

## S24G application

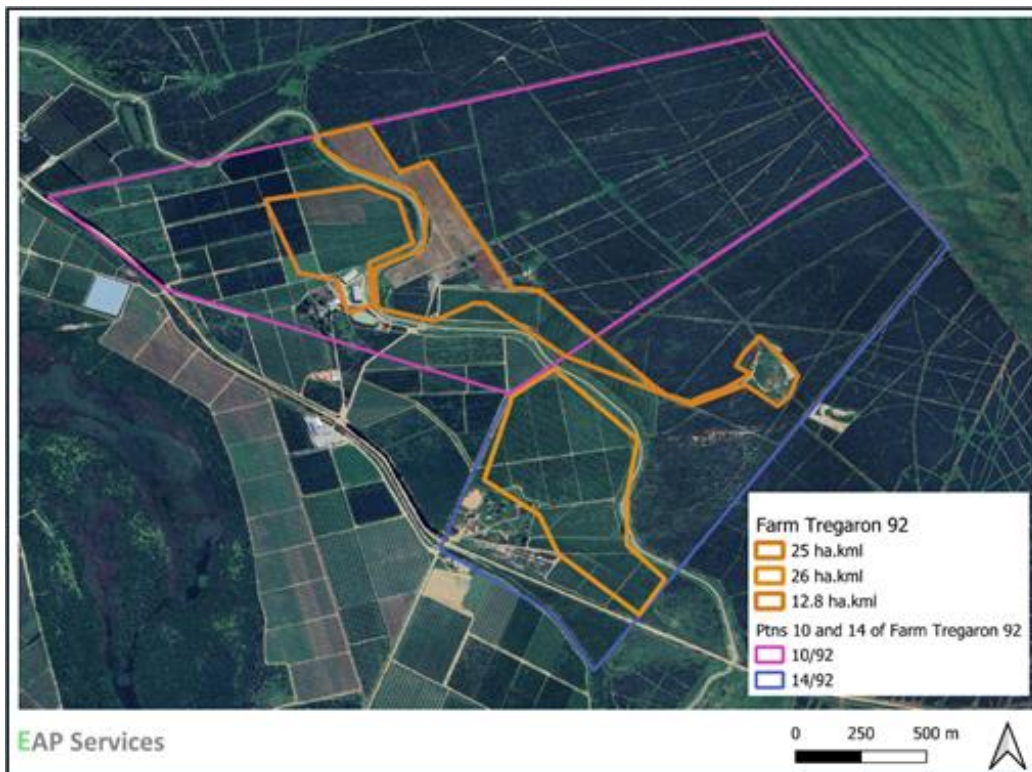
### PART 2 - SECTION A

## Appendix 4– DRAFT ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT (Draft EMPr)

In terms of the **National Environmental Management Act** (Act No. 107 of 1998, as amended) & 2014  
Environmental Impact Regulations (as amended, 2017) for:

**Activities carried out on portions 10 and 14 of Farm Tregaron No 92,  
Sunland, Ward 8 of the Sundays River Local Municipality, Sarah  
Baartman District Municipality, Eastern Cape**

**Draft application in terms of Section 24G of the National  
Environmental Management Act (Act No. 107 of 1998)  
INTERESTED AND AFFECTED PARTY REVIEW AND COMMENTS:  
DEDEAT REFERENCE: TO BE ISSUED**



**PREPARED FOR THE APPLICANT:**  
**PREPARED BY:**  
**DATE:**

Mr. Mark Hume (Humeat cc)  
CLAIRE DE JONGH (EAPASA REG: 2021/3519)  
September 2026

## ENVIRONMENTAL MANAGEMENT PROGRAMME REQUIREMENTS:

Appendix 4 of Regulation 982 of the 2014 EIA Regulations (as amended, 2017) published in terms of the NEMA, contains the required contents of an Environmental Management Programme (EMP). The table below serves as a summary of how these requirements were incorporated into this EMPR:

An EMPR must comply with section 24N of the Act and include:-

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| (a) Details of –<br><br>(i) The EAP who prepared the EMPR; and<br>(ii) The expertise of the EAP to prepare an EMPR, including a curriculum Vitae;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | This EMPR was prepared by Claire De Jongh. Please see attached CV of the EAP (Annexure 3). |
| (b) A detailed description of the aspects of the activity that are covered by the EMPR as identified by the project description;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Section 6 -EMP                                                                             |
| (c) a map at an appropriate scale which superimposes the proposed activity, it associated structures, and infrastructure on the environmental sensitivities of the preferred site, indicating any areas that should be avoided, including buffers;                                                                                                                                                                                                                                                                                                                                                                                                                   | Annexure 1                                                                                 |
| (d) A description of the impact management outcomes, including management statements, identifying the impacts and risks that need to be avoided, managed and mitigated as identified through the environmental impact assessment process for all phases of the development including –<br>(i) planning and design;<br>(ii) pre-construction activities;<br>(iii) construction activities;<br>(iv) rehabilitation of the environment after construction and where applicable post closure;<br>and<br>(v) where relevant, operation activities;                                                                                                                        | Appendix 2 – Retrospective assessment                                                      |
| (f) a description of proposed impact management actions, identifying the manner in which the impact management outcomes contemplated in paragraph (d) will be achieved, and must, where applicable, include actions to –<br>(i) avoid, modify, remedy, control or stop any action, activity or process which causes pollution or environmental degradation;<br>(ii) comply with any prescribed environmental management standards or practises;<br>(iii) comply with any applicable provisions of the Act regarding closure, where applicable; and<br>(iv) comply with any provisions of the Act regarding financial provision for rehabilitation, where applicable; | Section 6 EMP                                                                              |
| (g) the method of monitoring the implementation of the impact management actions contemplated in paragraph (f);                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Section 5<br>Section 6<br>Section 7                                                        |
| (h) the frequency of monitoring the implementation of the impact management actions contemplated in paragraph (f);                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Section 6<br>Section 7                                                                     |
| (i) an indication of the persons who will be responsible for the implementation of the impact management actions;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Section 6 of draft EMPR                                                                    |
| (j) the time periods within which the impact management actions contemplated in paragraph (f) must be implemented;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Section 6<br>Section 6<br>Section 7                                                        |
| (k) the mechanism for monitoring compliance with the impact management actions contemplated in paragraph (f);                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Section 6 of draft EMPR<br>Section 7                                                       |
| (l) a program for reporting on compliance, taking into account the requirements as prescribed by Regulations;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Section 4<br>Section 7 COMPLIANCE WITH THE EMPR                                            |
| (m) an environmental awareness plan describing the manner in which –                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Section 7<br>Section 10.                                                                   |

|                                                                                                                                                                                                                                             |                                              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| <p>(i) the applicant intends to inform his or her employees of any environmental risk which may result from their work; and</p> <p>(ii) risks must be dealt with in order to avoid pollution or the degradation of the environment; and</p> |                                              |
| <p>(n) any specific information that may be required by the competent authority.</p>                                                                                                                                                        | <p>Appendix 2 – Retrospective assessment</p> |

