Department of Environmental Affairs and Development Planning **Ziyaad Allie**Rectification

Ziyaad.Allie@westerncape.gov.za | Tel: 021 483 2991

Email: jw@citrii.com

jw@indigofruit.co.za

24G Application: 14/2/4/2/2/E4/20/0005/21

**ENVIRONMENTAL AUTHORISATION** 

Vestern Cape

The Managing Director Indigo Fruit Farming (PTY) Ltd PO Box 501 Tel: (082) 557 3398

LYDENBURG

1120

<u>Attention: Mr Jan-Willem Boonzaaier</u>

Dear Sir

APPLICATION IN TERMS OF SECTION 24G OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) ("NEMA"): UNLAWFUL COMMENCEMENT OF A LISTED ACTIVITY: THE UNLAWFUL INSTALLATION OF A SUMP & EXCAVATIONS ON A RIVERBANK, A PIPELINE & ROAD EXTENSION, THE CLEARING, PLANTING AND INFILLING OF A WETLAND AND THE CONSTRUCTION AND ENLARGEMENT OF A DAM ON PORTION 7 OF FARM TWISTWYK NO. 182, NOORDHOEK FARM, RIVIERSONDEREND

With reference to your application received by the Department on 13 March 2021 and the Method Statement dated 15 July 2021 have reference in terms of section 24G of the NEMA for the consequences of unlawful commencement of listed activities identified in terms of the NEMA, find below the decision in respect of your application.

A. DECISION

By virtue of the powers conferred by section 24G of the NEMA and the *Environmental Impact* Assessment Regulations, 2014 ("EIA Regulations, 2014") (as amended), the competent authority herewith **grants environmental authorisation** to the applicant to continue with the listed activities specified in Section C below as described in the application and environmental assessment received by the Department on 13 March 2021.

1

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

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

### B. DETAILS OF THE APPLICANT FOR THIS ENVIRONMENTAL AUTHORISATION

Indigo Fruit Farming (Pty) Ltd

C/o Mr Jan-Willem Boonzaaier

P.O. Box 501

LYDENBURG

1120

Tel: 082 398 9257

Email: <u>jw@citrii.com</u>

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

#### C. LIST OF ACTIVITIES AUTHORISED

Listed Activities	Activity/Project Description
Government Notice No. R. 327 of 2017 –	Small dam - the water surface area of the
Activity Number: 12	existing dam is ± 7000m².
Activity Description: The development of	The road and main pipeline were
(ii) infrastructure or structures with a	constructed within a watercourse/
physical footprint of 100 square metres or	wetland with a footprint of ±7000m².
more; where such development occurs;	Pipelines cross several watercourses with
(a) within a watercourse;	a cumulative footprint larger than 100m²
(b) in front of a development setback; or	where it crosses the stream.
	Bridge's wing walls.

(c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse.

Government Notice No. R327 of 2017 -

**Activity Number: 13** 

Activity Description: The development of facilities or infrastructure for the off-stream storage of water, including dams and reservoirs, with a combined capacity of 50 000 cubic metres or more, unless such storage falls within the ambit of activity 16 in Listing Notice 2 of 2014.

Dam Option 5i will have a capacity of 250 000m³ and footprint area of 3.5 ha.

Government Notice No. R327 of 2017 -

**Activity Number: 19** 

Activity Description: The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse; but excluding where such infilling, depositing, dredging, excavation, removal or moving -

- (a) will occur behind a development setback:
- (b) is for maintenance purposes undertaken in accordance with a maintenance management plan;

During the construction of the sump and excavation on the Riviersonderend riverbank, the construction of the pipeline and road extension, as well as certain sections of the pipeline, more than 10m<sup>3</sup> of material was excavated or moved from a watercourse. Clearing and planting over a wetland area. Small dam - the holding capacity of the small dam is ±8000m³ and is within a watercourse. The proposed activities which include Dam option 5i and associated infrastructure, as well as the bridge wing walls, will further trigger this activity. Weir of ±60m<sup>3</sup> associated with expansion of Dam Option 2b.

Government Notice No. R327 of 2017

**Activity Number: 27** 

Activity Description: The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation,

Clearance of wetland for orchard.

Dam Option 5i.

	except where such clearance of	
	indigenous vegetation is required for;	
	(i) the undertaking of a linear activity; or	
	maintenance purposes undertaken in	
	accordance with a maintenance	
	management plan.	
	Government Notice No. R327 of 2017	
	Activity Number: 50	The small dam with a holding capacity of
	Activity Description: The expansion of	8 000m³, is proposed to be expanded to
	facilities or infrastructure for the off-	hold 40 000m³ water.
	stream storage of water, including dams	
	and reservoirs, where the combined	
	capacity will be increased by 50 000	
	cubic metres or more.	
L		

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

# D. PROPERTY DESCRIPTION AND LOCATION

The listed activities commenced on Portion 7 of the Farm Twistwyk No. 182, Caledon Registration Division, Riviersonderend.

The SG digit code is: C0130000000018200007

The co-ordinates for the property are:

Point	Latitude (S)	Longitude (E)
Point 1 (Sump &	34° 08′ 17.81″ S	19° 52' 11.52" E
Excavation)		
Point 2 (New Pipeline &	34° 08′ 7.74″ S	19° 52' 22.94" E
Road Extension)		
Point 3 (Wetland Area	34° 08′ 12.86″ S	19° 52' 31.58" E
Cleared, Filled &		
Planted)		

Point 4 (Small Dam and	34° 08′ 23.71″ S	19° 52' 56.28" E
Proposed Expansion)		
Point 5 (Expansion of	34° 06′ 58.60″ S	19° 52' 4.62" E
Dam Option 2b)		
Point 6 (Construction of	34° 8′ 21.78″ S	19° 53′ 15.04″ E
Dam Option 5b)		
Point 7 (Construction of	34° 8′ 22.72″ S	19° 53′ 29.51" E
Dam Option 5i)		
Point 8 (Sand Borrow	34° 8′ 10.10″ S	19° 52′ 18.81" E
Area)		
Point 9 (Rock Borrow	34° 7′ 29.12″ S	19° 52′ 10.92″ E
Area)		
Point 10 (Bridge)	34° 8′ 41.93″ S	19° 53' 43.81" E

Refer to Annexure 1: Locality Plan and Annexure 2: Site Plan and Locality Points. Herein-after referred to as "the site".

