



**REFERENCE:** 16/3/3/1/D4/12/0005/19  
**ENQUIRIES:** Shireen Pullen  
**DATE OF ISSUE:** 04 NOV 2019

The Director  
Farmhill Properties (Pty) Ltd  
PO Box 100  
**HOEKWIL**  
6538

**Attention: Mr. Mark Rubin**

Telefax: (044) 850 1155  
Email: markrubin@mweb.co.za

Dear Sir

**APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 (AS AMENDED): PROPOSED FARMHILL PROPERTIES (PTY) LTD DAM EXPANSION ON REMAINDER PORTION 11 OF FARM 183 EASTBROOK AND PORTION 83 OF FARM 183 EASTBROOK, KARATARA, KNYSNA**

With reference to your application for the abovementioned, find below the outcome with respect to this application.

**ENVIRONMENTAL AUTHORISATION**

**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, the Department herewith **grants Environmental Authorisation** to the applicant to undertake the listed activities specified in section B below with respect to the preferred alternative, described in the final Basic Assessment Report ("BAR") dated 16 July 2019.

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  
Farmhill Properties (Pty) Ltd  
Mr. Mark Rubin  
% PO Box 100  
**HOEKWIL**  
6538

4th Floor, York Park Building,  
93 York Street, George, 6529  
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 Email: markrubin@mweb.co.za

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

**B. LIST OF ACTIVITIES AUTHORISED**

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

The expansion of an existing dam to increase the storage capacity to 135 500m<sup>3</sup> with a spillway and syphon at 120 000m<sup>3</sup> in order to irrigate macadamias to be planted on the existing farmland, which is approximately 30 hectares in extent. The expanded dam will have the following specifications:

- Dam wall length: ±150m
- Dam wall height: ±12m
- Water depth inside dam: ±10m
- Dry board: ±1.8m
- Dam volume: 135 500m<sup>3</sup>
- Outlet or siphon system as part of the dam wall construction

The existing water use makes provision for abstraction of 120 000m<sup>3</sup> and the design of the dam and spillway at 120 000m<sup>3</sup> will limit the storage to this volume as well.

2014 NEMA EIA Listed activities (as amended on 7 April 2017) –

Listed Activities	Activity/Project Description
<p><b>Government Notice No. GN No. R 327 of 7 April 2017</b>  <b>Activity 19</b>  <b>Activity Description</b></p> <p>The infilling or depositing of any material of more than 10m<sup>3</sup> into, or the dredging, <b>excavation, removal or moving of soil</b>, sand, shells, shell grit, pebbles or rock of <b>more than 10m<sup>3</sup> from a watercourse</b> 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</p>	<p>The expansion of the dam and on-going maintenance thereof will result in the moving and removal of more than 10m<sup>3</sup> from the watercourse area.</p>

<p>harbour, in which case activity 26 in Listing Notice 2 of 2014 applies.</p>	
<p><b>Activity 27</b> <b>Activity Description</b></p> <p>The clearance of an area of <b>1ha or more, but less than 20ha of indigenous vegetation</b>, 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.</p>	<p>The expansion of the dam will result in the permanent removal of more than 1ha of indigenous vegetation (regardless the level of infestation).</p>
<p><b>Activity 48</b> <b>Activity Description</b></p> <p>The expansion of – (i) infrastructure or structures where the physical footprint is expanded by 100m<sup>2</sup> or more; or <b>(ii) dams or weirs, where the dam or weir, including infrastructure and water surface area, is expanded by 100m<sup>2</sup> or more.</b> Where such expansion occurs – (a) within a watercourse; (b) in front of a development setback; or (c) if no development setback exists, within 32m of a watercourse, measured from the edge of a watercourse. Excluding – (aa) the expansion of infrastructure within existing ports or harbours that will not increase the development footprint of the port or harbour; (bb) where such expansion activities are related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies; (cc) activities listed in activity 14 of Listing Notice 2 of 2014 or activity 14 in Listing Notice 3 of 2014, in which case that activity applies; (dd) where such expansion occurs within an urban area; or or (ee) where such expansion occurs within existing roads, road reserves or railway line reserves.</p>	<p>The existing dam will be expanded with an area (approximately 31 500m<sup>2</sup>) far exceeding 100m<sup>2</sup>.</p>
<p><b>Government Notice No GN No. 325 of 7 April 2017</b> <b>Activity 12</b> <b>Activity Description</b></p> <p>The clearance of an area of <b>300m<sup>2</sup> or more of indigenous vegetation</b> except where such clearance of indigenous</p>	<p>The expansion of the existing dam will take place in an area which is identified as an Endangered Ecosystem and will</p>