## Glossary of Terms

|               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>BAR</b>    | <b>Basic Assessment Report</b> – A tool used by the EAP to submit to the competent authority if listed activities is triggered in Regulations GNR 327 and GNR 324 as per NEMA to make a decision regarding a proposed development.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>DFFE</b>   | <b>Department Forestry Fisheries and Environment</b> – the national authority for sustainable environmental management and integrated development planning.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>DEDEAT</b> | Eastern cape Department of Economic Development, Environmental Affairs and Tourism                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>CBA</b>    | <b>CBA Critical Biodiversity Area</b> – Areas in a natural condition that are required to meet biodiversity targets, for species, ecosystems or ecological processes and infrastructure.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>CMP</b>    | <b>Coastal Management Plan</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>ECPHRA</b> | <b>Eastern Cape Provincial Heritage Resources Authority</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>EAP</b>    | <p><b>Environmental Assessment Practitioner</b> – An EAP and a specialist, appointed in terms of regulation 12(1) or 12(2) must –</p> <ul style="list-style-type: none"> <li>(a) be independent.</li> <li>(b) Have expertise in conducting environmental impact assessments or undertaking specialist work as required, including knowledge of the Act, these regulations and any guidelines that have relevance to the proposed activity.</li> <li>(c) Ensure compliance with these Regulations</li> <li>(d) Perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the application.</li> <li>(e) Take into account, to the extent possible, the matters referred to in regulation 18 when preparing the application and any report, plan or document relating to the application; and</li> <li>(f) Disclose to the proponent or applicant, registered and affected parties and the competent authority all material information in the possession of the EAP and, where applicable, the specialist, that reasonably has or may have the potential of influencing – <ul style="list-style-type: none"> <li>i. Any decision to be taken with respect to the application by the competent authority in terms of these regulations; or</li> <li>ii. The objectivity of any report, plan or document to be prepared by the EAP or specialist, in terms of these Regulations for submission to the competent authority; unless access to that information is protected by law, in which case it must be indicated that such protected information exists and is only provided to the competent authority.</li> </ul> </li> </ul> <p>(2) In the event where the EAP or specialist does not comply with sub regulation (1)(a), the proponent or applicant must, prior to conducting public participation as contemplated in chapter 5 of these regulations, appoint another EAP or specialist to externally review all work undertaken by the EAP or specialist, at the applicants cost.</p> <p>(3) An EAP or specialist appointed to externally review the work of an EAP or specialist as contemplated in sub regulation (2), must comply with sub regulation (1).</p> |
| <b>ECO</b>    | <b>Environmental Control Officer</b> – A site agent who needs to ensure that all environmental authorisation and conditions are adhered to during the construction phase of the project                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>EIA</b>    | <b>Environmental Impact Assessment</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>EMPr</b>   | <b>Environmental Management Programme</b> – can be defined as “an environmental management tool used to ensure that undue or reasonably avoidable adverse impacts of the construction, operation and decommissioning of a project are prevented; and that the positive benefits of the projects are enhanced”.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>ESA</b>    | <b>Ecological Support Area</b> – Areas that are not essential for meeting biodiversity targets, but that play an important role in supporting the functioning of Pas or CBAs, and are often vital for delivering ecosystem services.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

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|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>NEMA</b>  | <b>National Environmental Management Act (Act 107 of 1998) as amended 2017</b> – national environmental legislation that provides principles for decision-making on matters that affect the environment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>PA</b>    | <b>Protected Area</b> - A protected area is an area of land or sea that is formally protected by law and managed mainly for biodiversity conservation. Protected areas recognised in the National Environmental Management: Protected Areas Act (Act 57 of 2003) (hereafter referred to as the Protected Areas Act) are considered formal protected areas in the NPAES. This is a narrower definition of protected areas than the International Union for Conservation of Nature (IUCN) definition. <sup>1</sup> The NPAES distinguishes between land-based protected areas, which may protect both terrestrial and freshwater biodiversity features, and marine protected areas. |
| <b>SANBI</b> | <b>South African National Biodiversity Institute</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>SBDM</b>  | <b>Sarah Baartman district Municipality</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>SRVM</b>  | <b>Sundays River Valley Municipality</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>SW</b>    | <b>Stormwater</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

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# 1. INTRODUCTION

In accordance with the Integrated Environmental Management Guidelines published by the Department of Forestry, Fisheries, and the Environment (DFFE) in 1992, the purpose of an Environmental Management Programme (EMPr) is “to describe how negative environmental impacts will be managed, rehabilitated or monitored and how positive impacts will be maximised”.

Section 28 of NEMA (National Environmental Management Act, Act 107 of 1998) states that:

*Duty of care and remediation of environmental damage -*

*"(1) Every person who causes, has caused, or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot be reasonably avoided or stopped, to minimise and rectify such pollution or degradation of the environment"*

This draft EMPr must be read in conjunction with the draft Basic Assessment Report (April 2026) and all related appendices. All recommendations, relevant conditions and mitigation measures provided in these documents have been included in the EMPr and must be adhered to.

This EMPr must form an integral part of the contract documents, as it outlines the methodology and duties required so that the project objectives can be achieved in an environmentally sustainable manner; with particular reference to the prevention and mitigation of environmental impacts caused by planning, construction and operational phases and activities associated with this project.

These requirements will have a financial impact on the project's costings.

**This EMPr is a dynamic document that may require updating during the project phases in response to new and changing circumstances to mitigate environmental impacts.**

**Relevant changes and updated EMPr must be submitted to the Eastern Cape Department of Economic Development, Environmental Affairs and Tourism (DEDEAT) for approval.**

## 1.2 Purpose of the EMPr

The purpose of this EMPr is to ensure that the negative environmental impacts of the proposed activities are managed, mitigated and kept to a minimum during the planning, construction and operational phases of the proposed development. The EMPr focuses on providing practical measures for avoiding negative environmental impacts and enhancing positive environmental impacts where possible.

Once the EMPr is approved by DEDEAT it is seen as a legal binding document on the following affected parties:

- 1 Project Applicant (Humeat cc)
- 2 All employees

Copies of this EMPr must be kept on site and all senior personnel are expected to familiarise themselves with the content of this EMPr.

Contractor method statements **must be aligned to relevant conditions in the EMPr and any conditions of the EA** (if attained).

It is suggested that the EMPr be reviewed on a five (5) year basis if required. Should any amendments need to be made during operational phase, **written authorisation should be obtained from DEDEAT.**

## 1.2 The Polluter-Pays Principle

This principle provides for “the costs of remedying pollution, environmental degradation and consequent adverse health effects and of preventing, controlling or minimizing further pollution, environmental damage or adverse health effects must be paid for by those responsible for harming the environment.” The Polluter Pays Principle will be rigorously applied throughout the construction phase of this project.

## 2. PROJECT DETAILS

Agricultural activities are in place on Portions 10 (189 ha) and 14 (128 ha) of Farm Tregaron No 92 located approximately 6.5 km north of the town of Sunland in ward 8 of the Sundays River Local Municipality, Eastern Cape. The combined size is an estimated 317 ha, of which approximately 129 ha of agricultural activities is currently in place. Approximate central coordinates: 33° 27.102'S; 25° 35.758'E

Water is currently sourced directly from the Lower SRLM canal. Electricity reticulation is in place. Access to the site is in place from the R336.



**Figure 1: Location of Portions 10 and 14 of Farm Tregaron 92, Sundays River Valley Municipality**

### Existing and expanded footprints

#### 1999 – 2006

Dwellings, dam and roads (7 ha) and approximately 38 ha of cultivated farming (mostly citrus) were in place at the time of purchase. Water rights were in place; water is sourced directly from the SRVM canal. Electricity reticulation was in place; access to the site was in place from the R336. No expansion took place between 1999 – 2006.

