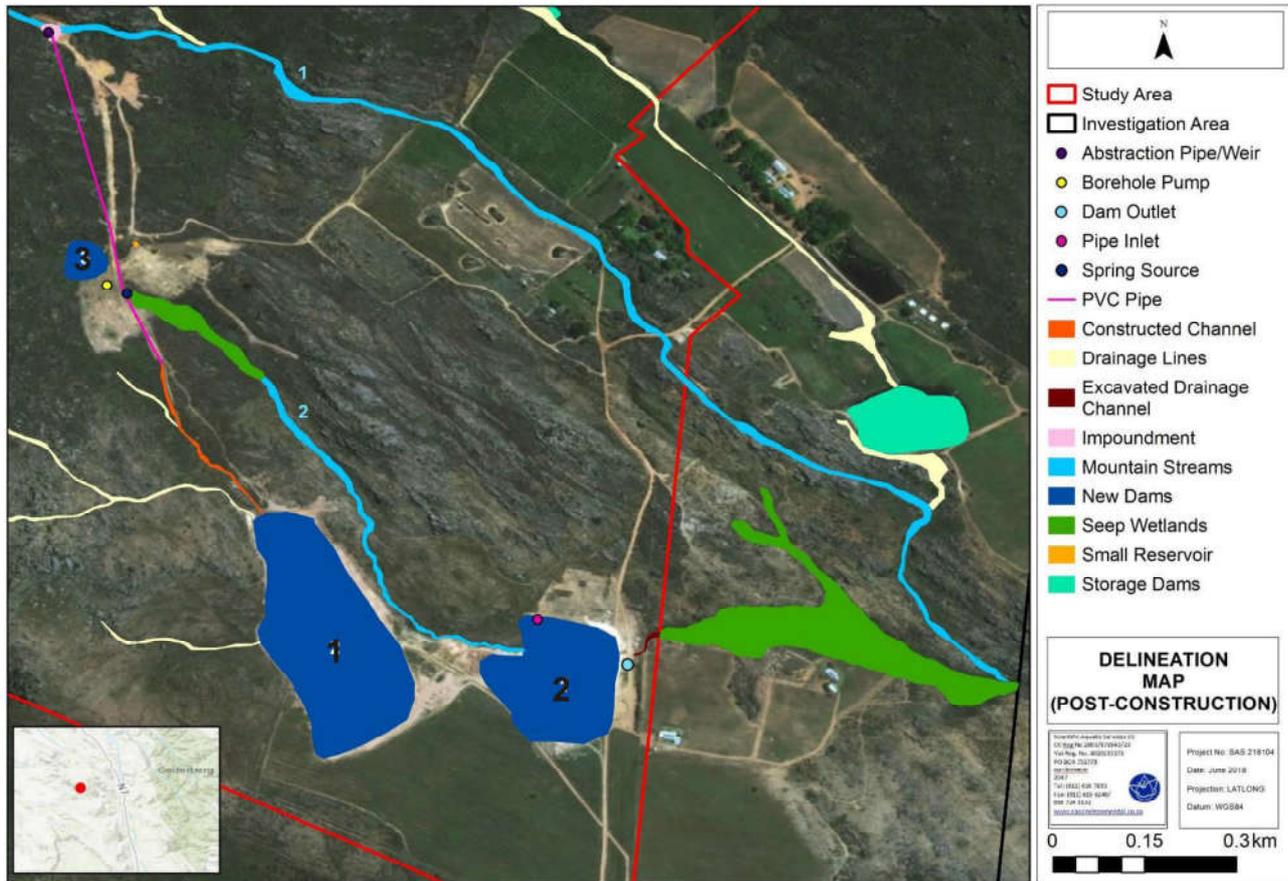
Tierhoek **Dam 1** is an off-stream dam with a storage capacity of $\pm 276\,000\text{ m}^3$ located in the catchment area of the Grootkloof River, which forms part of the Olifants River drainage area. The dam is primarily filled with water abstracted from an adjacent catchment and to a far lesser extent with runoff from its own very small catchment area. The main purpose and use of the dam is for irrigation of fruit and fresh produce grown and produced for the local and export markets. Tierhoek Dam 1 was classified on 04 Januarie 2018 as a Medium category 2 dam with a Low risk potential in terms of the dam safety legislation at the time, as set out in sections 117 to 123, Chapter 12 of the National Water Act 36 of 1998. The full capacity of the dam is in the order of $276\,000\text{ m}^3$ at the 772,15m contour level with a total flooded area of $\pm 4,4\text{ ha}$.