# E. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER ("EAP")

Cornerstone Environmental Consultants (Pty) Ltd.

C/o Mr Pieter de Villiers

P.O. Box 12606

DIE BOORD

7613

Tel: (021) 887 9099

Email: <u>pieter@cornerstoneenviro.co.za</u>

# F. DETAILS OF THE ACTIVITIES UNDERTAKEN

The activities undertaken entails the following:

Completed infrastructure

• Sump and Excavation on the Riviersonderend riverbank

- Pipeline Construction and Road Extension
- Clearing, Infilling and Planting of a Wetland
- Construction of the Small Dam

### Sump and Excavation on the Riviersonderend riverbank

The sump, as well as excavated area lying to the west of it, is located right on the banks of the Riviersonderend river and was commenced with during September 2019. It entailed the installation of a sump on the riverbank and associated excavation works covering an area of  $\pm$  560m². This specific area has historically been used for an abstraction pipeline to the river and has been kept clear of vegetation for many years. However, the new sump and pipeline installation did trigger a listed activity as it was not merely maintenance. This site is categorised as an Aquatic CBA according to Cape Farm Mapper due to Watercourse protection and the possible occurrence of threatened vertebrate, even though limited natural vegetation remains.

## <u>Pipeline Construction and Road Extension</u>

The bulk water pipeline construction and road extension were constructed on the western side towards the centre section of the farm during September 2019, both through the larger wetland area, covering a combined development footprint of  $\pm 7000$ m<sup>2</sup>. The road extension can be considered an extension, as it aligned with a historically existing farm road in order to make access to certain parts of the farm easier. The road extension is  $\pm$  960m in length and between 6 – 8m wide, with the pipeline situated within this road reserve.

There was no representation of the terrestrial ecosystem, Central Rûens Shale Renosterveld (CR) or South Sonderend Sandstone Fynbos (V), evident on site. The site was disturbed and transformed by agricultural activities, and heavily infested along the riverbank with dense stands of Black Wattle. The site is considered Ecological Support Area (ESA) (RES) by Cape Farm Mapper. From the National Freshwater Ecosystem Priority Areas (NFEPA) map, the area within which the road fall is classified as a NFEPA area as the watercourses are associated with several natural NFEPA wetland areas.

### Clearing, Infilling and Planting of a Wetland

A wetland area, previously used for grazing, was filled in and orchards were established, covering an area of  $\pm$  63 000m<sup>2</sup>. This activity has already taken place during end of 2019. The wetland was in a largely to seriously modified state prior to the infilling and planting, but still had some biodiversity and wetland function. The entire site already transformed by agricultural activities and comprised a grazing pasture dominated by grass with a number of additional

weeds evident on site before commencement of activities. Scattered individuals of wetland plant species were indicative of wetland conditions. There was no representation of the terrestrial ecosystem, South Sonderend Sandstone Fynbos, evident on site.

#### Construction of the Small Dam

The small dam, covering an area of ±7000m² with a holding capacity of 8000m³, was constructed by the previous owner in 2017/2018. Several channels remain of the original braided Riviersonderend river system and the small dam is located within one of these channels. The dam is located in the southern centre of the farm. The channels, within which the dam was constructed, were already found to be in a largely to seriously modified state where more than 90% of its natural state have been modified through ploughing, planting and grazing over the whole wetland, and is regarded to have a low ecological importance and sensitivity. There was no representation of the terrestrial ecosystem, South Sonderend Sandstone Fynbos, evident on site. The site was disturbed and transformed by agricultural activities and an agricultural field was present to the south of the small dam site. From the NFEPA map, the area within which the small dam fall is classified as a NFEPA area as the watercourses are associated with several natural NFEPA wetland areas.

#### Continuation of the following infrastructure:

- Expansion of the Small Dam
- Expansion of Dam Option and Construction of Weir
- Continuation of commencement for the development of Dam 5i (Dam Option 5i will have a capacity of 250 000 m³ and footprint area of 3.5 ha)
- Borrow Areas
- Bridge reinforcement

#### Continuation for expansion of the Small Dam

The small dam with a holding capacity of 8 000m<sup>3</sup>, is proposed to be expanded to hold 40000m<sup>3</sup> water. Although currently heavily transformed, the area around the small dam still has good vegetation cover, although mostly with pioneer species. The channels surrounding the dam are in a largely to seriously modified state where more than 90% of its natural state have been modified through ploughing, planting and grazing, and is regarded to have a low ecological importance and sensitivity. There was no representation of the terrestrial ecosystem, South Sonderend Sandstone Fynbos, evident on site. The site is disturbed and transformed by agricultural activities and an agricultural field is present to the south of the small dam site.

## <u>Dam Alternative 1 – Dam Option 5i</u>

The continuation of the off-channel dam, Dam Option 5i will be located just east of Dam Option 5b, but outside of the buffer zone of Stream C, as well as outside any aquatic CBAs. This proposed dam will be filled by means of pumping water from an existing weir, namely the Noordhoek weir that will be reinstated, as well as from pumping water from the Riviersonderend River directly. The Noordhoek weir is located within a seasonal stream which originates in the mountains to the north, flowing southward, where it joins the Riviersonderend River. As this is an existing weir, this weir will not be further assessed as part of this Section 24G Report. The water to be pumped from the Riviersonderend River, will be extracted at the sump that was unlawfully constructed.

There are no CBAs or ESAs identified within Dam Option 5i. The entire site is mapped as 'other natural areas' and is very disturbed and heavily infested with Pine, Black wattle and Port Jackson trees.