#### 2006 – 2010

Cultivated land was expanded by approximately 9 ha

### 2010 - 2014

Additional Infrastructure was put in place

Cultivated land was expanded by approximately 32 ha

### 2014 - 2017

Cultivated land was expanded by approximately 9 ha

### 2017 - 2025

Cultivated land was expanded by approximately 34 ha

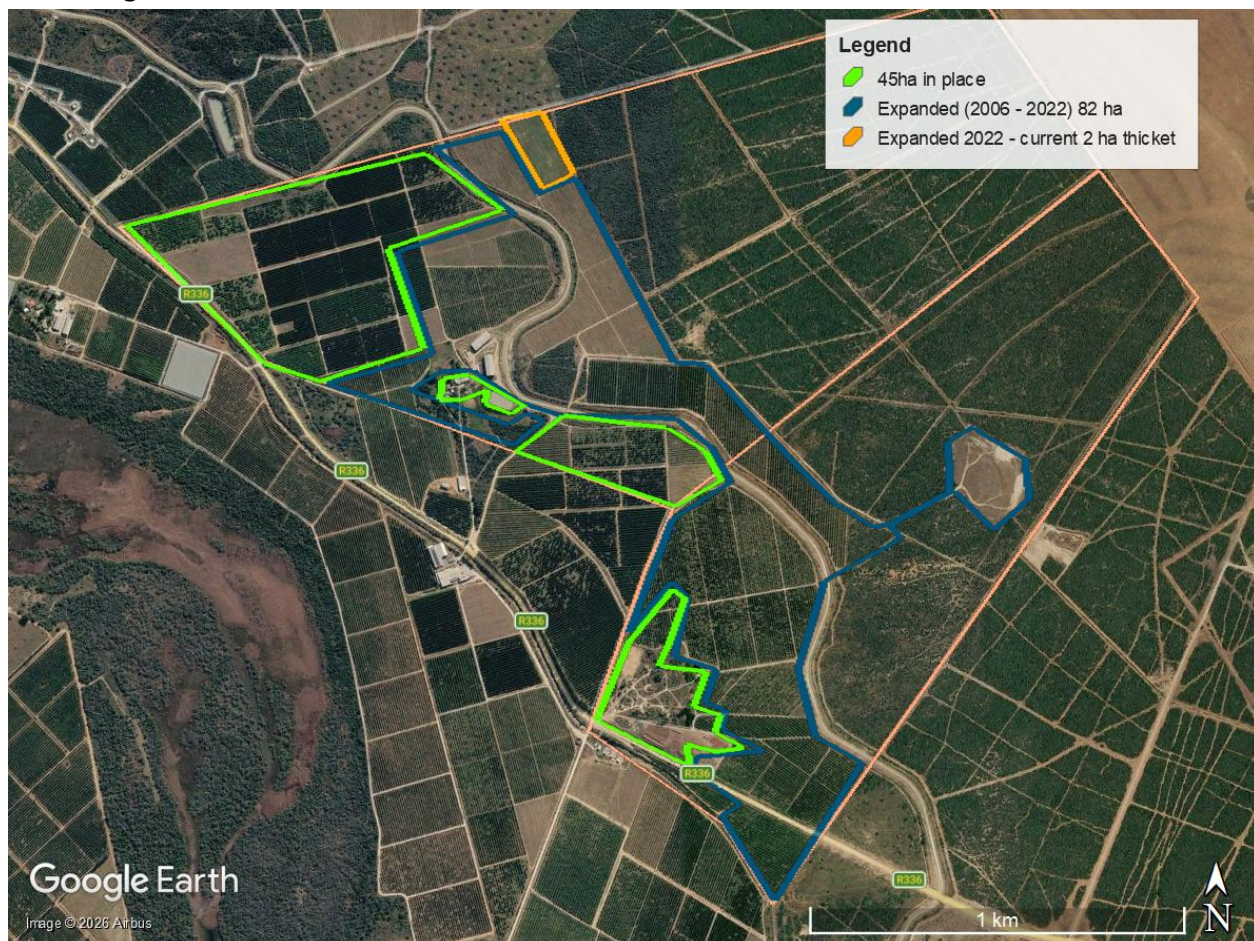
- Cultivated land was expanded by approximately 32 ha (2017 – 2022)
- Cultivated land was expanded by approximately 2 ha (2022- current)

**Existing at time of purchase: 45 ha**

**Total expansion area: 84 ha**

**Total current agricultural use area (including dwellings, structures, roads, dam): 129 ha**

**Remaining natural area: 188 ha**



**Figure 2: Existing (45 ha) and expanded (84 ha) agricultural areas**

The proposed development and continuation of activities requires an environmental authorisation to be issued by the competent authority in terms of Section 24G of the NEMA. The competent authority for the application is the Eastern Cape Department of Economic Development, Environmental Affairs and Tourism.

The main impacts associated with the proposed activity includes the following:

- Loss of vegetation and fragmentation of habitats
- Soil disturbance

- Impacts associated with pesticide and fertilizer use (cumulative)
- Positive impact on socio-economic conditions as a result of employment opportunities
- Positive impact of the operation on agricultural production

The EMPr contains all the mitigation measures to prevent / reduce negative environmental impacts and enhance positive impacts. These mitigations measures are a combination of measures recommended by the specialist assessments and recommendations by the EAP. **This EMPr must be updated with all conditions of the environmental authorisation (EA) if attained.**

### 3. LEGISLATIVE REQUIREMENTS

#### 3.1 Signing of the EMPr

The acknowledgement form at the back of the approved EMPr is to be signed by the holder of the Environmental Authorisation (the Applicant) and operations manager acknowledging that all parties are familiar with the requirements of the EMPr. All employees are to be made aware of the conditions as contained in the EMPr.

#### 3.2 Legislation

Of importance are all national, provincial and municipal by-laws and regulations

*Relevant environmental legislation and guidelines:*

- ***National Environmental Management Act (Act 107 of 1998), Environmental Conservation Act and Regulations***

In terms of National environmental management act (act 107 of 1998) an environmental authorisation is required for the expansion of the agricultural area on the farm portions. Environmental authorisation for relevant activities has not yet been applied for or authorised.

Listed activities which are required to be applied for:

- **ECA EIA Contraventions : Between 08 September 1997 end of day 09 May 2002**  
**Activities unlawfully commenced with on or after 08 September 1997 and before end 09 May 2002: EIA Regulations promulgated in terms of the ECA, Act No 73 of 1989, as amended**
  - No expansion of agricultural areas took place between the year the farm was purchased (1999) and 2002
- **ECA EIA Contraventions : Between 10 May 2002 and before end of day 02 July 2006**  
**Activities unlawfully commenced with on or after 10 May 2002 and before end 02 July 2006: EIA Regulations promulgated in terms of the ECA, Act No 73 of 1989, as amended**
  - No expansion of agricultural areas took place between the year the farm was purchased (1999) and June 2006
- **NEMA EIA Contraventions : Between 03 July 2006 and before end of day 01 August 2010**  
**Activities unlawfully commenced with in terms of the EIA Regulations promulgated in terms of the NEMA, Act No 107 of 1998, as amended on or after 03 July 2006 and before end of day 01 August 2010**  
Activity 12 of GNR 386 The transformation / removal of indigenous vegetation of 3 hectares or more or of any size where the transformation or removal would occur within a critically endangered / endangered ecosystem listed in terms of Section 52 of the NEM: Biodiversity Act (Act 10 of 2004)
  - Cultivated land was expanded by approximately 9 ha
  - The vegetation on the farm portions includes Albany Alluvial vegetation and Sundays Valley Thicket mapped in terms of the National Vegetation Map, 2024 (NVM, 2024). In terms of section 52 of NEMBA

(Activity (a)(i)), Albany Alluvial Vegetation has an Endangered status, and Sunday's Valley Thicket has a least concern status as per National Biodiversity Assessment (2025).

- **NEMA EIA Contraventions : On or after 02 August 2010 until 7 December 2014**

**Activities unlawfully commenced with in terms of the EIA Regulations promulgated in terms of the NEMA, Act No 107 of 1998, as amended on or after 02 August 2010 until 7 December 2014**

Activity 8 of GNR 544 The construction of agri-industrial infrastructure outside industrial complexes where the development footprint covers an area of 2000 square meters or more

Activity 12 of GNR 546 The clearance of an area of 300 square metres / 1 hectare or more of vegetation where 75% or more of the vegetative cover constitutes of indigenous vegetation within any a critically endangered / endangered ecosystem / critical biodiversity area...

Activity 13 of GNR 546 The clearance of an area of 300 square metres / 1 hectare or more of vegetation where 75% or more of the vegetative cover constitutes of indigenous vegetation within any a critically endangered / endangered ecosystem / critical biodiversity area...

Activity 14 of GNR 546 Listing Notice 3 (GNR 546, 2010) Activity 14: : The clearance of an area of 5 hectare or more of vegetation where 75% or more of the vegetative cover constitutes of indigenous vegetation

- Additional Infrastructure was put in place
- Cultivated land was expanded by approximately 32 ha
- The vegetation on the farm portions includes Albany Alluvial vegetation and Sundays Valley Thicket mapped in terms of the National Vegetation Map, 2024 (NVM, 2024). In terms of section 52 of NEMBA (Activity (a)(i)), Albany Alluvial Vegetation has an Endangered status, and Sunday's Valley Thicket has a least concern status as per National Biodiversity Assessment (2025).

