

EXECUTIVE SUMMARY

PROJECT BACKGROUND AND OVERVIEW

The applicant, Mr HHJ (Hermanus) Potgieter of the Hermanus Potgieter Familie Trust, proposes to expand existing agricultural activities for citrus production on Portion 23 a portion of 5 of 104 (94 ha); and the Remainder of Farm No 650 Swanepoels Kraal (136ha), Division Uitenhage, Sundays River Valley Municipality. The two adjoining properties, which measure approximately 230 ha, are zoned for agriculture.

It is the intention of the applicant to clear approximately 94 hectares and establish citrus orchards and associated infrastructure (internal roads, a dam and irrigation system). The section 24G Assessment Report deals with the already cleared portion on the two properties (approximately 20.2 ha of the proposed 94 ha) and indicates activities that have taken place on the cleared area, and activities still to be undertaken on the 20.2 ha, should environmental authorisation be received.

Activities on Site to Date

The site visit, by the appointed independent Environmental assessment practitioner on the 27 September 2012 identified that approximately 20.2 hectares of vegetation, on the southern most portion of the two properties has been cleared. The vegetation cleared to date amounts to approximately 8.7% of the 230 ha. Vegetation in a drainage line located on an eastern portion of the cleared area has not been removed. The vegetation cleared from the site has been stockpiled in rows. Chapter Four of this report provides a detailed overview of the affected environment and makes recommendations for mitigatory measures.

The area south and east of the cleared area are existing citrus orchards, while the area west and north of the two properties contains intact vegetation which is proposed for further citrus expansion. All activities on the cleared area have ceased and no further activities relating to the establishment of additional areas for citrus cultivation have taken place, pending the outcome of the Section 24G application.

The following activities are still proposed to take place on the area that has been cleared.

Construction Phase Activities

The following provides an overview of the activities which are still required to take place on the cleared portion of the site before citrus orchards can be established.

Shaping and earthworks

The topography of the cleared area slopes in a northerly to southerly direction, thus minor shaping and levelling may be required in order to manage runoff from the cultivated lands and prepare the site for crop planting.

Planting of windbreaks

The orchards will require the establishment of suitable windbreaks. In order to provide optimum yields and quality, citrus crops need to be protected from environmental extremes, including wind. It is recommended that a tree species, which is not listed as invasive in terms of the Conservation of Agricultural Resources Act (Act 43 of 1983) (CARA) Regulations, is selected for planting as a windbreak.

Irrigation infrastructure

The crops will require regular watering. In order to achieve this, a system of underground pipes to provide drip/micro-irrigation is required to be installed in order to deliver water to the crops. The drip / micro irrigation infrastructure is proposed to tie into the new dam which forms part of the Basic Assessment Process for the intact portion of the two properties. It is proposed that a storage dam with a total capacity of 33 750m³ be constructed, which will be sufficient to meet the requirements of the already cleared portion of the site. Water will be pumped from the LSRWUA canal adjacent to the site and stored in the dam to provide irrigation water for the proposed development.

Internal Roads

The development does not require formal surfaced roads, however reliable vehicle access needs to be maintained to the cultivated area. There is an existing vehicle track from the entrance of Dung Beetle Lodge

directly to the cleared portion of the site as well as from the proposed irrigation dam. It is anticipated these vehicle tracks will provide access for vehicles and equipment to the proposed new orchards for the construction phase as well as operational phases of the project.

Planting of the crops

Seed has already been purchased, which has been sent to a nursery for germination. The saplings are planted annually in the last quarter of the year from approximately September to December. A variety of citrus crops are proposed for planting, predominantly for the export market.

Supporting Infrastructure (potable water, sanitation, administration)

No additional infrastructure is required on site for the processing or packaging of the citrus, therefore the proposed development will tie into existing infrastructure.

Operational Phase Activities

Cultivation

Once established the lands will be used to cultivate a variety of citrus crops for the export market. This will require seasonal harvesting of the citrus over approximately 8 months of the year and transport to the SRCC for export.