#### G. CONDITIONS OF AUTHORISATION

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

#### **PARTI**

#### Scope of authorisation

- 1. The holder is authorised to undertake the listed activities specified in Section C above in accordance with and restricted to Dam option 5i described in the application and assessment report on the site as described in Section D above.
- 2. The development must be concluded within 5 years from the date of continuation of the first listed activity.
- 3. 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.
- 4. Any changes to, or deviations from the scope of the alternative described in Section F above must be accepted or approved, in writing, by the competent authority before such

changes or deviations may be implemented. In assessing whether to grant such acceptance/approval or not, the competent authority may request information to evaluate the significance and impacts of such changes or deviations, and it may be necessary for the holder to apply for further authorisation in terms of the applicable legislation.

#### **PART II**

## Written notice to the competent authority

- 5. Seven (7) calendar days' notice, in writing, must be given to the competent authority before continuation of commencement of the authorised activities.
- 5.1 The notice must make clear reference to the site details and 24G Reference number given above.

#### **PART III**

## Notification and administration of an appeal

- 6. The holder 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 as included in Annexure 3;
  - 6.1.3 the date of the decision; and
  - 6.1.4 the date when the decision was issued.
- 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 Appeals Regulations*, 2014 detailed in Section I below.
- 6.3 draw the attention of all registered I&APs to the manner in which they may access the decision.
- 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, of the holder; 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.

7. The listed activities, including site preparation, may not commence within 34 (thirty-four) calendar days from the date of issue of this Environmental Authorisation. In the event that an appeal is lodged with the Appeal Authority, the effect of this Environmental Authorisation is suspended until the appeal is decided.

#### **PART IV**

### Management of the activity/development

- 8. The draft Environmental Management Programme ("EMPr") of September 2021 compiled by Cornerstone Environmental Services (Pty) Ltd and submitted as part of the application for environmental authorisation is hereby approved and must be implemented.
- 9. The EMPr must be included in all contract documentation for all phases of implementation.

# **PART V**

#### Monitoring

- 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, including a publicly accessible website (if applicable).
- 11. Access to the site referred to in Section D must be granted, and the environmental reports mentioned above must be produced, to any authorised official representing the competent authority who requests to see it for the purposes of assessing and/or monitoring compliance with the conditions contained herein.

#### **PART VI**

## **Auditing**

12. In terms of regulation 34 of the EIA Regulations, 2014 the holder must conduct environmental audits to determine compliance with the conditions of the Environmental Authorisation, and the EMPr and submit Environmental Audit Reports to the competent authority upon receiving such request in writing from the competent authority. The Audit Report must be prepared by

an independent person and must consider all the information required in Appendix 7 of the EIA Regulations, 2014.

#### **PART VII**

### **Activity/ Development Specific Conditions**

13. Should any heritage remains be exposed during excavations or any other actions on the site, these must immediately be reported to the Provincial Heritage Resources Authority of the Western Cape, Heritage Western Cape. Heritage remains uncovered or disturbed during earthworks must not be further disturbed until the necessary approval has been obtained from Heritage Western Cape.

Heritage remains include: meteorites, archaeological and/or paleontological remains (including fossil shells and trace fossils); coins; indigenous and/or colonial ceramics; any articles of value or antiquity; marine shell heaps; stone artefacts and bone remains; structures and other built features with heritage significance; rock art and rock engravings; and/or graves or unmarked human burials including grave goods and/or associated burial material.

- 14. A qualified archaeologist and/or palaeontologist must be contracted where necessary (at the expense of the holder) to remove any heritage remains. Heritage remains can only be disturbed by a suitably qualified heritage specialist working under a directive from the relevant heritage resources authority.
- 15. The recommendations and mitigation measures contained in the Freshwater Assessment of May 2020 must be adhered to.
- 16. The recommendations and mitigation measures contained in the Botanical Assessment of September 2019 must be adhered to.

#### H. GENERAL MATTERS

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

- 2. Non-compliance with a condition or term of this Environmental Authorisation or EMPr may render the holder liable to criminal prosecution.
- 3. If the holder does not continue, conduct or undertake listed activities within the period referred to in Condition 2 of Section G, this Environmental Authorisation shall lapse for that activity or 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 must be made on condition that the environmental authorisation is valid on the date of receipt of such amendment application.

#### Note that:

- (1) In terms of regulation 28(1A) of the EIA Regulations, 2014 the competent authority shall not accept or process an application for amendment of an environmental authorisation if such environmental authorisation is not valid on the day of receipt of such amendment application but may consider an application for environmental authorisation for the same development.
- (2) In terms of regulation 28(1B) of the EIA Regulations, 2014 an environmental authorisation which is the subject of an amendment application remains valid pending the finalisation of the amendment application.
- (3) It is an offence in terms of section 49A(1)(a) of the 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.
- 4. The holder must submit an application for amendment of the Environmental Authorisation to the competent authority where any detail with respect to the Environmental Authorisation must be amended, added, substituted, corrected, removed or updated. If a new holder is proposed, an application for Amendment in terms of Part 1 of the EIA Regulations, 2014 must be submitted.
  - Please note that an amendment is not required if there is a change in the contact details of the holder. In this case, the competent authority must only be notified of such changes.
- 5. The manner and frequency for updating the EMPr is as follows:
  Amendments to the EMPr must be done in accordance with regulations 35 to 37 of the EIA
  Regulations, 2014 or any relevant legislation that may be applicable at the time.

I. APPEALS

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

1. An appellant (if the holder) must –

1.1 submit an appeal in accordance with regulation 4 National Appeal Regulations, 2014

to the Appeal Administrator and a copy of the appeal to any registered I&APs, any

Organ of State with interest in the matter and the decision maker within 20 (twenty)

calendar days from the date the holder was notified by the competent authority of this

decision.

2. An appellant (if NOT the holder) must -

2.1 submit an appeal in accordance with regulation 4 National Appeal Regulations, 2014

to the Appeal Administrator, and a copy of the appeal to the holder, any registered

1&APs, any Organ of State with interest in the matter and the decision maker within 20

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

decision.