- **NEMA EIA Contraventions: EIA regulations 2014 (as amended, 2017)**

**Activities unlawfully commenced with in terms of the EIA Regulations promulgated in terms of the NEMA, Act No 107 of 1998, as amended on or after 8 December 2014**

Activity 15 of GNR 984, The clearance of an area of 20 hectares or more of indigenous vegetation...

Activity 12 of GNR 985 The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.

- Cultivated land was expanded by approximately 9 ha (2014 – 2017)
- Cultivated land was expanded by approximately 34 ha (2017 – 2025)
- The vegetation on the farm portions includes Albany Alluvial vegetation and Sundays Valley Thicket mapped in terms of the National Vegetation Map, 2024 (NVM, 2024). In terms of section 52 of NEMBA (Activity (a)(i)), Albany Alluvial Vegetation has an Endangered status, and Sunday's Valley Thicket has a least concern status as per National Biodiversity Assessment (2025).

The landowner would like to submit an application in terms of Section 24G of the NEMA to authorise the existing agricultural worked areas and supporting structures.

- **National Water Act (Act 36 of 1998)**

Water rights are in place and the activities are not taking place within 100 m of a drainage line / perennial river or within 500 m of a wetland. No water uses listed in Section 21 of the NWA are triggered by this development.

- **National Environmental Management: Waste Act 59 Of 2008**

The waste hierarchy must be followed at all times. Reduce, reuse, recycle; discarding of waste must be the last option. All waste to be discarded must be correctly transported and safely disposed at a licensed landfill site..

- **National Environmental Management Act: Biodiversity Act (Act 10 of 2004)(NEMBA)**
- **Environmental Conservation Act (Act 73 of 1989) (ECA)**
- **Provincial Nature and Environmental Conservation Ordinance No 19 of 1974 (PCNO)**

NEMBA and CARA provides a list of Alien invasive species requiring removal (NEMBA supersedes CARA).

Collection and translocation of NEMBA threatened or protected species (TOPS) or species listed in the Nature Conservation Ordinance No. 19 of 1974 will require the relevant permits to be in place.

Search and rescue by a suitable specialist will need to be carried and required permits be in place irrespective of whether an Environmental Authorisation and accompanying EMPr is required.

Disturbance / removal of trees protected in terms of the National forest Act will also require a permit.

Note: No SCC or protected trees were confirmed to be present on the site.

- **Conservation of Agricultural Resources Act (Act 43 of 1993) (CARA)**

A permit to cultivate virgin soil is required in terms of regulation 2 of the CARA.

Note: An application to cultivate virgin soil has been submitted for the existing area.

- **National Heritage Resources Act 25 of 1999**

Note: A notice of intent has been submitted to the Eastern Cape Provincial Heritage Resources Authority

Should any buried archaeological resources, human remains or burials be uncovered during the course of development activities, work must cease in the vicinity of these finds. Eastern Cape Provincial Heritage Resources Authority (ECPHRA) must be contacted immediately in order to determine an appropriate way forward.

Chance Fossil Finds Protocol (CFFP): A Chance Fossil Finds Protocol, as incorporated into this draft Environmental Management Programme (EMPr), is to be used to guide on-site personnel during all ground-disturbing activities.

Statutes are amended periodically; it is the Applicant's responsibility to ensure a competent person (EAP or similar) identifies relevant legislation relevant to the proposed activity

## 4. Project Responsibilities

Responsibility for the implementation of the EMPr lies with the Applicant

The project Applicant will be responsible for the following:

- Adhering to the approved EMPr.
- Ensure that all employees, service providers are aware of and understand the conditions of the EMPr.
- Has the right to remove any person from site if they contravene with the EMPr.
- Appoint an external auditor

The EAP / auditors responsibilities must include, *inter alia*:

- Guide, advise and consult the relevant authority on environmental issues as required.
- Revise the EMPr as required and inform the relevant parties of the changes.
- Ensure staff are adequately trained on environmental responsibilities as applicable
- Ensure audits are carried out as required

The responsibilities of the employees and Contractors include but are not limited to the following:

- Adhere with the conditions and recommendations of the EMPr or any other legally binding documentation.
- Prevent actions that may cause harm to the environment.
- Correct non compliances identified
- Be responsible for any remedial activities in response to an environmental incident within their scope of influence.
- Ensure compliance of all site personnel and / or visitors to the EMPR and any other authorisations.

## **5. REPORTING PROCEDURES**

### **5.1 Documentation**

The following documentation must be kept on site in order to record compliance with the EMPr: An Environmental File which includes:

- Copy of the EMPr;
- Copy of the EA;
- Permits (e.g. soil permits)
- Reports submitted to Eastern Cape Provincial Heritage Resources Authority (ECPHRA)
- Audit reports
- Incident / response Register
- Waste Documentation as required
- Material Safety Data Sheets (MSDSs) for any hazardous substances used

### **5.2. Incident / complaint Register**

The Applicant will put in place an Environmental Register and will ensure that the following information is recorded for all complaints / incidents:

- Nature of complaint / incident.
- Causes of complaint / incident.
- Party/parties responsible for causing complaint / incident.
- Immediate actions undertaken to stop / reduce / contain the causes of the complaint / incident.
- Additional corrective or remedial action taken and/or to be taken to address and to prevent reoccurrence of the complaint / incident.
- Timeframes and the parties responsible for the implementation of the corrective or remedial actions.
- Procedures to be undertaken and/or penalties to be applied if corrective or remedial actions are not implemented.
- Copies of all correspondence received regarding complaints/incidents.

### **5.3. Audit Report and Non-conformance report**

External audits are recommended. Conditions of EA (if issued) and EMPr requirements will be audited including the EM file. Non compliances will be identified and actions / recommendations provided with timeframes to address the non-compliance. An audit report identifying non compliances will be issued to the Applicant and the relevant authorities as a final step towards rectifying a failure in complying with a requirement of the EMPr. The Applicant must be given an opportunity to rectify the issue.

The following information should be recorded:

- Details of non-conformance;
- Any equipment involved;
- Any chemicals or hazardous substances involved;
- Work procedures not followed;
- Nature of the risks and other physical aspects;
- Actions agreed to by all parties following consultation to adequately address the non-compliance
- Agreed timeframe by which the corrective actions must be carried out; and
- The auditor should verify that the agreed actions have taken place by the agreed completion date, when completed satisfactorily

#### 5.4. Emergency Response

The Applicants environmental emergency procedures must ensure appropriate responses to unexpected / accidental actions / incidents that could cause environmental impacts.

The Environmental Emergency Response Plan must ensure and include the following:

- Employees shall be adequately trained in terms of incidents and emergency situations;
- Details of the organisation (i.e. manpower) and responsibilities, accountability and liability of personnel;
- A list of key personnel and contact numbers;
- Details of emergency services (e.g. the fire department / on-site fire detail) shall be listed;
- Internal and external communication plans, including prescribed reporting procedures;
- Actions to be taken in the event of different types of emergencies;
- Incident recording, progress reporting and remediation measures to be implemented; and
- Information on any hazardous materials, including the potential impact associated with each, and measures to be taken in the event of accidental release.

## 6. ENVIRONMENTAL MANAGEMENT PROGRAMME

It is important that mitigation measures are strictly adhered to and that all measures are taken to reduce the disturbance footprint wherever possible to minimize negative impacts.

### 6.1 Planning and operations

- Ensure that all conditions of any Environmental Authorisation (EA) (if attained), together with the applicable specialist recommendations and environmental management measures, are implemented.
- Establish and maintain an Environmental Management File containing all relevant environmental documentation, including the EA, EMPr, permits, specialist reports, audit reports and other records relating to environmental compliance.
- Undertake a review of applicable environmental legislation and approval requirements before any future development, agricultural expansion, rezoning or land-use change is undertaken.
- Ensure that no expansion of the agricultural footprint or other development occurs outside the currently assessed footprint until the required environmental authorisation and other applicable approvals have been obtained.
- Allocate an appropriate budget for environmental management, monitoring, compliance and any rehabilitation requirements arising from the retrospective process.
- Undertake periodic environmental compliance audits, with a two-yearly audit period recommended, to verify ongoing compliance with applicable environmental approvals and management requirements.