<p>vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.</p> <p>(i) Within any <b>critically endangered or endangered ecosystem listed in terms of section 52 of the NEM:BA</b> 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;</p> <p>(ii) Within critical biodiversity areas identified in bioregional plans;</p> <p>(iii) Within the littoral active zone or 100m inland from the 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;</p> <p>(iv) On land, where, at the time of the coming into effect of this Notice or thereafter such a land was zoned open space, conservation or had an equivalent zoning; or</p> <p>(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.</p>	<p>result in the clearance of more than 300m<sup>2</sup> of Garden Route Shale Fynbos vegetation.</p> <p>Furthermore, the expansion of the existing dam is located in an area which has been identified as an aquatic and terrestrial critical biodiversity area in the 2017 Western Cape Biodiversity Sector Plan (WCBSP).</p>
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**“Listed activities”.**

Although activity 23 of Listing Notice 3 was applied for, this Department cannot approve the activity as the Critical biodiversity areas in bioregional plans was not yet adopted by the competent authority, making the activity not listed for the proposed development.

**C. Site description and location**

The listed activities described above will take place on the Remainder of Farm Eastbrook 183/11 and Portion of Farm Eastbrook 183/83, which are located west of the village of Karatara in the Knysna Municipal area. The existing dam is on the Huis River and also receives water from an unnamed drainage line from the north-west. Access to the site is via the Seven Passes Road.

SG 21 Code: C03900000000018300011  
C03900000000018300089

Coordinates: 33° 55' 25" South  
22° 49' 21" East

The listed activities will be undertaken at the following co-ordinates:

The above is hereinafter referred to as **“the site”**.

## D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

Environmental Assessment Practitioner:  
Cape Environmental Assessment Practitioners (Pty) Ltd  
% Ms Melissa Mackay  
PO Box 2070  
**GEORGE**  
6530

Tel: 044 874 0365  
Fax: 044 874 0432

## 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 following preferred Alternative 1 as described in Section B above:

The proposal entails the expansion of an existing dam in the Huis River currently used to irrigate 30 hectares for grazing for dairy farming in order to diversify the current operations to include Macadamia nuts.

The specifications of the expansion are as follows:

- Dam wall length:  $\pm 150\text{m}$
- Dam wall height:  $\pm 12\text{m}$
- Water depth inside dam:  $\pm 10\text{m}$
- Dry board:  $\pm 1.8\text{m}$
- Dam volume:  $135\,500\text{m}^3$
- Outlet or siphon system as part of the dam wall construction

The existing dam covers an area of  $\pm 0.37\text{ha}$ . The dam will be expanded from the current  $\pm 0.37\text{ha}$  to  $\pm 3.5\text{ha}$  by increasing the existing dam wall. The existing water use makes provision for abstraction of  $120\,000\text{m}^3$  and the design of the dam and spillway at  $120\,000\text{m}^3$  will limit the storage of water to that volume as well.

2. The non-operational component of the Environmental Authorisation is subject to the following:
  - 2.1 The development activities (construction phase) must be concluded within a period of **seven (7) years** from the date of issue of this authorisation; and
  - 2.2 The post construction rehabilitation and monitoring requirements must be finalised within a period of 6-months from the date the development activities (construction phase) are concluded.
3. The operational aspects of this Environmental Authorisation are granted for a period until **4 November 2049** during which period all rehabilitation and monitoring requirements and final environmental auditing and reporting must be finalised. The dam may not be operated without a valid Environmental Authorisation.

4. The holder shall be responsible for ensuring compliance with the conditions by any person acting on his/her behalf, including an agent, sub-contractor, employee or any person rendering a service to the holder.
5. Any changes to, or deviations from the scope of the alternative described in section B above must be accepted or approved, in writing, by the Competent Authority before such changes or deviations may be implemented. In assessing whether to grant such acceptance/approval or not, the Competent Authority may request information in order to evaluate the significance and impacts of such changes or deviations, and it may be necessary for the holder to apply for further authorisation in terms of the applicable legislation.

#### **Written notice to the Department**

6. Seven calendar days' notice, in writing, must be given to the Department before start of construction 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, 8, 9 and 20

#### **Notification of authorisation and right to appeal**

7. The applicant 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 2;
    - 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 National Appeals Regulations, 2014 detailed in Section F 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 name of the responsible person for this Environmental Authorisation,
    - 7.4.3 postal address of the holder,
    - 7.4.4 telephonic and fax details of the holder,
    - 7.4.5 e-mail address, if any, of the holder,
    - 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 2014 National Appeals Regulations.