The global layout of the dam is a long L-shaped embankment with a maximum height of $\pm 17\text{m}$ and a crest length in the order of 470m. The wall crest is between $\pm 3,4\text{ m}$ and $\pm 4,4\text{ m}$ wide with an average upstream slope of $\pm 1\text{v} : 2,5\text{h}$ and downstream slope of $\pm 1\text{v} : 1,5\text{h}$. It has partly natural inflow and is equipped with an open channel spillway located at the northern end of the wall, as well as an outlet pipe under the embankment.

Tierhoek **Dam 2** is an in-stream dam with a storage capacity of $\pm 207\,000\text{ m}^3$ located in the catchment area of the Grootkloof River, which forms part of the Olifants River drainage area. Tierhoek Dam 2 is situated directly downstream of Dam 1 that is filled with water abstracted from an adjacent catchment north of the dam. Dam 2 is located downstream from Dam 1 and is also filled with releases from Dam 1 and not as much with runoff from its own very small catchment area. The main purpose and use of the dam is for irrigation of fruit and fresh produce grown and produced for the local and export markets. Tierhoek Dam 2 [12/2/E100/BV] was classified on 04 Januarie 2018 as a Small category 1 dam with a Low risk potential in terms of the dam safety legislation at the time, as set out in sections 117 to 123, Chapter 12 of the National Water Act 36 of 1998. Full capacity of the dam is in the order of $207\,000\text{ m}^3$ at the 751,65m contour level with a total flooded area of $\pm 3,3\text{ ha}$.

The global layout of the dam is a U-shaped embankment with a maximum height of $\pm 13,3\text{m}$ and a crest length in the order of 375m. The wall crest is between $\pm 3,6\text{ m}$ and $\pm 5,3\text{ m}$ wide with an upstream slope varying between $\pm 1\text{ v} : 2,5\text{ h}$ and $\pm 1\text{ v} : 3,4\text{ h}$ and downstream slope between $\pm 1\text{ v} : 1,5\text{ h}$ and $\pm 1\text{ v} : 2,4\text{ h}$. It has partly natural inflows and is equipped with an open channel spillway located at the northern end of the wall, as well as an outlet pipe under the embankment.

A **third dam** was constructed toward the north of Dam 1 and Dam 2 and is a much smaller dam in volume and extent. Dam 3 is a lined, off-stream dam which is sourced from a borehole, located just upstream of a spring source. Dam 3 has been lined with HDPE material.



The construction activities have also included a number of ancillary activities.

A drainage line has been re-aligned and lined with plastic to convey water into Dam 1. Water is abstracted from the northern most mountain stream and diverted by means of a large earth weir which diverts the water and a PVC pipeline transports the water into a lined channel above Dam 1. Two boreholes were also instated. Borehole 1 feeds Dam 3 from where it is conveyed via the overflow into the constructed channel towards Dam 1. The water from borehole 2 is fed via a pvc pipeline to Dam 2. The borehole pumps are powered via small solar plants which have been installed.

The DEA&DP Environmental Law Enforcement Directorate conducted a site inspection on the 1st of November 2017 and subsequently issued a Pre-Compliance Notice to the client (Tierhoek Boerdery Pty Ltd) on the 18th of December 2017. GNEC have subsequently informed the Department of our appointment on the 16th of February 2018. A further Compliance Notice have not been issued to the client. All construction activities have been completed prior to the site visit from the Department.

A Specialist Freshwater Impact Assessment, Botanical Impact Assessment as well as an Engineering Design Evaluation and Construction Completion Report will be conducted in order to further inform the Draft S24G Report.

3. NATIONAL ENVIRONMENTAL MANAGEMENT ACT (ACT NO. 107 OF 1998), AS AMENDED

Environmental Assessment

An Application for retrospective Environmental Authorization (EA) is currently being undertaken in order to authorize the following “Listed Activities” in terms of the National Environmental Management Act, 1998 (“NEMA”) (Act No. 107 of 1998).

Government Notice No. R. 983 of 04 December 2014, as amended –

- Listing Notice 1 – Activity No: 12, 13 and 19
- Listing Notice 2 – Activity No: 16
- Listing Notice 3 – Activity No: 12 and 14

Definition of an Environmental Impact Assessment (EIA)

An environmental impact assessment is a good planning tool to assist in the identification, evaluation and assessment of potential positive and negative impacts of a proposed development on the environment. It also recommends ways to avoid or reduce negative impacts, and ensure that developments are sustainable without affecting people’s lives and the environment adversely.

As mentioned, an EIA is undertaken in terms of the NEMA (Act No 107 of 1998) as amended, and the EIA Regulations.