### Unnecessary loss of vegetation and disturbance to ecological support areas, habitats and fauna

- No further clearing of indigenous vegetation or natural habitat may occur without the required environmental authorisation
- No further clearing along the canal corridor should be permitted.
- Existing vegetated areas retained between citrus orchards should, where practicable, be maintained as part of the ongoing agricultural management of the property, as these areas provide forage and refuge for birds and small animals.
- Where vegetated areas between orchard blocks are rotated or brought into agricultural production, vegetated areas should, where practicable, be retained elsewhere within the orchard matrix to continue providing forage and refuge opportunities for fauna.
- Farming methods that promote biodiversity within the agricultural landscape should be implemented, including the retention of vegetated areas where practicable.
- An Alien Invasive Species (AIS) Management Plan should be implemented, with ongoing control of invasive species in accordance with accepted best practice (e.g. Working for Water guidelines).
- Any rehabilitation that may be required should make use of indigenous species occurring naturally within the area. Large succulent species such as *Aloe ferox*, *Aloe striata* and *Aloe africana* are encouraged where appropriate as windbreaks along fence lines.
- No disturbance, collection or removal of indigenous flora or fauna may take place without the necessary permits, where applicable.
- Gathering of firewood or indigenous vegetation on or adjacent to the property should not be permitted.
- No dumping of soil, rubble or other materials on surrounding indigenous vegetation is permitted.
- Workers may not intentionally harm, capture, snare or kill indigenous fauna. Environmental awareness training should include the protection of fauna, and contractual penalties should apply where appropriate.

- Injured, trapped or potentially dangerous fauna encountered on site should be reported to the appropriate authority or environmental representative. Photographs should be taken where practicable to assist with identification.
- Vehicle speeds on farm roads should be kept to a minimum to reduce the likelihood of fauna collisions.
- Where new fencing is installed, consideration should be given to fence designs that allow the movement of small terrestrial fauna where practicable.

In accordance with the National Biodiversity Offset Guideline, biodiversity offset requirements for impacts to Endangered Albany Alluvial Vegetation should be considered by the Competent Authority during determination of the application.

### Loss / disturbance of palaeontological resources

SAHRIS CASE ID: 26776

ECPHRA requirements:

Submit the EA and Record of Decision (RoD) to ECPHRA once issued.

- A Heritage Chance Finds Procedure must be submitted to ECPHRA for approval, before development start and the Fossil Chance Finds Protocol must be adhered to (PIA report, page 27).
- Heritage induction and training for all ground staff including the ECO must be conducted. Proof thereof to be submitted to ECPHRA.
- Upon completion of the project, a final heritage compliance report to be submitted to ECPHRA.

### PIA Recommendations

- Notice sent to Eastern Cape Provincial Heritage Resources Authority (Completed)
- Carry out required assessments (completed)
- The development may proceed with no limitations, on the condition that a palaeontologist is on site during any excavation into solid bedrock. In the unlikely event of fossil material being found during expansion, the Chance Fossil Find Procedure at the end of this document should be followed.
- Should important new fossil remains be found the finder should alert ECPHRA (i.e. The Eastern Cape Provincial Heritage Resources Authority. Contact details: Ms. Ayanda Ma Mncwabe Mama 74 Alexander Road, King Williams Town 5600; amncwabe@gmail.com) as soon as possible.
- A professional palaeontologist to carry out appropriate action, as required, at the developer's expense.
- Palaeontological mitigation would normally involve the scientific recording and judicious sampling or collection of fossil material as well as associated geological data (e.g. stratigraphy, sedimentology, taphonomy).
- The palaeontologist concerned with mitigation work will need a valid fossil collection permit from ECPHRA and any material collected would have to be curated in an approved depository (e.g. museum or university collection).
- All palaeontological specialist work should conform to international best practice for palaeontological fieldwork and the study (e.g. data recording fossil collection and curation, final report) should adhere as far as possible to the minimum standards for Phase 2 palaeontological studies recently developed by SAHRA (2013).
- These recommendations are summarised in tabular form in Appendix 1 of the palaeontological study - Chance Fossil Finds Procedure and is incorporated into the Environmental Management Programme (EMPr) for the proposed development (Refer to EMPr for Chance Fossil Finds Procedure (Adopted from the HWC Chance Fossils Finds Procedure: June 2016)
- Include the above in Training of contractors and include any such findings to be reported to landowner in recommended Rules of conduct

## Chance Finds Procedure

Procedure to follow if it is likely that the material identified is a fossil:

- The ECO or site agent must ensure that all work ceases immediately in the vicinity of the area where the fossil or fossils have been found;
- The ECO or site agent must inform SAHRA of the find immediately. This information must include photographs of the findings and GPS co-ordinates;
- The ECO or site agent must compile a Preliminary Report and fill in the attached Fossil Discoveries: Preliminary Record Form within 24 hours without removing the fossil from its original position. The Preliminary Report records basic information about the find including:
  - o The date
  - o A description of the discovery
  - o A description of the fossil and its context (e.g. position and depth of find)
  - o Where and how the find has been stored
  - o Photographs to accompany the preliminary report (the more the better):
  - o A scale must be used
  - o Photos of location from several angles
  - o Photos of vertical section should be provided
  - o Digital images of hole showing vertical section (side);
  - o Digital images of fossil or fossils.
- Upon receipt of this Preliminary Report, SAHRA will inform the ECO or site agent whether a rescue excavation or rescue collection by a palaeontologist is necessary.
- Exposed finds must be stabilised where they are unstable and the site capped, e.g., with a plastic sheet or sandbags. This protection should allow for the later excavation of the finds with due scientific care and diligence.
- SAHRA can advise on the most appropriate method for stabilisation.
- If the find cannot be stabilised, the fossil may be collected with extreme care by the ECO or the site agent and put aside and protected until SAHRA advises on further action. Finds collected in this way must be safely and securely stored in tissue paper and an appropriate box. Care must be taken to remove all the fossil material and any breakage of fossil material must be avoided at all costs.

## Loss / disturbance of archaeological / heritage resources

SAHRIS CASE ID: 26776

ECPHRA requirements:

Submit the Record of Decision (RoD) to ECPHRA once issued.

- A Heritage Chance Finds Procedure must be submitted to ECPHRA for approval, before development start and the Fossil Chance Finds Protocol must be adhered to (PIA report, page 27).
- Heritage induction and training for all ground staff including the ECO must be conducted. Proof thereof to be submitted to ECPHRA.
- Upon completion of the project, a final heritage compliance report to be submitted to ECPHRA.

## AIA Recommendations

- Portions of the proposed area for development are covered in dense vegetation and sites/features may be covered by soil and vegetation and will only be located once this has been removed. It would be preferred that a professional archaeologist be appointed to monitor the vegetation clearing to identify the extent of the occurrence of possible in situ stone artefacts. The responsibility of the archaeologist will be to monitor the vegetation clearing and record any archaeological scatters and sites that may be uncovered. The decision for

collection and possible test-pitting and phase 2 mitigation will be the decision of the appointed archaeologist after assessment of significance

during the archaeological monitoring. The cost of appointment and associated activities will be the responsibility of the developer.