### **Management of activity**

8. The draft EMPr submitted as part of the application for Environmental Authorisation must be amended to address the following aspects, and must be re-submitted to the Department and approved, prior to the start of construction activities:
  - 8.1 Incorporate all the conditions given in this Environmental Authorisation;
  - 8.2 Include a demarcation map, which clearly illustrates the areas (construction areas, protected areas as no-go areas and where erosion control measures must be put in place) to ensure that the aforementioned areas are suitably demarcated at all the required places, prior to construction.
  - 8.3 Demarcation of construction and no-go areas during the construction phase.
  - 8.4 Include a detailed Erosion Management Plan which clearly detail the measures that must be implemented to mitigate and manage pollution and sedimentation of the dam and stream/river, as a result of surface water runoff from exposed areas, as well as areas where alien invasive species will be removed/cleared.
  - 8.5 Incorporate the final design to be implemented in accordance with this authorisation.
  - 8.6 Include a rehabilitation plan which complies with the requirements of condition 17.

An application for amendment to the EMPr must be submitted to the Department if any further amendments to the EMPr are proposed, other than those mentioned above, and this may only be implemented once the amended EMPr has been authorised by the Department.

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

### **Monitoring**

9. The holder must appoint a suitably experienced environmental control officer ("ECO") must be appointed in the Pre-Construction and Construction Phase to monitor that the applicant is in compliance with all of the requirements of the EMPr and the EA. Such appointment must take place prior to the start of of any land clearing or construction activities to ensure compliance with the EMPr and the conditions contained herein.
10. A copy of the Environmental Authorisation, EMPr, audit reports and compliance monitoring reports must be kept at the site of the authorised activities, and must be made available to anyone on request.
11. Access to the site referred to in section C must be granted and the environmental reports mentioned above must be produced to any authorised official representing the Department who requests to see it for the purposes of assessing and/or monitoring compliance with the conditions contained herein.

### **Environmental Audit Reports**

12. The holder must, for the period during which the environmental authorisation and EMPr remain valid—

- 12.1 ensure the compliance with the conditions of the environmental authorisation and the EMPr, is audited;
  - 12.2 undertake during the construction phase annual environmental audit(s) and submit these Environmental Audit Report(s) to the Competent Authority.
  - 12.3 submitted the final construction phase Environmental Audit Report(s) to the Competent Authority within **two (2)** months of completion of construction and another audit report 1 year after rehabilitation has been done;
  - 12.3 ensure during the operation phase that environmental audit(s) are performed and Environmental Audit Report(s) submitted to the Competent Authority every **five (5)** years.
  - 12.4 ensure that an environmental audit report is prepared by an independent person with the relevant environmental auditing expertise and submit these to the Competent Authority.
13. The Environmental Audit Report, must –
- 13.1 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 ability of the measures contained in the EMPr to sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity.
  - 13.2 identify and assess any new impacts and risks as a result of undertaking the activity;
  - 13.3 evaluate the effectiveness of the EMPr;
  - 13.4 identify shortcomings in the EMPr;
  - 13.5 identify the need for any changes to the avoidance, management and mitigation measures provided for in the EMPr;
  - 13.6 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;
  - 13.7 indicate the date on which the operational phase was commenced with and the progress of the rehabilitation;
  - 13.8 include a photographic record of the site applicable to the audit and be informed by the ECO reports.
14. The holder must, within 7 days of the submission of the 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 on a publicly accessible website (if applicable).

### **Specific Conditions**

15. Clearance of vegetation from the dam footprint must be done outside of the breeding season for birds (spring and summer) to minimise losses of chicks and eggs.
16. An outlet or siphon system must be installed as part of the dam wall construction to ensure a continuous supply of water to the downstream watercourse and to limit the storage capacity to 120000m<sup>3</sup> unless a Water Use License is obtained to store 135000m<sup>3</sup>.
17. A rehabilitation plan must be developed with the aim of restoring the integrity of the ecological structure and functioning of the riparian zone of both tributaries upstream



of the dam. Such rehabilitation plan must be developed and implemented with the input of the freshwater specialist.

18. Alien plant seedlings must be identified and removed throughout the construction phase and this activity must continue post construction, as part of alien invasive management areas.
19. A meter-system must be installed to monitor storage and abstraction activities to prevent unlawful storage or abstraction of water.
20. Effective pollution and erosion control measures must be implemented on the subject property. This must be done in accordance with the Erosion Management Plan that must be submitted and approved by this Department as part of the EMPr, prior to commencement of construction activities.
21. 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 landfill licensed in terms of the applicable legislation. This must be done in accordance with the Integrated Waste Management Plan that must be submitted and approved by this Department as part of the EMPr, prior to commencement of construction activities.
22. In case of decommissioning, a biodiversity assessment of aquatic fauna and flora of the dam along with a risk assessment of releasing these taxa into the watercourse must be conducted by a suitably qualified specialist and rare or endangered species associated with dam must be relocated to suitable habitat.
23. 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: 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; shipwrecks; 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.