Water Use and Availability

Water for the additional agricultural area will be provided from the adjacent canal system belonging to the Lower Sundays River Water Users Association (LSRWUA). Confirmation of the availability of water to service the area has been received from Harms Du Plessis of the LSRWUA (pers comm. Hermanus Potgieter) and written confirmation thereof will be provided in the Final Assessment Report. Water will be pumped from the canal system to an onsite dam, located on a northern section of Portion 23 of Farm 104, with a storage capacity of 33 750m³. ***This component of the project however forms part of a separate Basic Assessment Application for the development.*** From the storage dam water will be reticulated via a system of underground PVC pipes to the orchards for micro and/or drip irrigation. It is estimated that approximately 181 000 m³ of water will be required annually to irrigate the cleared area of 20.2ha. The cumulative total for the entire area (94 ha) is 847 000 m³ annually.

Employment Creation and Capital Investment

Planting and harvesting are done manually and are labour intensive processes. It is estimated that the development will create an additional 4 direct permanent employment opportunities, 1 indirect permanent employment opportunities and an additional 25 seasonal employment opportunities (8 months of the year). Thus an additional income into the local market from permanent employment opportunities is estimated at approximately R120 000 annually and R400 000 annually from seasonal employment. At an average of R125 000 per hectare for site preparation and construction it is estimated the capital investment of the development is R2.25 million for 20.2 ha. Labour will be sourced locally from communities in both the NMBM as well as the Sundays River Valley Municipality. The cumulative capital investment for the 94 ha is estimated to be approximately R11.7 million.

Supporting Infrastructure (potable water, sanitation, administration)

No additional infrastructure is proposed on the area already cleared. The existing administrative and technical infrastructure at Miskruier Farm will be utilised to service the expanded agricultural activities (offices, storage areas, and service buildings). The sanitation facilities at the Miskruier Farm will be used during the day to day maintenance of the orchards and associated infrastructure. During harvesting when there is a larger labour force present at the site, portable sanitation and washing facilities need to be provided.

OVERVIEW OF THE ASSESSMENT PROCESS AND PUBLIC PARTICIPATION

Section 24G (1) of NEMA notes that on application by a person who has committed an offence in terms of section 24F(2) the Minister or MEC, as the case may be, may direct the applicant to -

- (a) *compile a report containing -
an assessment of the nature, extent, duration and significance of the impacts of the activity on the environment, including the cumulative effects;
a description of mitigation measures undertaken or to be undertaken in respect of the impacts of the activity on the environment;
a description of the public participation process followed during the course of compiling the report, including all comments received from interested and affected parties and an indication of how issues raised have been addressed;
an environmental management plan; and*
- (b) *provide such other information or undertake such further studies as the Minister or MEC may deem necessary.*

This Section 24G Assessment Report has been prepared in line with Section 24G (1) of NEMA. In addition this report has been prepared to meet with the requirements for a Basic Assessment Report in terms of Section 21 and 22 of GN R 543 of the NEMA EIA regulations, 2010.

Consultation with DEDEAT

Early in August 2012, Mr Max Landule of the Department of Economic Development, Environmental Affairs and Tourism (DEDEAT), Compliance Division was notified of the clearing of the vegetation on the site without receipt of an environmental authorisation and a site visit was undertaken by Mr Landule, following which the Applicant was instructed to commence with the Section 24 G Application Process for the cleared portions of the site. On 16 August 2012 an Application Form in terms of NEMA Section 24 G was submitted to the DEDEAT, Compliance Division.

Notification of I&APs

All I&APs on the project database were provided with written notification of the Assessment Process. I&APs were provided with a 14 day comment period to raise issues of concern which extended from the 10 October 2012 to the 23 October 2012.

At the time of preparation of the Draft Section 24G Assessment Report for I&AP review no issues of concern had been raised by I&APs. One I&AP requested to be removed from the database.

Review of the Draft Section 24G Assessment Report

The assessment process is at the stage where all I&APs on the project database are notified in writing of the 14 day review period for the Draft Assessment Report. A copy of the report will be made available on the website www.publicprocess.co.za.