- If concentrations of pre-colonial archaeological heritage material and/or human remains (including graves and burials) are uncovered during construction, all work must cease immediately and be reported to the author of the report and the Eastern Cape Provincial Heritage Resources Agency (ECPHRA) (043 492 1370) so that systematic and professional investigation/excavation can be undertaken. Phase 2 mitigation in the form of test-pitting/sampling or systematic excavations and collections of the pre-colonial shell middens and associated artefacts will then be conducted to establish the contextual status of the sites and possibly remove the archaeological deposit before development activities continue.
- Construction managers/foremen and/or the Environmental Control Officer (ECO) should be informed before construction starts on the possible types of heritage sites and cultural material they may encounter and the procedures to follow when they find sites.
- In addition, construction managers/foremen and/or the ECO and/or anyone who may be permanently on-site during pre-construction and construction phases of the project must undergo training before the bush clearing activities starts on the possible types of heritage sites and cultural material that they may encounter and the procedures to follow when they find sites.
- A Chance Finds Protocol (included in this report) for archaeological and cultural heritage finds must be compiled and be readily available for the Environmental Control Officer (ECO) and/or construction manager/s and/or anyone who may be permanently on-site during the relevant pre-construction and construction phases of the project to follow the correct procedures when accidentally uncovering archaeological sites and possible unmarked burials

#### CHANCE FINDS PROTOCOL

- The Chance Finds Protocol may include but not be limited to the following:
- A heritage practitioner should be appointed to develop a heritage induction program and conduct training for the ECO, as well as team leaders, in the identification of heritage resources and artefacts;
- An appropriately qualified heritage consultant should be identified to be called upon if any possible heritage resources or artefacts are identified;
- Should an archaeological site or cultural material be discovered during construction (or operation), the area should be demarcated, and construction activities be halted;
- The qualified archaeologist will then need to come out to the site and evaluate the extent and importance of the heritage resources and make the necessary recommendations for mitigating the find and impact on the heritage resource;
- The contractor therefore should have some sort of contingency plan so that operations could move elsewhere temporarily while the material and data are recovered;
- Should the heritage consultant conclude that the find is a heritage resource protected in terms of the NHRA (1999) Sections 34, 35, 37 and NHRA (1999) Regulations (Regulation 38, 39, 40), he or she should notify SAHRA and/or the relevant PHRA;
- Based on the comments received from SAHRA and/or the PHRA, the heritage consultant would present the relevant terms of reference to the client for implementation;
- Construction/Operational activities can commence as soon as the site has been cleared and signed off by the archaeologist.

#### Changes to hydrological regimes

- Clearing activities should not take place during, or immediately before or after, rainfall events
- Clearing work within these areas should be short-term with disturbed areas rehabilitated / planted as soon as clearing is complete to reduce the possibility of water and wind erosion of the farmed areas and resultant sedimentation.
- Any debris/solid waste accumulated as a result of clearing activities must be removed.

### **Hazardous substances - Potential pollution of water resources**

- All hazardous substances, including fuels, pesticides, herbicides and fertilisers, must be stored and handled in accordance with applicable requirements and in a manner that prevents accidental spills and releases to the environment.
- Hazardous substances and hazardous waste must not be stored or disposed of within aquatic features, drainage areas or their regulated areas.
- Fuels and other liquid hazardous substances must be stored on suitable impermeable surfaces, with appropriate secondary containment where applicable.
- Pesticides, herbicides and fertilisers must be applied strictly in accordance with product requirements and good agricultural practice, with application controlled to prevent unnecessary use, pooling or runoff.
- An emergency response procedure must be in place to address accidental spills or leakages.
- Appropriate spill response materials must be available where hazardous substances are stored or handled.
- Any spills must be cleaned up promptly, with contaminated soil and absorbent materials collected and disposed of at an appropriately authorised facility.
- All personnel involved in the handling and application of hazardous substances must receive appropriate environmental awareness and handling training.
- Hazardous waste, where generated, must be appropriately stored and disposed of at a suitably authorised facility.
- Septic and/or conservancy tanks for domestic effluent, where present, must be appropriately maintained and emptied as required.

### **Increase in sedimentation and turbidity levels of instream habitats**

- Stormwater and erosion control measures must be maintained and monitored during the operational phase. Should erosion channels or areas of significant soil mobilisation become evident, these must be stabilised, backfilled where appropriate, compacted and re-vegetated as soon as practicable.
- Existing and future agricultural areas should be managed to minimise concentrated surface runoff and erosion. Where required, berms, swales or other suitable stormwater management measures should be used to attenuate concentrated flows and prevent the formation of erosion channels.
- Drip irrigation systems should be maintained and continued in use to minimise excessive irrigation, surface runoff and associated soil erosion and sediment mobilisation.
- Areas of exposed soil associated with agricultural activities should be stabilised or re-vegetated where practicable to reduce the potential for sediment mobilisation during rainfall events.

### **Soil disturbance**

- Conservation Agriculture (Grain SA) as an approach to management of the farming area should be considered, this includes:
  - Continuous minimum mechanical soil disturbance to prevent damage to soil structure.
  - Permanent organic soil cover to assist with erosion and water loss.
  - Diversification of crop species grown in sequences and/or associations.
- Composting is recommended to take place on site and used on the farmed areas.

- Permission in terms of Regulation 2 of the CARA is required before the virgin soil may be disturbed mechanically (application submitted)
- Most of the subsoils are friable in the moist state although set hard in the dry state. Deep ripping to 1 m will benefit deeper rooting while ridging is recommended over the rip-lines. The top 30 cm or only topsoil should be used to create the ridges. This should provide effective rooting depths in excess of 80 cm. in most instances.
- Orchard rows should be interspaced with protective vegetation
- Optimize irrigation water to minimize nutrient leaching
- Avoid use of heavy machinery to prevent soil compaction as far as possible
- Tillage of wet soil should be avoided, as wet soil is more susceptible to shearing and compression.
- Ripping of moist to wet soil must not occur – it will cause further smearing and compaction.
- Where ripping takes place, ensure that the soil is sufficiently dry to allow effective deep ripping.
- Where practicable, work smaller areas at a time to limit the extent and duration of exposed soil and reduce the potential for wind and water erosion.
- Avoid unnecessary or excessive application of fertilisers and pesticides and apply agricultural chemicals in accordance with recommended rates and conditions.
- Maintain permanent organic or protective cover on worked areas where practicable to reduce erosion and assist in preserving soil quality.

### Pesticides and fertilizers

- Apply fertilizers and pesticides only where required and in accordance with recommended application rates, timing and methods.
- Optimise irrigation to meet crop requirements and minimise excessive water application, nutrient leaching and unnecessary runoff.
- Where practicable, investigate the use of organic inputs and alternative fertilisers, including manure, compost, vermicompost and microbial bio-fertilisers.
- Maintain soil cover and appropriate soil-management practices to reduce runoff and the mobilisation of agricultural chemicals.
- Keep all agricultural chemicals clearly labelled and securely stored in an appropriate storage facility.
- Use target-specific pesticides and, where practicable, avoid persistent pesticides in favour of less persistent alternatives.
- Avoid indiscriminate aerial spraying and do not undertake pesticide application during windy conditions where this may result in spray drift.
- Do not apply pesticides when bees are present or where application may adversely affect non-target organisms.
- Ensure that workers involved in the application of pesticides and fertilizers receive appropriate training in their safe and correct use.
- Ensure that appropriate personal protective equipment (PPE) is provided and used during pesticide application.
- Maintain records of fertilizer and pesticide application, including the product, application rate, location and date of application.
- Comply with applicable legislation and requirements governing the use, storage and application of agricultural remedies and fertilizers.

### Dust generation

- Avoid unnecessary or blanket clearing of vegetation.
- Retain indigenous vegetation where practicable.

- Maintain permanent organic/protective cover on worked areas.
- Work smaller areas at a time, where practicable, to limit the extent and duration of exposed soil.
- Where large areas of soil are temporarily exposed, particularly during dry and windy conditions, implement appropriate dust suppression measures where required.
- Maintain agricultural roads and disturbed areas appropriately to minimise dust generated by vehicle and machinery movement.

### Water Use

- Ensure no wastage of water (no leaking taps, pipes etc) and responsible use
- Monitoring of water use to continue
- Ensure all pipes are correctly installed and aligned to applicable SANS standards and correctly maintained for the life of the operation
- Ensure any leaks are attended to immediately for the life of the operation
- Maintain the existing drip irrigation system and ensure that it is appropriately operated and maintained.
- Permanent cover of soil is recommended to reduce evapotranspiration
- Optimise irrigation scheduling and application rates according to crop requirements and prevailing conditions to minimise unnecessary water use and nutrient leaching.