## **Operational Aspects**

24. On-going alien invasive management must be undertaken on the subject property.
25. Water storage and abstraction data must be kept and made available to this Department and or the Department of Water Affairs.

## **F. General**

1. Notwithstanding this Environmental Authorisation, the holder must comply with any other statutory requirements that may be applicable when undertaking the listed activities.

## ***Amendment of Environmental Authorisation and EMPr***

2. If the holder wishes to extend a validity period specified in the Environmental Authorisation, an application for amendment in this regard must be made to the relevant Competent Authority prior to the expiry date of such a period.

Note:

- (a) Failure to lodge an application for amendment prior to the expiry of the validity period of the Environmental Authorisation will result in the lapsing of the Environmental Authorisation.
  - (b) It is an offence in terms of Section 49A(1)(a) of NEMA for a person to commence with a listed activity if the competent authority has not granted an Environmental Authorisation for the undertaking of the activity.
3. An application for amendment of the Environmental Authorisation to the Competent Authority is required where any detail with respect to the Environmental Authorisation must be amended, added, substituted, corrected, removed or updated.

In assessing whether to grant such 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.

The onus is on the holder to verify whether such changes to the environmental authorisation must be approved in writing by the relevant competent authority prior to the implementation thereof.

4. The validity period of the environmental authorisation may not be extended unless the required process to amend the environmental authorisation as contemplated in the Environmental Impact Assessment Regulations, 2014 (or subsequent notice) is followed.
5. The manner and frequency for updating the EMPr is as follows:
  - (a) Any further amendments to the EMPr, other than those mentioned above, must be approved in writing by the relevant competent authority.
  - (b) An application for amendment to the EMPr must be submitted to the Competent Authority if any amendments are to be made to the impact management outcomes of the EMPr. Such amendment(s) may only be implemented once the amended EMP has been approved by the competent authority.

The onus is however on the holder to confirm the legislative process requirements for the above scenarios at that time.

6. Where an amendment to the impact management outcomes of an EMPr is required before an environmental audit is required in terms of the environmental authorisation, an EMPr may be amended on application by the holder of the environmental authorisation.

## ***Compliance with Environmental Authorisation and EMPr***

7. Non-compliance with a condition of this environmental authorisation or EMPr is an offence in terms of Section 49A(1)(c) of the National Environmental Management Act, 1998 (Act no. 107 of 1998, as amended).

8. In the event that the Environmental Authorisation should lapse, it is an offence in terms of Section 49A(1)(a) of NEMA for a person to commence with a listed activity, unless the competent authority has granted an Environmental Authorisation for the undertaking of the activity.
9. Offences in terms of the NEMA and the Environmental Impact Assessment Regulations, 2014, will render the offender liable for criminal prosecution.

## **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 the notification of the decision was sent to the holder by the Competent Authority –
  - 1.1. Submit an appeal in accordance with Regulation 4 of the National Appeal Regulations 2014 (as amended) to the Appeal Administrator; and
  - 1.2. Submit a copy of the appeal to any registered I&APs, any Organ of State with interest in the matter and the decision-maker i.e. the Competent Authority that issued the decision. -
2. An appellant (if NOT the holder of the decision) must, within 20 (twenty) calendar days from the date 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 and the responding statement must be submitted to the address listed below:

By post:                   Western Cape Ministry of Local Government, Environmental Affairs  
and Development Planning  
Private Bag X9186  
CAPE TOWN  
8000

By facsimile:           (021) 483 4174; or

By hand:                 Attention: Mr Marius Venter (Tel: 021 483 3721)  
Room 809  
8<sup>th</sup> Floor Utilitas Building, 1 Dorp Street, Cape Town, 8001

**Note:** For purposes of electronic database management, you are also requested to submit electronic copies (Microsoft Word format) of the appeal, responding statement and any supporting documents to the Appeal Authority to the address listed above and/ or via e-mail to [Marius.Venter@westerncape.gov.za](mailto:Marius.Venter@westerncape.gov.za).