3. The holder (if not the appellant), the decision-maker, I&APs and Organ of State must submit

their responding statements, if any, to the Appeal Authority and the appellant within 20

(twenty) calendar days from the date of receipt of the appeal submission.

4. This appeal and responding statement must be submitted to the address listed below -

By post: Attention: Marius Venter

Western Cape Ministry of Local Government, Environmental Affairs &

**Development Planning** 

Private Bag X9186, Cape Town, 8000; or

By facsimile: (021) 483 4174; or

By hand: Attention: Mr Marius Venter (Tel: 021-483 3721)

Room 809, 8th floor Utilitas Building

1 Dorp Street, Cape Town, 8000; or

By e-mail: <u>DEADP.Appeals@westerncape.gov.za</u>

Note: You are also requested to submit an electronic copy (Microsoft Word format) of the

appeal and any supporting documents to the Appeal Administrator to the address listed

above and/ or via e-mail to <u>DEADP.Appeals@westerncape.gov.za</u>.

5. A prescribed appeal form, as well as assistance regarding the appeal processes is obtainable

from the office of the appeal authority/ at: Tel. (021) 483 3721, E-mail

<u>DEADP.Appeals@westerncape.gov.za</u> or URL http://www.westerncape.gov.za/eadp.

J. CONSEQUENCES OF NON-COMPLIANCE WITH CONDITIONS

Non-compliance with a condition or term of this Environmental Authorisation or EMPr may result

in suspension or withdrawal of this Environmental Authorisation and may render the holder liable

for criminal prosecution.

K. DISCLAIMER

The Western Cape Government, appointed in terms of the conditions of this Environmental

Authorisation, shall not be responsible for any damages or losses suffered by the holder,

developer or his/her successor in any instance where construction or operation subsequent to

construction is temporarily or permanently stopped for reasons of non-compliance with the

conditions as set out herein or any other subsequent document or legal action emanating from

this decision.

Yours faithfully

**ZAIDAH TOEFY** 

**ACTING DIRECTOR: ENVIRONMENTAL GOVERNANCE** 

CC: (1) Pieter de Villiers (EAP)

(2) Loretta Osborne (DEA&DP: DM – Region 2)

(3) Johann Kilian (Bioconsulting)

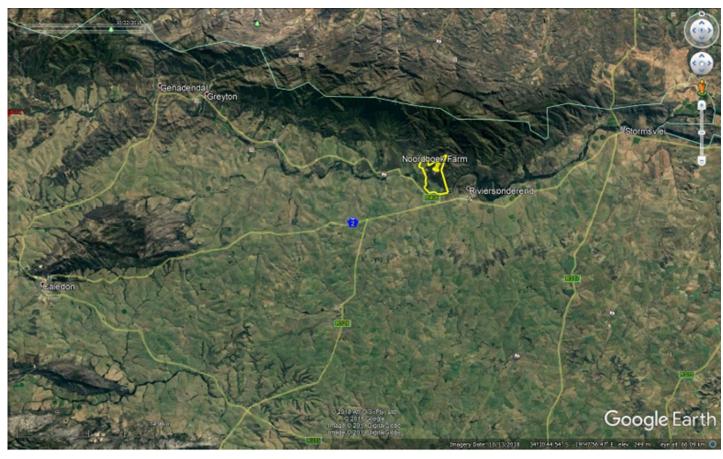
Email: <u>pieter@cornerstoneenviro.co.za</u>

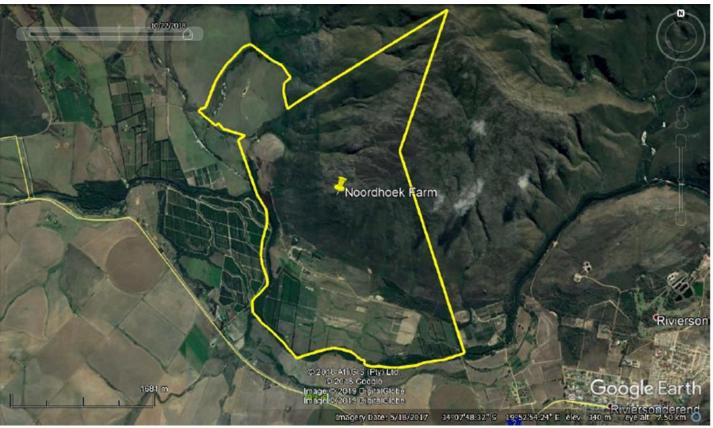
Email: <u>Loretta.Osborne@westerncape.gov.za</u>

Email: johann@bioconsulting.co.za

14

# **ANNEXURE 1: LOCALITY MAP**





**ANNEXURE 2: LOCALITY POINTS AND SITE PLAN** 



Locality points of activities



Image indicating the two dam alternatives, Dam Option 5b and (authorised) Dam Option 5i.



Off-channel Dam Option 5i (authorised)



The location of the new pipeline and road extension (orange line).

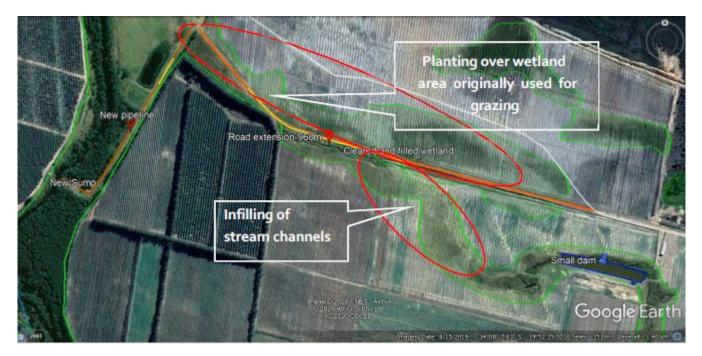


Image of the location of the filled and planted areas on the wetland.