### Electricity Use

- Best-practice energy-efficiency measures should be incorporated into the ongoing farming operations to minimise electricity consumption.
- The existing drip irrigation system should be appropriately operated and maintained to ensure efficient water delivery and minimise unnecessary pumping.
- Irrigation pumps should be appropriately sized and maintained, and where practicable, pump output should be matched to the irrigation requirements of the relevant zones to minimise unnecessary electricity consumption.
- Energy-efficient equipment and practices should be considered when existing agricultural equipment or irrigation infrastructure is replaced or upgraded.
- The potential use of renewable energy, including solar energy, for irrigation pumping and other suitable farm electricity requirements may be considered where technically and economically feasible.

### Unintentional and uncontrolled fires

- No open fires are permitted except in appropriately designated and controlled areas.
- No cigarette butts, matches or other burning substances may be discarded into the environment. Cigarette butts must be fully extinguished and disposed of in designated waste receptacles.
- Appropriate fire prevention and emergency response measures must be maintained for the operation.
- Any fire detected on or adjacent to the property must be reported and attended to immediately.
- Emergency contact numbers for the relevant fire response services must be readily available.
- Fire risk conditions, including periods of high winds, drought and very dry conditions, should be monitored and appropriate precautionary measures implemented during periods of elevated fire danger.

### General Waste pollution

- Identify all general waste streams.
- Waste management must follow the waste hierarchy – avoid, reduce, reuse, recycle, dispose. Where possible, waste generated on site must be reused or recycled.

- Continue composting organic materials generated on the farm and reuse the compost where practicable. Compost heaps must be appropriately managed and regularly turned.
- Provide suitable waste receptacles.
- Identify the closest registered general waste disposal facility.
- Under no circumstances may solid waste be burnt or buried on site or in the surrounding area.
- Keep the area clear of waste and ensure no littering (include in environmental awareness training).
- Any vehicles transporting waste or other loose materials must be appropriately loaded and covered to prevent spillage or loss of material.

### **Traffic and road**

- Existing and permissible access roads should be used to access the development area at all times; no offroad driving permitted on site and when traversing adjacent land portions to access the site. This must be clearly communicated to all drivers
- Entrance to the site only permitted from designated access points provided by landowner
- Ensure strict access control to and from the construction site at all times.
- All construction vehicles are to be monitored to ensure they are not overly full so the likelihood of spillage of debris is prevented. Ensure any debris spilled onto roads is cleared up.
- Any loose materials transported to / from site must be covered.
- Surrounding area and roads should be monitored for debris and materials associated with the proposed development and cleaned up as soon as such becomes apparent.
- All materials to be delivered in a safe manner at designated delivery area located within footprint of the development site; ensure sufficient space is allocated in the construction site plan to provide safe turning for larger trucks.
- Speed travelled by construction vehicles must be kept to a minimum and speed limits enforced; contractors and service providers are to travel slowly and avoid collisions with wildlife.

### **Social - Income generation**

- Prioritise the use of local labour for agricultural activities
- Make use of local contractors, suppliers and service providers where reasonably practicable.
- Use local materials and products where suitable and available.
- Maintain fair and appropriate employment practices and provide workers with appropriate training for their duties.
- Where additional labour is required, opportunities should be advertised locally where practicable.
- Maintain the existing farming operation to support the continued provision of employment and associated local economic opportunities

### **Agricultural production and contribution to the regional agricultural economy**

- Continue implementing sustainable agricultural practices to maintain long-term agricultural productivity.
- Continue implementing soil and water conservation measures to protect the productive capacity of the land.
- Continue implementing biodiversity-friendly farming practices, including the retention of vegetated areas between orchard blocks where practicable.

## 7. EMP Targets – Planning, Construction, Operations

Noncompliance to conditions of Environmental Authorisation can have financial implications and lead to delays in the project. Insufficient budget, planning and responsibility allocated for environmental management will result in unmitigated impacts.

Responsibility: Holder of EA, employees

The following is a summary checklist that can be used to ensure compliance to mitigation measures:

### Targets:

- ✓ EA in place
- ✓ External audits
- ✓ EMPr and EA distributed to construction team
- ✓ Training completed
- ✓ EM file in place and updated on ongoing basis as required
- ✓ Required Permits in place
- ✓ No blanket clearing of vegetation.
- ✓ Designated areas of working agricultural areas
- ✓ No disturbance of indigenous plants outside development footprint without EA in place
- ✓ AIS clearing on ongoing basis as required
- ✓ No disturbance to fauna
- ✓ Waste plan in place
- ✓ Correct management of hazardous substances
- ✓ Mulch / vegetation cover for dust control and soil quality
- ✓ Fire prevention and response in place
- ✓ Incident / complaint register in place

### Project Aspects to be completed by construction team

| Activity:                     | Description of activity (i.e. AIS clearing, construction of road, maintenance activity)         |          |   |       |
|-------------------------------|-------------------------------------------------------------------------------------------------|----------|---|-------|
| Responsible person:           |                                                                                                 |          |   |       |
| Aspect                        | Nature / Description                                                                            | Required |   | Notes |
|                               |                                                                                                 | ✓        | ✗ |       |
| Environmental Training        | Environmental training required (i.e. excavations – archaeology; ongoing – litter; AIS; no -go) |          |   |       |
| Health and safety             | As required – HS File, first aid etc.                                                           |          |   |       |
| Workforce                     | Number of employees required?                                                                   |          |   |       |
|                               | Required environmental management training (i.e. waste, soil management etc)                    |          |   |       |
|                               | Local labour                                                                                    |          |   |       |
| Suppliers / Service providers | Local suppliers / service providers                                                             |          |   |       |
| Transport and traffic         | Safe transport of produce                                                                       |          |   |       |
|                               | Access control in place                                                                         |          |   |       |
| Vegetation management         | No disturbance to vegetation outside footprint                                                  | ✓        |   |       |
|                               | Remove alien invasive from land portions as required                                            | ✓        |   |       |
| Soil management               | Top 300 mm soil with indigenous vegetation intact                                               |          |   |       |
|                               | Stockpile separately                                                                            |          |   |       |
|                               | Compost separately as mulch elsewhere in landscaping / public open space area                   |          |   |       |

| <b>Activity:</b>           | <b>Description of activity (i.e. AIS clearing, construction of road, maintenance activity)</b> |                 |   |              |
|----------------------------|------------------------------------------------------------------------------------------------|-----------------|---|--------------|
| <b>Responsible person:</b> |                                                                                                |                 |   |              |
| <b>Aspect</b>              | <b>Nature / Description</b>                                                                    | <b>Required</b> |   | <b>Notes</b> |
|                            |                                                                                                | ✓               | ✗ |              |
| Waste management           | Ablution facilities – Required? Number? Service Provider? Record of service to be kept         | ✓               |   |              |
|                            | General waste bins                                                                             |                 |   |              |
|                            | Drip trays, cement mixing trays, plastic liners,                                               |                 |   |              |
|                            | Spill kits, hazardous waste bins                                                               |                 |   |              |
|                            | Waste receptacles                                                                              |                 |   |              |
| Working hours              | Working hours – no Sundays, no public holidays, no night time.                                 | ✓               |   |              |

## 8. COMPLIANCE WITH THE EMPr

### 8.1 Monitoring and Compliance

The monitoring and compliance of the development should take place as follows:

- The external auditor / EAP has the authority to instruct the Applicant to cease a particular operation causing or liable to cause significant environmental damage, and issue fines or penalties for non-compliance of the Environmental Management Programme/ EMPr.
- Monitoring and compliance of the activity shall be undertaken through an external environmental audit every two years, or at such intervals as may be stipulated in the Environmental Authorisation (EA).
- The external auditor shall assess compliance with the Environmental Management Programme (EMPr), including the implementation of the applicable mitigation and management measures and the overall environmental condition of the site.
- The external auditor shall identify any instances of non-compliance and provide recommendations for corrective action where required.
- The holder of the Environmental Authorisation (the Applicant) is responsible for ensuring that the external environmental audit report is completed and submitted to DEDEAT within the timeframes stipulated in the Environmental Authorisation (EA).