5. A prescribed appeal form as well as assistance regarding the appeal processes is obtainable from Appeal Authority at: Tel. (021) 483 3721, E-mail [DEADP.Appeals@westerncape.gov.za](mailto: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. GAVIN BENJAMIN**  
**DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 3)**

DATE OF DECISION: 04/11/2019

### **COPY:**

Ms M. Mackay  
Ms. Pam Booth

Cape EAPrac (EAP)  
Knysna Municipality

Fax: 044 874 0432  
Email: [pbooth@knysna.gov.za](mailto:pbooth@knysna.gov.za)

### **FOR OFFICIAL USE ONLY:**

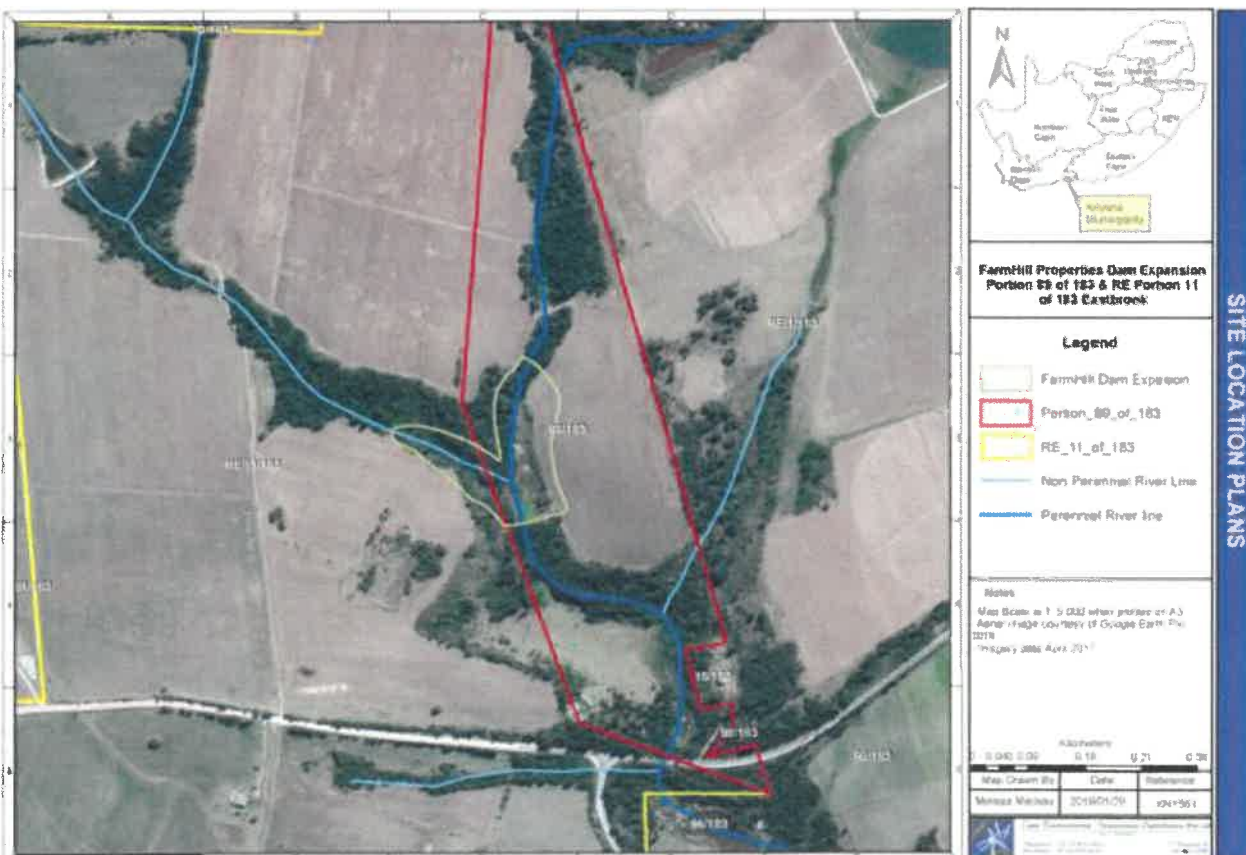
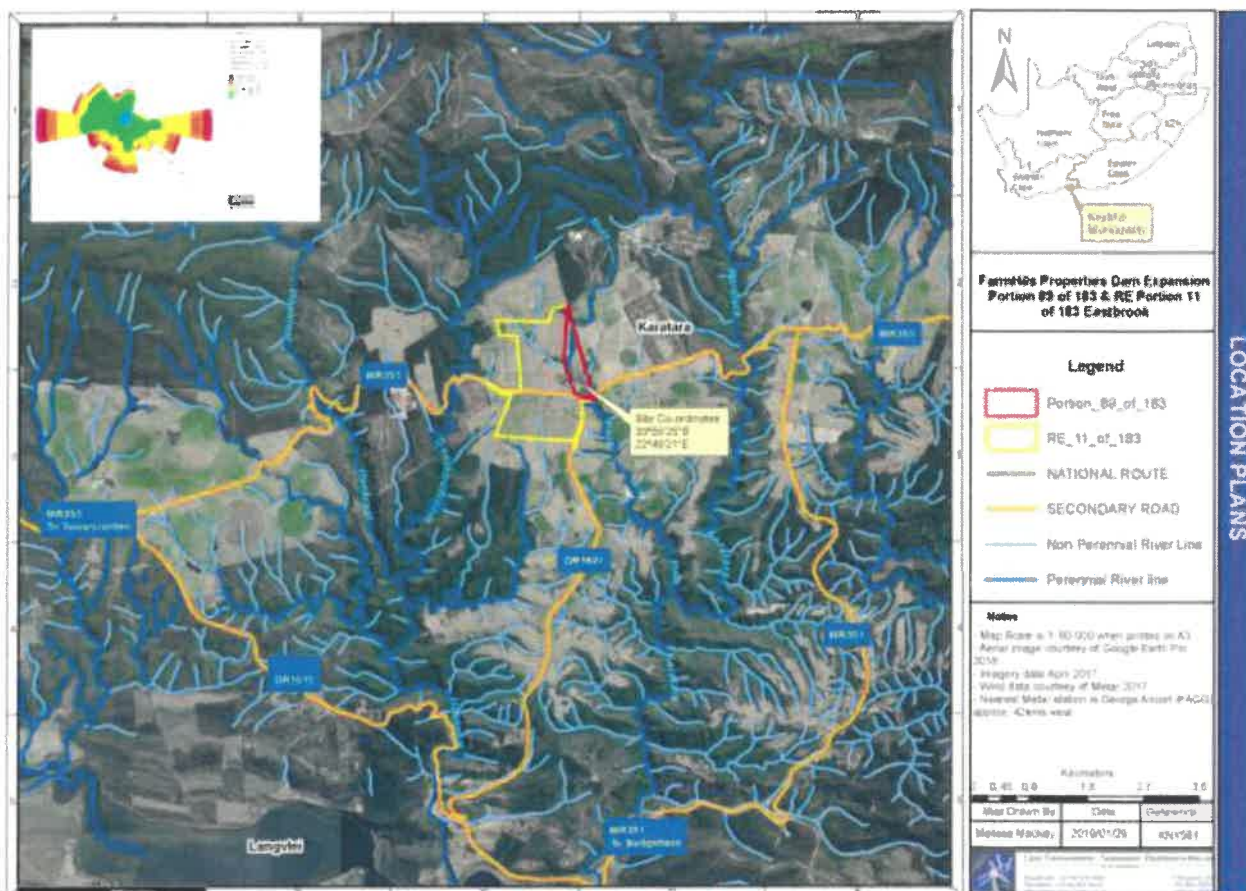
**EIA REFERENCE NUMBER:**