The issues raised by I&APs will be considered for inclusion in a Comments and Responses Trail in the Final Report prior to submission to DEDEAT for their decision making.

Final Section 24G Assessment Report

Based on the input received from I&APs the Assessment Report will be finalised prior to submission to DEDEAT for their decision making. All I&APs on the project database will be notified via Letter 3 of the submission of the Final Report and any additional comment period. The Final Report will be made available through the project website www.publicprocess.co.za

Environmental Authorisation and Appeal

All I&APs on the project database will be notified of the outcome of the decision making process and the Appeal period. The notification will include the placement of a newspaper advertisement. The Authorisation will also be made available through the website www.publicprocess.co.za

ECOLOGICAL IMPACTS AND MITIGATION

The key impacts that the clearing of vegetation has had on the environment are shown below.

- Destruction of habitat for plant and faunal species of special concern (SSC)
- Loss of plant and faunal SSC due to vegetation clearing and disturbance
- Disruption of ecological corridors, patterns and processes

- Destruction of exotic plants (weeds and invaders) during vegetation clearing
- Destruction of riparian vegetation and associated habitat

Mitigatory measures have been proposed for some of these impacts so as to reduce the significance, extent or intensity thereof (see Chapter 4 of the Draft Assessment Report). The following recommendations are made with regards to the mitigation and management of impacts that have already occurred as a result of the clearing of vegetation:

- A 32 metre no development buffer area should be applied around the drainage line and any portion of this which is degraded or transformed should be rehabilitated.
- The gravel road that runs through the drainage line should not be used and this area should be rehabilitated, neither should infrastructure be installed through the drainage line.
- Exotic plant material removed must be removed from the site and destroyed so that seeds and propagating material does not remain at the site.
- Follow-up clearing for weeds and exotics should take place.

If the cleared portion were to be developed according to the project description provided in Chapter 2 of the Draft Assessment Report the following additional site preparation phase impacts could be experienced:

- Increased erosion risk and topsoil loss due to vegetation clearing and disturbance which can be mitigated to *Low Negative*.
- Damage to the drainage line due to upgrading of roads and the installation of infrastructure which could be mitigated to a *Low Positive* impact.

The following impacts may be associated with the operational phase of the proposed development, if it receives authorisation:

- Erosion risk and topsoil loss due to stormwater runoff and wind.
- Pollution of surface and groundwater by herbicides, pesticides and fertiliser.
- Loss of faunal species of special concern (poaching, domestic dogs & cats).
- Introduction of exotic flora and risk of alien plant invasion
- Potential visual impacts on the Addo Elephant National Park.
- Disruption of ecological corridors, patterns and processes associated with the Addo Elephant National Park.

All of the above can be mitigated to a *Low Negative* or *Neutral* impact.

The following recommendations are made with regards to the mitigation and management of impacts that may potentially occur if authorization is granted to develop the site in line with the project description found in Chapter 2 of this report:

- Any lay-down areas required during the site preparation phase must be contained within the cleared area and may not encroach on any of the intact vegetation on the affected properties.
- Plant species of special concern should be transplanted from the disturbance footprint to refuge areas on the site (e.g. remaining intact thicket).
- An alien plant control program should be implemented which ensures that all invasive exotic plants (Prickly Pear) must be removed from the site and alien plant control must take place on an ongoing basis.
- Measures should be implemented to ensure that fauna on site are not harmed during site preparation or operational phase activities associated with the development, e.g. environmental induction process for construction personnel and / or farm workers.
- Faunal search and rescue operations before and during the site preparation phase will decrease the impacts considerably.

ARCHAEOLOGICAL IMPACTS AND MITIGATION

Should the proposed development not proceed and the cleared area be restored to Thicket vegetation it is unlikely that any heritage material will be disturbed or exposed. The impact of the No-Go alternative on heritage resources is considered Neutral.

The impact that the clearing of the vegetation from the site has had on archaeological resources is said to be an overall Positive one as the rest of the site is covered by dense/impenetrable thicket and grass vegetation which makes it difficult to locate archaeological sites or materials. The cleared area therefore provided a window to observe the range of possible archaeological sites/materials which may be covered by soil and vegetation on the rest of the properties.