4. POTENTIAL ENVIRONMENTAL ISSUES

Potential environmental issues that will be addressed in the assessment include inter alia:

Freshwater

The following freshwater features were identified within the study area prior to commencement:

- Various drainage lines from the surrounding Skimmelsberg Mountain range;
- Two mountain streams;
- A Seep Wetland (0,76 ha) associated with a spring formed upstream of one of the mountain streams;
- A small Seep Wetland (0,37 ha) associated with the confluence of various drainage lines; and
- A large Seep Wetland (3, 35 ha) located downstream of the mountain streams, within the 500m investigation zone.

The freshwater resources were classified as Inland Systems, located within the Western Folded Mountains Ecoregion.

Botanical

Prior to the commencement of the building of the dams and associated infrastructure, the vegetation within the development footprint largely comprised intact fynbos with some smaller areas that had been previously cultivated. Adjacent to the construction footprint and cultivated areas, the vegetation is intact and in very good condition. It appears from the historical aerial imagery that all areas (apart from those previously cultivated) contained vegetation in the same intact condition prior to the dam construction. The vegetation that remains on the site is typical mountain fynbos found on acidic soils derived from sandstones. The vegetation communities are fairly homogeneous but show variation in species composition as habitat changes from open slopes (proteoid fynbos) to rocky outcrops (thicket vegetation) and riverine/seepage areas (moisture tolerant species). These intact fynbos areas support a very high diversity of species and important ecological processes and are considered to have high botanical conservation value.

Socio Economic

The benefits associated with the construction of the dams include an increase in agricultural production due to the availability of irrigation water which have facilitated the planting of large orchards in the proximity of the dams. This increased in orchards have also resulted in a few additional job opportunities being available to the local farm working community. The majority of this fruit will be exported which will also have a positive impact on the greater economy..

As mentioned, the Basic Assessment Report will identify measures to reduce identified negative impacts, and optimise positive impacts.

5. PUBLIC PARTICIPATION

In terms of the NEMA, public participation forms an integral part of the environmental assessment process. The public participation process provides people who may be affected by the proposed development with an opportunity to provide comment and to raise issues of concern about the project or to make suggestions that may result in enhanced benefits for the project.

Comments and issues raised during the public participation process will be captured, evaluated and included in a Comment and Response Report. These issues will be addressed and included in the final, Basic Assessment Report which will be submitted to the Department of Environmental Affairs and Development Planning (DEA&DP).

6. INVITATION TO PARTICIPATE

GNEC was appointed as an independent environmental consultancy by **Tierhoek Boerdery (Pty) Ltd** to facilitate the environmental impact assessment and public participation process for the proposed project. A copy of the **Draft Section 24(G) Report** is made available at the Citrusdal Public Library from **Monday the 11th of March until Friday the 12th of April 2019**. Alternatively a copy of the report is also available on the GNEC website at www.gnec.co.za. To register as an Interested and Affected Party, please complete and return the enclosed registration sheet and submit any written comments to:

GNEC

Att: Mr Renier Kapp

P.O. Box 2632, Paarl, 7620

Tel: 021 870 1874

Fax: 021 870 1873

Cell: 082 675 5233

E-mail: renier@gnec.co.za

GNEC Ref No: 20478

DEA&DP Ref No: 14/2/4/1/F2/4/0005/18

Please submit the registration sheet to GNEC by no later than Friday the 12th of April 2019.

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**REGISTRATION AND COMMENT SHEET
 March 2019**

DEA&DP REFERENCE No: 14/2/4/1/F2/4/0005/18

GNEC REF: 20478

Title _____ **Name and Surname** _____
Company Name/Interest _____
Postal-or-Residential Address _____
Area _____ **Postal Code** _____
Tel: _____ **Cell Phone** _____
Fax: _____
E-Mail Address _____

Please indicate your preferred method of communication (Please indicate with an X)					
Fax		E-Mail		Post	

Comments (You are welcome to attach more sheets if necessary (Your comments will be considered in the EIA (BA) process)

Please provide details of any other person/company whom you would like us to add to our mailing list

Title _____ **Name and Surname** _____
Company Name _____
Tel: _____ **Fax No:** _____
E-Mail _____

Please complete and return to GNEC by no later than **Friday the 12th of April 2019**
Attention: Mr Renier Kapp
 P.O. Box 2632, Paarl, 7620
 Tel: 021 870 1874, Fax: 021 870 1873, Cell: 082 675 5233, E-mail: renier@gnec.co.za
Thank You for your participation