16/3/3/1/D4/12/0005/19

**NEAS EIA REFERENCE NUMBER:**

WCP/EIA/0000589/2019

# ANNEXURE 1: LOCALITY MAP





### **ANNEXURE 3: REASONS FOR THE DECISION**

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

- a) The information contained in the Application Form dated 17 April 2019, the final BAR dated 16 July 2019 and the EMPr submitted together with the final BAR on 16 July 2019;
- 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 National Environmental Management Act, 1998 (Act No. 107 of 1998);
- d) The comments received from I&APs and responses to these, included in the final BAR;
- e) The balancing of negative and positive impacts and proposed mitigation measures; and
- f) The site visit that was conducted on 3 October 2019.  
Persons present: Shireen Pullen (DEA&DP), Malcolm Fredericks (DEA&DP), Melissa Mackay (EAP), Colin Fordham (Cape Nature), Rohen Hesselman and Mark Rubin (the holder) to familiarize ourselves with the proposed site and surrounding area.

All information presented to the Department 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:

- Identification of and engagement with I&APs;
- A Background Information Document (BID) was circulated on 5 February 2019 for 30 days;
- Draft BAR was circulated on 12 June 2019 for 30 days;
- Authority site meeting on 3 October 2019;
- Fixing a notice board at the site where the listed activities will be undertaken;
- Interaction with the Commission on Land Rights in 2017, early in the process;
- Giving written notice to the owners and occupiers of land adjacent to the site and any alternative site where the listed activities are to be undertaken, the municipality and ward councilor, and the various organs of state who has jurisdiction in respect of any aspect of the listed activities; and
- Placing of a newspaper advertisement in the 'Knysna-Plett Herald' on 31 January 2019.

Issues raised during the Public Participation Process (PPP) can be summarized as follows:

Concerns were raised by downstream water users regarding the water and that the holder would use more water than he is authorised. It was confirmed that the applicant does not propose to abstract more than his water use currently approved and that the proposal is only to expand the storage capacity. Conditions stipulated in this authorisation limits the applicant to only be able to store 120000m<sup>3</sup>, which is in line with the amount of water currently allocated to the properties.