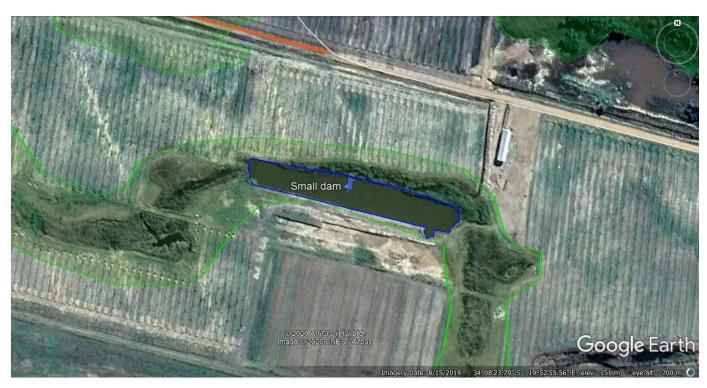


Image indicating the location of the small dam (blue polygon) that is proposed to be enlarged.

**FOR OFFICIAL USE ONLY:** 

S24G REFERENCE: 14/2/4/2/2/E4/20/0005/21

APPEAL REFERENCE: 14/36/E4/20/0591/22

**ANNEXURE 3: REASONS FOR THE DECISION** 

This Environmental Authorisation is in respect of the consequences of commencement of the

afore-mentioned illegal activities. An Environmental Assessment Practitioner ("EAP") was

appointed to submit a section 24G Environmental Impact Assessment ("EIA") to the Department

to obtain this Environmental Authorisation. The EIA was considered adequate for informed

decision-making. In addition, the holder paid an administrative fine of R337 500.00 (Three hundred

and thirty-seven thousand and five hundred Rand) to meet the requirements of section 24G of the

National Environmental Management Act, 1998 ("NEMA").

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

a) The information contained in the application received by the Department on 13 March 2021,

the Method Statement dated 15 July 2021, and the Environmental Management Plan of

September 2021.

b) The Freshwater Assessment of May 2020.

c) The Botanical Assessment of September 2019.

d) Relevant information contained in the Departmental information base, including, the

Guidelines on Public Participation and Alternatives.

e) The objectives and requirements of relevant legislation, policies and guidelines, including

section 2 of the NEMA.

f) The comments received from Interested and Affected Parties ("I&APs") and the responses

provided thereto.

g) The sense of balance of the negative and positive impacts and proposed mitigation

measures.

h) The site visit conducted on 25 April 2022 attended by officials from this Directorate:

Environmental Governance.

i) The appeal decision on the 24G administrative fine dated 26 September 2022.

All information presented to the competent authority was taken into account in the consideration

of the application for environmental authorisation. A summary of the issues which, according to

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

19

#### 1. Public Participation Process

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

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

- An advertisement was placed in the Theewaterskloof & Kaap Agulhas Gazette on 3 March 2020:
- A site notice was erected;
- Letters were sent to interested and affected parties ("I&APs") and the municipal ward councillor;
- I&APs were afforded the opportunity to provide comments on the application.

## 1.1 Consultation with organs of state in terms of section 240 of the NEMA

The following organs of state provided comment on the application:

- CapeNature
- Department of Agriculture, Rural Development and Land Reform (DARDLR)
- Department of Agriculture, Forestry and Fisheries: Land Use and Soil Management (DAFF)

A summary of the comments received, and the responses thereto follows below:

## <u>CapeNature</u>

CapeNature stated that they do not object to the expansion of the existing dam at Site 2 if the freshwater specialist recommendations are adhered to; however, objects to the development of Site 5. Further feasible alternatives must be assessed. CapeNature recommends an alternative weir location is proposed and assessed by the freshwater specialist. CapeNature supports the freshwater specialist recommendations with regards to the bulk pipeline; however, further detail on the impacts and specific mitigation measures must be proposed for these intersections.

#### EAP's response

"The proposed 315 mm pipeline from the proposed diversion weir to the proposed Dam Options will not trigger listed activities in terms of NEMA, as amended, and therefore the pipeline's potential impacts were not assessed. The bulk water pipeline that was constructed

on the western side towards the centre section of the farm during September 2019, did however, trigger a listed activity as it ran through the larger wetland area. As this was a linear structure, it led to a small loss of biodiversity and wetland area through excavation and later impaction of soils, with only some short-term impact on soil disturbance and possible water quality. Operational phase mitigation includes rehabilitation and revegetation of all disturbed areas resulting from the installation of the new pipeline."

#### **CapeNature**

CapeNature stated that the pump station is within the cultivated fields and will impact on a section of Ecological Support Area (ESA) 2. The new road appears to follow an existing twee spoor track.

Borrow Pits: No alternative borrow pit locations were proposed. Two borrow pits have been proposed: (i) rock borrow pit from the existing cultivated land; and (ii) sand borrow pit from dam Site 4. CapeNature does not object to the rock borrow pit provided that it is adequately rehabilitated to prevent long-term erosion. CapeNature recommends that the sand borrow pit is located in the footprint of the dam that will be excavated (e.g., Site 2, if practicable), or alternatively the sand borrow pit at dam Site 4 must be rehabilitated. If sand is to be brought onto site, it must be certified free of alien seed.

Cultivated Areas: Although largely transformed already, the proposed cultivated areas still function hydrologically to filter and transport water into the Sonderend River and its various tributaries. Application of fertilizers will compromise water quality and must therefore be strictly controlled to minimise leaching and run-off. CapeNature does not object to the expansion of the cultivated areas if the specialists' recommendations are adhered to. In the present case, the development of the new dam at Site 5 will be high after mitigation for both the construction and the operation phases, and the loss of vegetation and water quality impairment at the weir will be medium and medium-low respectively after mitigation in the construction phase. Should a biodiversity offset be deemed necessary in accordance with the mitigation hierarchy, then a suitably qualified biodiversity offset specialist should be contracted to identify and secure a biodiversity offset in terms of the abovementioned draft policy and guidelines.

## EAP's response

"In order to avoid sensitive vegetation at the new dam at Site 5, another site close to this site, namely Site 5i, was put forward as an alternative (preferred alternative). As avoidance is the first step of the mitigation hierarchy, a biodiversity offset is therefore not necessary. Mitigation measures are in place to minimise the adverse impacts associated with the proposed weir. As the impacts on loss of vegetation and water quality impairment will be relevant only in the

construction phase, these impacts are of a temporary nature, and a biodiversity offset for a temporary impact seems unfitting. In addition to this, water will still be released in terms of the Ecological Water Requirements (EWR) and will therefore not influence the source."