### 8.2 Auditing Process

The terms of reference for the audits must comprise the following:

- Develop a checklist against which the criteria can be referenced during the audit.
- During the audit process, key individuals involved with the management of the project are to be given the opportunity to comment on issues being audited and will be invited to accompany the auditor during the site inspection.
- Compile an audit report on the implementation of the EMPr and compliance to the Environmental Authorisation and submit this report to the competent authority (DEDEAT).

Compliance ratings against which the listed criteria are assessed are as follows:

| Symbol | Rating         |
|--------|----------------|
| X      | Non compliant  |
| C      | Compliance     |
| NA     | Not applicable |

### 8.3 Non-Compliance

The non-compliance is defined as, and will be issued for:

- Any deviation by the Applicant from the environmental conditions and requirements as set out in the EA and EMPr, or;
- Any contravention by the Applicant of environmental legislation, or;
- Any unforeseen environmental impact resulting from direct or indirect actions or activities on site that would be considered as a significant impact. Significance will be determined by the auditor and be informed by geographic extent, duration, lasting effects of the impact and extent of remediation to the impact.

Non-compliances will be recorded in an audit report and issued to the applicant and competent authority.

On receiving a notice of non-compliance, the Applicant is required to swiftly address the issue/s within the recommended time frame taking all corrective actions required to rectify the situation. Penalties could be applied for non-compliant situations. The imposition of such a penalties / fines shall not preclude the relevant competent authority from applying an additional penalty in accordance with statutory powers. Upon addressing the non-compliances, the audit report is to be updated to close out the noncompliance's and submitted to the applicant and competent authority. n

## **8.4 Unlawful Activity/ies**

NEMA and its Regulations entitle environmental authorities to administer a fine not exceeding R 5 million- or 10-years imprisonment and/or a fine and imprisonment for a person guilty of an unlawful activity. The Act makes allowance for the rectification of unlawful activity and may charge up to R1 million administration fees over and above the remediation costs.

NEMA makes provision for damages to be awarded by the courts where loss or damage has occurred as a result of a contravention of other environmental statutes. Importantly, NEMA provides for the liability of conviction of employees, managers, agents and directors for any offences resulting from the failure to take all the reasonable steps that were necessary under the circumstances to prevent the commission of an offence.

## **8.5 AMENDMENTS TO THE EMPr**

This EMPr outlines the environmental practices and mitigation measures to be adhered to in order to curtail and/or minimise potential negative impacts and promote sound environmental practises.

The EMPr is a living document and is subject to change from time to time in consultation with the DEDEAT. Any amendments to the EMPr will require approval from the DEDEAT.

## **9 ENFORCING THE EMPr**

The holder of the Environmental Authorisation (EA) has a responsibility to ensure that all those people involved in the project are aware of and familiar with the environmental requirements for the project (this includes casual labour, etc.).

All senior and supervisory staff members shall familiarise themselves with the full contents of the EA and EMPr. They shall know and understand the specifications of the EA and EMPr and shall be able to assist other staff members in matters relating to the EA and EMPr.

## **10 CODE OF CONDUCT**

- DO NOT leave the site untidy or strewn with rubbish that may attract pests.
- DO NOT trespass onto private properties not associated with the farming operation.
- DO NOT carry weapons onto the site or in vehicles transporting workers to and from the site.
- DO NOT set fires except in designated areas and in accordance with the applicable fire management requirements.
- DO NOT cause unnecessary disturbing noise.
- DO NOT drive a vehicle under the influence of alcohol or any other intoxicating substance.
- DO NOT exceed the national speed limits on public roads or applicable site speed limits.

- DO NOT operate or use a vehicle that is generating excessive noise or has fuel or oil leaks. Such vehicles must be reported and repaired as soon as reasonably practicable.
- DO NOT litter on the site or along public or private roads.
- DO NOT remove or destroy natural vegetation outside areas authorised for agricultural activities.
- DO NOT intentionally harm, capture, hunt or disturb fauna on the site, including birds, reptiles and other wildlife
- DO NOT operate critical items of mechanical equipment without having received the necessary training and, where applicable, certification.
- ALL employees must undergo the necessary occupational health and safety training and use the required personal protective equipment (PPE) when undertaking activities requiring such equipment.
- NO worker may be forced to undertake work that is potentially dangerous or for which they have not received the necessary training.

## 11 RESPONSIBILITIES

The “Responsibility” column is merely a guide and does not relieve the Applicant of his responsibilities in terms of overall compliance with the EA and EMPr.

| FUNCTION                                      | RESPONSIBILITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Applicant / Holder of EA (if attained)</b> | <ul style="list-style-type: none"> <li>• The Applicant is ultimately responsible for the ensuring compliance with all mitigation measures and conditions of the EA (if attained).</li> <li>• The Applicant is responsible to ensure that all necessary communication and submission of required documentation concerning this project is submitted to the relevant authorities.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Farm / operational manager</b>             | <ul style="list-style-type: none"> <li>• Responsible for the day-to-day implementation of the environmental management measures contained in the EMPr and the conditions of the EA, if attained.</li> <li>• Ensure that farm workers, contractors and visitors are made aware of and comply with the relevant environmental requirements and Code of Conduct.</li> <li>• Ensure that activities are undertaken in accordance with the approved agricultural activities and that no unnecessary environmental disturbance occurs.</li> <li>• Ensure that waste is appropriately managed, including the separation, storage, reuse, composting and disposal of waste as applicable.</li> <li>• Ensure that pesticides, fertilisers, fuels and other potentially hazardous substances are stored, handled and used responsibly and in accordance with applicable requirements.</li> <li>• Ensure that measures are implemented to prevent pollution of soil and water resources and to minimise erosion, sedimentation and runoff.</li> <li>• Ensure that fauna and indigenous vegetation are protected and that unnecessary disturbance, removal, hunting, capture or harm to fauna does not occur.</li> <li>• Ensure that fire prevention and response measures are implemented and maintained.</li> <li>• Report any environmental incidents, non-compliance or significant environmental concerns to the Applicant and ensure that appropriate corrective measures are implemented.</li> <li>• Maintain relevant environmental records and make these available to the Applicant and external auditor when required.</li> <li>• Facilitate access to the site and provide relevant information and records required for the external environmental audits.</li> </ul> |
| <b>External auditor</b>                       | <ul style="list-style-type: none"> <li>• An external auditor to carry out audits once every two years to ensure that the environmental conditions of the EMPr as well as the conditions stipulated to in the EA are being implemented and adhered to.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

| FUNCTION                                                                                                          | RESPONSIBILITY                                                                                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Competent Authority - Eastern Cape Department of Economic Development, Environmental Affairs and Tourism (DEDEAT) | <ul style="list-style-type: none"> <li>The DEDEAT is responsible for ensuring that the Applicant is compliant with the provisions of the EA and EMP.</li> </ul>                  |
| Department of Agriculture (NDA) Directorate: Land & Soil Management                                               | <ul style="list-style-type: none"> <li>Responsibility for issuing of permits for disturbance of soil</li> </ul>                                                                  |
| Eastern Cape Provincial Heritage Authority (ECPHRA)                                                               | <ul style="list-style-type: none"> <li>Responsible for issuing of heritage permits required for any discovered artefacts during excavation / site clearing activities</li> </ul> |

## **ACKNOWLEDGEMENT FORM**

Record of signatures providing acknowledgment of being aware of and committed to complying with the contents of this Environmental Management Programme (EMPr), which relates to the environmental mitigation measures for the project outlined below, and the environmental conditions contained in all other contract documents.

**PROJECT NAME:**

**DEDEAT REF:**

**Landowner / APPLICANT:**

Signed: ..... Date: .....

## **ANNEXURE 1: CV of EAP**