An issue was also raised regarding the legality of sale of the properties. However, the Eastbrooke Trustees (majority of trustees) and their representatives, as well as the Surveyor General's Office confirmed the sale of the properties to the holder (Farmhill Properties (Pty) Ltd) was legal and the transfer is complete.

Knysna Municipality raised concerns regarding further disturbance to an already stressed water system and the expected reduction of the ecological reserve as a result of the proposed dam expansion. However, the freshwater specialist report indicated that the conditions of the system after the implementation of the proposed development will in fact be better and that downstream flow will ultimately increase.

The Breede-Gouritz Catchment Management Agency also indicated in their comment that they do not have any objection to the storage of 120 000m<sup>3</sup> maximum, as this represents the holder's existing lawful use. According to BGCMA, any additional water should be released as part of the Ecological Water Requirement. The freshwater specialist also indicated in the freshwater specialist report that the majority of impacts associated with the construction and operational phase of the proposed dam expansion were determined to be minor negative impacts, which could be mitigated to negligible impacts with the implementation of various measures/actions as recommended in their report. This Department has also incorporated these measures in Conditions 15 - 20 of this authorisation.

## **2. Alternatives**

The following alternatives were considered:

### **Alternative 1**

This alternative entails the expansion of a dam from the current  $\pm 0.37$ ha to  $\pm 3.5$ ha by increasing the existing dam wall. The dam will have the following specifications:

- Dam wall length:  $\pm 150$ m
- Dam wall height:  $\pm 12$ m
- Water depth inside dam:  $\pm 10$ m
- Dry board:  $\pm 1.8$ m
- Dam volume: 135 500m<sup>3</sup>.

According to the BAR the proximity of the dam to the nearby provincial road will result in a hazard potential classification of "Significant", resulting in a Category 2 classification. Due to these concerns, no outlet pipes will be allowed to avoid potential scouring at the toe of the dam wall. This is not the applicant's preferred alternative.

### **Alternative 2 (Preferred alternative)**

This alternative entails the expansion of an existing dam in the Huis River currently used to irrigate 30 hectares for grazing and dairy farming. The ultimate aim or purpose of the proposal is to diversify the current operations to also include Macadamia nuts.

The specifications of the expansion will take as follows:

- Dam wall length:  $\pm 150$ m
- Dam wall height:  $\pm 12$ m
- Water depth inside dam:  $\pm 10$ m
- Dry board:  $\pm 1.8$ m



- Dam volume: 135 500m<sup>3</sup>

The existing dam covers an area of ±0.37ha. The dam will be expanded from the current ±0.37ha to ±3.5ha by increasing the existing dam wall. This alternative also includes the placement of an outlet or siphon system that will allow for water to flow over the dam wall via a pipeline which empties into the watercourse a safe enough distance away from the toe of the dam wall to ensure that the integrity of the wall remains intact and to comply with the dam safety requirements. This offers a low technology, proven mechanism for ensuring flow into the downstream habitat.

### **No-Go Alternative**

This alternative is the action of not expanding the current dam wall and leaving the existing dam as is. According to the BAR the no-go alternative has much the same impacts as the expansion activity, however, it does not allow for the long term development of the properties as a viable and sustainable agri-business. The BAR further submits that the current dam wall has no outlet pipes and does not provide ongoing downstream flow except from flood events and possible seepage. The preferred alternative is more advantageous towards the downstream users and the present ecological state of the watercourse. This Department concurs with the aforementioned statements and is of the opinion that the proposal will contribute to better flow conditions in the system and better management of the water resource, as more alien vegetation will be eradicated, which will also improve the downstream ecological conditions and integrity of the river system.

### **3. Impact Assessment and Mitigation measures**

The BAR submits that the proposed expansion will take place within aquatic and terrestrial CBAs according to the biodiversity programmes. The Present Ecological State (PES) of the two watercourses is determined as D, "Largely Modified". Furthermore, the freshwater impacts associated with the expansion are considered Minor (-ve) and Negligible (-ve) with mitigation. Hydrologically the proposed dam expansion is deemed acceptable for its intended purposes and will not negatively affect downstream users. The clearance and management of alien invasive vegetation are critical and conditions for such clearance is included in this EA. This Department concurs with the aforementioned findings and conclusions with regard to the anticipated impacts, as these are confirmed by the freshwater study and also recommended by the specialist.

#### **3.1 Freshwater Aspects**

In terms of regional conservation plans, the study area is located within a Freshwater Ecosystem Priority Area (according to NFEPA) and the watercourses flowing into and out of the dam are identified as Critical Biodiversity Areas (Category 1) according to the Western Cape Biodiversity and Spatial Plan. The existing dam has been in place for more than 50 years resulting in existing impacts affecting longitudinal connectivity and reduced water flows downstream.