CapeNature agrees with the assessment and recommendations of the current freshwater

assessment. The activities took place within the floodplain of the Riviersonderend River, and

### <u>Subsequent comment from CapeNature</u>

although the habitat has been severely modified, the floodplain is of high importance from a functional perspective, forming a major tributary within the Breede River catchment and it should further be stated that the river flows through the Riviersonderend Nature Reserve (managed by CapeNature) directly downstream of the site, and therefore the activities impact on the nature reserve. The mitigation measures recommended for the excavation of the sump and the construction of the road and laying the pipeline is to rehabilitate these areas, with particular emphasis on the earthworks along the banks of the Riviersonderend River. CapeNature agrees with the recommendation, provided that the rehabilitation is in accordance with a detailed rehabilitation plan that will restore the riverbanks to a near natural condition (restoration to natural condition would require removal of agricultural activities). The impacts associated with the infill of the channelled wetland and construction of the instream dam are rated as higher significance than the above-mentioned two activities. It should be noted that these activities were not within the scope of activities applied for in the BA process. The proposed mitigation for the infill of the wetland is to partially remove the infill and orchards and reinstate the channelled wetland. The recommendation is not for rectification but rehabilitation to the original condition for this activity, which CapeNature agrees with. With regards to the activities still to be undertaken, the assessment for the BA process and CapeNature's associated comments remain relevant. As indicated, CapeNature did not object to Dam Alternative 2B, however we objected to Dam alternative 5A. Dam Alternative 5i has been proposed in response to our comments, which is located off-stream outside of the floodplain within a dense stand of alien invasive trees. Alternative 5i is located within an area classified as Other Natural as opposed to Critical Biodiversity Area (CBA) 1 for Alternative 5A. Both the botanical assessment and freshwater assessment which assessed Alternative 5i indicated that this site is acceptable in terms of impacts on terrestrial and

CapeNature recommended that an alternative location for the weir to provide water for Dam Alternative 2 should be sought. The response provided is that this is the only alternative that can be considered. It should be noted that water abstraction is not supported within declared

freshwater biodiversity. CapeNature agrees with this.

Mountain Catchment Areas (MCAs), however the weir is located a short distance downstream from the boundary of the MCA. Management of MCAs has been delegated to provincial levels and has been included in the draft Western Cape Biodiversity Bill which has been gazetted for public comment. The design of the weir allows for a bypass that permits ecological water requirements to continue downstream and does not capture all flow. The location is however sensitive as stated in the freshwater assessment therefore disturbance must be minimized as far as possible, and construction restricted to late summer.

The S24G Report indicates that the catchment o Alternative 5i is not sufficient therefore water will be supplemented from the existing Noordhoek weir. This component has not been assessed in an of the freshwater assessments and needs to be taken into consideration i.e., the existing use and volume from the Noordhoek weir and changes as result of the construction of Dam Alternative 5i CapeNature does not agree with the preferred alternative (Alternative 5B) recommended in the S24G Report. Dam Alternative 5B was not assessed in any of the freshwater assessments, however the figure in the S24G Report indicates that this alternative is a slight variation of Alternative 5A with much the same footprint and therefore the impacts can be considered the same or very similar.

CapeNature does not object to the use of the excavated material from Dam Alternative 5i. The sand borrow pit adjacent to the Riviersonderend River is within the floodplain. The recommended buffer of 25m from the Riviersonderend River as recommended by the freshwater assessment must be adhered to and it is preferred that the borrow pit should be located outside of the floodplain, therefore further investigation of alternatives is required. Confirmation should be provided whether the material excavated from Dam Alternative 2B would be suitable as dam construction material. As previously indicated, we do not object to the proposed rock borrow pit. CapeNature does not object to the proposed upgrade of the bridge provided mitigation measures are implemented.

# EAP's response

"Annexure 3 of the MMP entails a detailed Rehabilitation Guideline which were implemented to restore the riverbanks. Also note that the Directive from the DEA&DP to implement the rehabilitation measures for the flood damage has begun and this will address some of these aspects. The impacts related to the infill of the wetland and construction of the in-stream dam, as well as the associated mitigation measures, have been included in the S24G Report and EMPr. For instance, as a mitigation measure, the original stream channel must be opened up and the new orchards can be planted outside this area. If the channel is opened up and rehabilitated, the overall impact of the activities can be lowered. Also note that the Method Statement (MS) that addresses the flood damage mentioned above, has been implemented

by the Applicant. The MS measures addresses the protection of cultivated land against soil loss as a result of erosion. The Project Team and Applicant understand the sensitive nature of the weir location for Dam Alternative 2 and mitigation measures are in place to ensure minimal disturbance during construction and operation of this proposed weir. This weir still remains the best environmental option, as the dam that it will feed, is an existing off-stream dam. The alternative option would be to move this dam to an instream position in order to obtain water, and this would be an unacceptable option as the environmental impact would be so much higher than that of the proposed weir. The sand borrow area will be situated within an existing dam site. Given the already disturbed and transformed nature of this site, an alternative sand borrow site seems redundant. Even though the proposed sand borrow area falls within the larger Hydro-geomorphological (HGM) zone 4, it was found by the specialist to be largely to seriously modified, where more than 90% of its natural state have been modified through ploughing, planting and grazing. The expected impact on biodiversity is therefore Low. Mitigation measures regarding the sand borrow area are included in the S24G Report, and include inter alia that after the construction phase, all the disturbed areas falling within the wetland area should be rehabilitated and the area must be revegetated with suitable vegetation to reduce the risk of erosion and water quality impact on the Riviersonderend River. This could also lead to an increase in biodiversity at that site."