If environmental authorisation is granted for the proposed agricultural development of the cleared area the installation of infrastructure and the preparation of the site for the planting of citrus may expose additional archaeological material. The development footprint is near the Coerney River and freshwater shell middens may be exposed. In general though the site appeared to be of low archaeological sensitivity and therefore these impacts are considered to be Low Negative and can be mitigated to Neutral.

ASSESSMENT OF ALTERNATIVES

There are two alternative ways to proceed with the area that has been cleared. The No-Go alternative would entail the restoration of the 20 hectares that have been cleared to Sundays Spekboom Thicket. The preferred alternative would involve continuing with the expansion of the citrus farming operation as described in Chapter 2 of this Draft Section 24G Assessment Report, including the establishment of infrastructure and citrus orchards on the cleared area. The initial capital investment to develop this portion of the site is anticipated to be approximately R2.25 million. However the anticipated yearly income after the orchards become productive is approximately R15 000 000 per annum. The preferred alternative will however also include the rehabilitation of the drainage line and a 32 metre buffer area surrounding it so as to ensure the ecological functioning thereof.

The no-go option would entail the restoration of the thicket that would have occurred on the cleared portion of the properties. If this were to be the case, the applicant would have to restore the Thicket to what it would have originally been, or as close to it as is possible. Restoration implies the return of ecological integrity and the full pattern of biological complexity and diversity, together with the ecosystem processes that maintain this pattern.

Based on the assessment of the no-go alternative, that is site restoration, the positive social and economic benefits to be potentially gained by the project proceeding outweigh the negative biophysical impacts of the proposed activities which have taken place on the site. The potential restoration of the 20.2 ha area is considered a low positive impact at an estimated cost of R164 000.

OVERALL EVALUATION OF IMPACTS

The Draft IDP (2011) for the Sundays River Valley Municipality indicates that the current unemployment rate in the municipal area may be as high as 44.1%. The monthly income of economically active individuals (age 15-65, employed or unemployed) living within the SRVM is generally low, with the greater majority earning less than R800 a month.

Agriculture remains a primary focus for employment opportunities as it currently represents almost 50% of the employment for the SRVM area. The agricultural industry centres mainly on citrus fruit farming in the Sunday's River Valley and dairy and chicory farming towards the Alexandria area in the east. Approximately 25% of South Africa's navel oranges and 50% of the country's lemons are produced in the Sunday's River Valley with the Sunday's River exporting more than 13 million cartons of navels per year, earning more than R1 billion in foreign exchange for the country (Draft SRVM IDP, 2011).

The total capital value for the proposed agricultural development of the cleared 20 hectare area is estimated to be R2.25 million. It is anticipated that 4 permanent direct and 1 permanent indirect employment opportunities will be created during the operational phase of the proposed development. In addition, approximately 25 seasonal jobs will also be provided.

Some of the impacts that have already been experienced due to the clearing of approximately 20 hectares of vegetation cannot be mitigated. However, most of these are of Low Negative significance. Those that can be mitigated and that are of a Medium Negative to High significance, by applying the mitigatory measures proposed, can mostly be reduced to impacts of low negative or impacts of positive significance.

If the cleared area were to be developed the key direct and indirect impacts associated with the *Construction Phase* of the development can, by applying the mitigatory measures proposed be reduced from negative impacts of medium significance to impacts of low significance and low positive significance.

The key direct and indirect impacts associated with the *Operational Phase* of the development can, by applying the mitigatory measures proposed is reduced from negative impacts of medium significance to impacts of low significance and Neutral significance.

The Environmental Assessment process has not identified any negative impacts that should be considered “fatal flaws” from an environmental perspective, and thereby necessitate substantial re-design or termination of the project. Taking into consideration the findings of the Section 24G Assessment process, it is the opinion of the Environmental Assessment Practitioner that the benefits of developing the cleared area for agricultural production outweigh the negative residual environmental impacts, provided that the specified mitigation measures are applied effectively. It is proposed that the project receive environmental authorization in terms of the Environmental Assessment process.