The BAR submits that according to the Index of Habitat Integrity the Present Ecological State of the river reach in the vicinity of the existing dam was determined as D, Largely Modified.

The majority of impacts associated with the construction and operational phase of the proposed dam expansion were determined to be minor negative impacts which could be mitigated to negligible impacts with various recommended actions as indicated in the EMPr.

## 3.2 Hydrological Report

A Hydrological and Water Resource System Assessment was done for the Karatara and Huis Rivers. The specialist looked at the location, Hydro-climatic conditions, Water- and land-use, Infrastructure, water availability and Water resources system analysis. The findings were presented in the report, which concluded that the proposed water resource systems are viable for its intended purposes, will not significantly impact downstream users, would not significantly affect the EWRs downstream of the dam, as well as the Present-Day development level EWR requirements (Class B) on the Karatara River downstream from the dam (and therefore the quantity aspect of the RQOs of the river. Although the report does not include a conclusive statement regarding the availability of the ecological reserve, the existing water rights make provision for the abstraction of 120 000m<sup>3</sup> of water, which are within the current existing limits. The freshwater report however indicated that the downstream ecological state of the river will be an improvement from the status quo, taking into consideration the proposed measures that will be implemented to secure and improve or enhance downstream flow.

## 3.3 Vegetation

According to the BAR the expansion of the dam will increase the surface coverage from the current, inundating vegetation. Currently the vegetation consists mostly of alien invasive vegetation with some riparian vegetation. The active management of alien vegetation upstream and riparian zones, as well as the rehabilitation of the riparian zone will result in positive impacts, especially for downstream water uses. This Department concurs that the proposed management actions will improve the ecological conditions and characteristics of the system upstream and riparian zones, which will ultimately improve stream flow and ecological functioning of the system both upstream and downstream.

## 3.4 Construction impacts

### 3.4.1 *Disturbance to the bed and banks of the watercourse*

According to the BAR the removal of vegetation to expand the existing dam, leaving the banks exposed, could lead to soil erosion along the banks and loss of habitat for nesting birds. However, with the implementation of the mitigation measures, such as demarcation of areas that will be disturbed and avoidance of the riparian zone upstream and downstream of the dam wall will prevent the destruction of unnecessary habitats and to limit the disturbance footprint of the areas that will be affected.

### 3.4.2 *Destruction of vegetation containing bird nests*

The BAR submits that when the proposed expansion area is cleared, it could lead to or result in the destruction of birds' nests and eggs, however, if the clearance activities is done outside of the breeding season for birds (spring and summer), this will mitigate this impact to an acceptable level. This Department concurs with this approach and has included this as a condition (condition 15) in this authorisation to mitigate the potential impacts on habitat destruction and reproduction activities and cycles of birds in particular.

#### 3.4.3 *Sedimentation of the watercourse*

According to the BAR when the vegetation is removed, loose soil may end up in the watercourse area, silting up the watercourse. The effective use of erosion control measures such as silt fencing will mitigate this impact to an acceptable level.

#### 3.4.4 *Import of alien seed to the site*

The BAR submits that the removal of vegetation, which will leave the soil bare may result in the importation of alien seed to the site and from one point to another. However, limiting the construction period when it is not raining to minimize this impact to an acceptable level.

### **3.5 Operational Impacts**

#### 3.5.1 *Creation of a barrier impeding connectivity for faunal and vegetative species.*

According to the BAR there is a pre-existing impact of reduced connectivity however, this will be reduced by the addition of an outlet or siphon system to enable a flow of water from the expanded dam to the Huis River downstream. The BAR states that this was added to the design and that the approved development has a siphon system/component attached to it. According to the specialist report this will be an improvement on the current situation and provide additional habitat for amphibians and invertebrates. This Department concurs with this recommendation made by the freshwater specialist and a condition to this effect has been included in this authorisation.

### **3.6 Decommissioning Impacts**

3.6.1 According to the BAR the existing dam has been in place for more than 50 years and with this being an agriculture property, it is unlikely that water will not be required for activities on the property. However, in an unlikely event that decommission should be required all requirements pertaining to such closure or decommissioning must be complied with.

3.6.2 Areas cleared of vegetation that are not to be inundated by the dam are likely to be colonised rapidly by alien plants such as black wattle. These plants have to be controlled on an ongoing basis in order to prevent their establishment and dispersal. This is incorporated into the conditions of this authorisation.

3.6.3 Should decommissioning be necessary, a biodiversity assessment of aquatic fauna and flora of the dam along with a risk assessment of releasing these taxa into the watercourse must be conducted and rare or endangered species associated with dam should be relocated to suitable habitat.

## **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 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.**

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