### <u>Department of Agriculture, Rural Development and Land Reform (DARDLR)</u>

The DARDLR stated that the S24G report indicates the dam option 5b is the preferred option due to a stronger socio-economic motivation as opposed to the dam option 5i which will have a lower impact on the freshwater environment and surrounding area. Dam option 5i is supported due to its lower impact on the direct environment and larger freshwater system opposed to the dam option 5b which will result in a high long-term (negative) impact.

#### Department of Agriculture, Forestry and Fisheries: Land Use and Soil Management (DAFF)

The DAFF stated that the landowner is advised to protect the cultivated land where he wishes to establish orchards before, during and after the cultivation of the proposed sites effectively against excessive soil loss as a result of erosion through the action of water and wind. Measures that may be applicable is; a suitable soil conservation work to be constructed and thereafter be maintained in order to divert run-off water from other land or to restrict the run-off speed of run-off water; the land concerned or sites shall be cultivated in accordance with such methods or be laid out in such a manner that the run-off speed of run-off water is restricted and that the surface movement of soil particles be restricted; to establishment permanent

cover vegetation between orchards to prevent soil erosion; suitable wind breaks shall be constructed or suitable vegetation to be established to serve as a wind break.

The weeds and invasive plants present on the farm need to be controlled and removed annually through continuous monitoring and maintenance programs as they can cause damage to the surrounding natural vegetation. Clearing on the banks or in a watercourse need to be done in accordance with clearing methods that will have the least environmental damage. During the clearing of the aforementioned invasive plants the alien vegetation is to be removed from the river/water course and disposed of outside the river to prevent flushing of alien vegetation downstream.

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

The competent authority concurs with the EAP's responses to the issues raised during the public participation process and has included appropriate conditions in this Environmental Authorisation and in the EMPr.

#### 2. Alternatives

#### 2.1 Site/Activity Alternatives

<u>Alternative 1 (Herewith authorised)</u>

<u>Sump and Excavation on the Riviersonderend riverbank</u>

The sump, as well as excavated area lying to the west of it, is located right on the banks of the Riviersonderend river and was commenced with during September 2019. It entailed the installation of a sump on the riverbank and associated excavation works covering an area of  $\pm$  560m². This specific area has historically been used for an abstraction pipeline to the river and has been kept clear of vegetation for many years. However, the new sump and pipeline installation did trigger a listed activity as it was not merely maintenance. This site is categorised as an Aquatic CBA according to Cape Farm Mapper due to Watercourse protection and the possible occurrence of threatened vertebrate, even though limited natural vegetation remains.

### <u>Pipeline Construction and Road Extension</u>

The bulk water pipeline construction and road extension were constructed on the western side towards the centre section of the farm during September 2019, both through the larger wetland area, covering a combined development footprint of ±7000m². The road extension can be considered an extension, as it aligned with a historically existing farm road in order to make access to certain parts of the farm easier. The road extension is ± 960 m in length and between 6 – 8 m wide, with the pipeline situated within this road reserve. There was no representation of the terrestrial ecosystem, Central Rûens Shale Renosterveld (CR) or South Sonderend Sandstone Fynbos (V), evident on site. The site was disturbed and transformed by agricultural activities, and heavily infested along the riverbank with dense stands of Black Wattle. The site is considered Ecological Support Area (ESA) (RES) by Cape Farm Mapper. From the National Freshwater Ecosystem Priority Areas (NFEPA) map, the area within which the road fall is classified as a NFEPA area as the watercourses are associated with several natural NFEPA wetland areas.

## Clearing, Infilling and Planting of a Wetland

A wetland area, previously used for grazing, was filled in and orchards were established, covering an area of  $\pm$  63 000m<sup>2</sup>. This activity has already taken place during end of 2019. The wetland was in a largely to seriously modified state prior to the infilling and planting, but still had some biodiversity and wetland function. The entire site already transformed by agricultural activities and comprised a grazing pasture dominated by grass with a number of additional weeds evident on site before commencement of activities. Scattered individuals of wetland plant species were indicative of wetland conditions. There was no representation of the terrestrial ecosystem, South Sonderend Sandstone Fynbos, evident on site.

#### Construction of the Small Dam

The small dam, covering an area of ± 7000m<sup>2</sup> with a holding capacity of 8000m<sup>3</sup>, was constructed by the previous owner in 2017/2018. Several channels remain of the original braided Riviersonderend river system and the small dam is located within one of these channels. The dam is located in the southern centre of the farm. The channels, within which the dam was constructed, were already found to be in a largely to seriously modified state where more than 90% of its natural state have been modified through ploughing, planting and grazing over the whole wetland, and is regarded to have a low ecological importance and sensitivity. There was no representation of the terrestrial

ecosystem, South Sonderend Sandstone Fynbos, evident on site. The site was disturbed and transformed by agricultural activities and an agricultural field was present to the south of the small dam site. From the NFEPA map, the area within which the small dam fall is classified as a NFEPA area as the watercourses are associated with several natural NFEPA wetland areas.

#### <u>Dam Alternative 1 – Dam Option 5i</u>

The continuation of the proposed off-channel dam, Dam Option 5i will be located just east of Dam Option 5b, but outside of the buffer zone of Stream C, as well as outside any aquatic CBAs. This proposed dam will be filled by means of pumping water from an existing weir, namely the Noordhoek weir that will be reinstated, as well as from pumping water from the Riviersonderend River directly. The Noordhoek weir is located within a seasonal stream which originates in the mountains to the north, flowing southward, where it joins the Riviersonderend River. As this is an existing weir, this weir will not be further assessed as part of this Section 24G Report. The water to be pumped from the Riviersonderend River, will be extracted at the sump that was unlawfully constructed. There are no CBAs or ESAs identified within Dam Option 5i. The entire site is mapped as 'other natural areas' and is very disturbed and heavily infested with Pine, Black wattle and Port Jackson trees. Dam designs for Dam Option 5b and Dam Option 5i were compared. Dam Option 5b is the applicant's preferred because the unit cost of Dam Option 5b is R 17.6 compared to Dam Option 5i at R 33.3 (nearly double the cost). Both designs will hold a total capacity of 250000m³ water.

## <u>Alternative 2- Dam option 5b (Not authorised)</u>

Constructing a new in-stream dam, Dam Option 5b (250 000m³) and associated infrastructure. This dam site is favoured by the Applicant as a viable storage option on the southern section of the farm as, from an engineering perspective, dam construction at this site would be very economical. This dam site is also preferred as a viable alternative because the site is very much disturbed and heavily infested with invasive alien vegetation, even though a wetland is present. Cape Nature commented that the southern portion of this site serves as a watercourse protection for the Southern Coastal Belt, and forms part of a CBA, as well as an ESA with restoration potential. Dam designs for Dam Option 5b and Dam Option 5i were compared. Dam Option 5b is the applicant's preferred because the unit cost of Dam Option 5b is R 17.6 compared to Dam Option 5i

at R 33.3 (nearly double the cost). Both designs will hold a total capacity of 250000m<sup>3</sup> water.

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

The "No-Go" Alternative (where the site is rehabilitated to its previous state and none of the proposed infrastructure is constructed) will mean that valuable farm infrastructure, e.g. orchard, road and pipeline, will be lost. Also, the existing dams would not be expanded, or a new dam would not be constructed to store the allocated water for future use. The Applicant would then not be able to economically expand their agricultural enterprise or to continue sustainably, which translates into lost socio-economic opportunity costs and job creation.

### 3. Environmental Impact Assessment (EIA) and Mitigation Measures

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

# 3.1. Activity Need and Desirability and Regional/Planning context

The property is zoned "Agricultural Zone" and the construction of pipelines, farm dams, roads and other infrastructure are in line with such land use rights. The Applicant intended to expand an existing dam and to construct a new dam to utilize the lawful agricultural water enlistment for the property, in order to irrigate existing and new orchards to the economic benefit of the Applicant and of the region in general.

# 3.2. Biophysical and Biodiversity Impacts

### Sump and Excavation on the Riviersonderend riverbank

These activities have led to loss of vegetation and biodiversity directly around these areas, together with a large disturbance of soils and some local pollution (construction waste). The excavation and soil disturbance activities have already led to some erosion adjacent to the river, which will continue to worsen as the new rainy season commences. The excavation activities have also led to a donga within the stream banks, which leads to some impedance of water. It is however so little that this impact would be deemed negligible in terms of flow modification.

### <u>Pipeline Construction and Road Extension</u>

As these activities took place as linear structures, they led to a small loss of biodiversity and wetland area through excavation and later impaction of soils, with only some short-term impact on soil disturbance and possible water quality.

## Clearing, Infilling and Planting of a Wetland

These activities resulted in a loss of maintenance of biodiversity, which include a loss in flood attenuation, stream flow regulation, sediment trapping and erosion control. A large part of the downstream channel associated with the braided system is also completely filled in and has led to some loss of biodiversity and impedance of flow towards downstream wetland features.

### Construction of the Small Dam

Loss of biodiversity and reduction of water quality due to the fact that the small dam was built within one of the channels of the Riviersonderend river system, would have been definite. The flow was also modified due to the fact that the small dam was built within one of the channels of the river system.

#### Expansion of the Small Dam

The proposed expansion of the small dam will impact on the surrounding channelled wetlands. It has the potential to impact biodiversity and to modify the flow in the channels surrounding the small dam.

# Expansion of Dam Option 2b and Construction of Weir

Impacts arising from the construction phase would lead to loss of biodiversity at the dam wall construction site, as well as possible water quality impairment through sedimentation and contaminated runoff into the downstream wetland area. Potential loss of vegetation and biodiversity could also take place in the wetland downstream of the site, if mitigation measures are not adhered to. The section of the wet area affected by the construction of the new dam wall of Dam Option 2b, will however fall over a more modified part of the wet area. Considering the current modified state of Dam Option 2b, with the proposed rehabilitation and re- vegetation of certain areas on the farm, together with the removal of alien invasive plant species within all the freshwater features, the cumulative impact of this activity could potentially have a low positive

impact. The proposed weir will lead to a loss of vegetation and impact on biodiversity. It could also result in water quality impairment and flow modification.

Alternatives: Construction of a dam- Option 5b

The Applicant intended to construct a new dam that can hold 250 000m³ of water. Two dam alternatives, namely the Preferred Dam Alternative (Dam Option 5b) and Dam Alternative 1 (Dam Option 5i). A total storage capacity of approximately 500 000 m³ is targeted, which will be achieved by the combination of the construction of a new dam and the expansion of an existing dam).

This activity will directly impact on any freshwater features, and indirectly impact on the surrounding stream and wetland areas. Construction of this dam would result in a High long-term (negative) impact on a local scale during both the construction and operational phases of this activity.

<u>Dam Alternative 1 – Dam Option 5i (Authorised Alternative)</u>

This activity could potentially impact on the terrestrial and aquatic habitat in the long-term. Construction of this dam would result in a Very Low (negative) impact during both the construction and operational phases of this activity.

**Borrow Areas** 

The sand borrow area potentially could impact on the larger freshwater system regarding water quality and biodiversity. The rock borrow area is not expected to impact the surrounding area. The expected impact is of Low negative significance.

<u>Bridge Reinforcement</u>

Regarding the fact that this activity will be an upgrade to existing infrastructure, the impact on vegetation and aquatic habitat is expected to be minimal. With mitigation, Very Low to Insignificant.

4. NEMA Principles

The National Environmental Management Principles (set out in section 2 of the NEMA), which apply to the actions of all organs of state, serve as guidelines by reference to which any organ of state must exercise any function when taking any decision, and which must guide the

interpretation, administration and implementation of any other law concerned with the protection or management of the environment), inter alia, provides for:

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

In view of the above, the NEMA principles, compliance with the conditions stipulated in this Environmental Authorisation, and compliance with the EMPr, the competent authority is satisfied that the listed activities will not conflict with the general objectives of integrated environmental management stipulated in Chapter 5 of the NEMA and that any potentially detrimental environmental impacts resulting from the listed activities can be mitigated to acceptable levels.

