SCOPING AND ENVIRONMENTAL IMPACT ASSESSMENT:

Agricultural Expansion of River Bend Citrus Farm -Remainder of Farm 82 Wolve Kop, Portion 1 of Farm 77
Wellshaven, and Portion 3 of Farm 77 Honeyvale; Sundays River Valley Municipality.

(DEDEAT Reference Number: EC06/LN2/M/12-10)

Final Scoping Report

May 2012



Prepared for:

San Miguel Fruits South Africa (Pty) Ltd Contact Person: Rory Niven 9 Lansdowne Rd Grahamstown 6139

Prepared by:

Sandy Wren and Paul-Pierre Steyn Public Process Consultants PO Box 27688, Greenacres, PE, 6057 120 Diaz Road, Adcockvale, PE 6001 Phone 041 – 374 8426 Fax 041 - 373 2002 Email sandy@publicprocess.co.za



Title:	Final Scoping Report, Agricultural Expansion of River Bend Citrus Farms on the Remainder of Farm 82 Wolve Kop, Portion 1 of Farm 77 Wellshaven and Portion 3 of Farm 77 Honeyvale Scoping and Environmental Impact Assessment (DEDEAT Ref Number: EC06/LN2/M/12-10).
Purpose of this report:	The Scoping Report forms part of a series of reports and information sources that are being provided during the Environmental Impact Assessment (EIA) process for the proposed Agricultural Expansion of River Bend Citrus Farms on the Remainder of Farm 82 Wolve Kop, Portion 1 of Farm 77 Wellshaven and Portion 3 of Farm 77 Honeyvale in the Sundays River Valley Municipality. In accordance with the EIA Regulations, the purpose of the Scoping Report is to:
	 Provide a description of the proposed project, including a sufficient level of detail to enable stakeholders to raise issues and concerns;
	 Describe the local planning context and environment within which the project is proposed, to assist further in identifying issues and concerns;
	 Provide an overview of the process being followed in the Scoping Phase, in particular the public participation process, as well as present the draft Plan of Study for EIA that would be followed in the subsequent EIA phase;
	 Present the issues and concerns identified to date from the stakeholder engagement process, together with an explanation of how these issues will be addressed through the EIA process.
	The Final Scoping Report will be submitted to the Department of Economic Development, Environmental Affairs and Tourism for their decision making.
Prepared for:	San Miguel Fruits South Africa (Pty) Ltd Contact Person: Rory Niven
Prepared by:	Public Process Consultants PO Box 27688, Greenacres, 6057 Phone: 041 - 374 8426 Fax: 041 - 373 2002
Authors:	Sandy Wren, Paul-Pierre Steyn, Marisa Jacoby
Date:	May 2012
To be cited as:	Wren S, Steyn P, Jacoby M, 2012. Scoping and Environmental Impact Assessment - Agricultural Expansion of River Bend Citrus Farms on the Remainder of Farm 82 Wolve Kop, Portion 1 of Farm 77 Wellshaven and Portion 3 of Farm 77 Honeyvale (DEDEAT Ref Number EC06/LN2/M/12-10), Final Scoping Report.

Executive Summary

Project Background and Project Overview

The applicant, San Miguel Fruits SA (Pty) Ltd, is proposing the expansion of existing citrus cultivation operations on the farm known as River Bend Citrus near Addo in the Sundays River Valley Municipality. Subject to the outcome of the specialist studies to be undertaken as part of the EIA process, the applicant proposes to clear a minimum of 300 ha of land over a period of four years for additional citrus cultivation. The project is proposed to take place on three adjoining properties which form part of the existing River Bend Citrus farming operations, namely:

- Remainder of Farm 82 Wolve Kop (~908 ha),
- Portion 1 of Farm 77 Wellshaven (~22ha), and
- Portion 3 of Farm 77 Honeyvale (~128ha).

The three adjoining properties measure approximately 1 058 hectares in combined extent. It is important to note that the Remainder of Farm 82 Wolve Kop measures 908 ha, however, 448 ha of this erf forms part of the River Bend Concession area with South African National Parks (SANParks) and is not being considered for the expansion of citrus production in line with the concession agreement with SANParks (land east of the Zuurberg road). In addition, approximately 110 ha of the Remainder of Farm 82 Wolve Kop (west of Zuurberg road) is currently being actively farmed for citrus production. This assessment process will therefore focus on the remaining 500 ha of undeveloped land which is being considered for the expansion of agricultural activities.

Included in the project proposal is the construction of a new balancing dam for irrigation purposes, estimated to be 40 000m³. The expansion of the existing agricultural activities will include the following project activities:

Preconstruction

- Book and purchase block seed from a certified agency
- Seeds are germinated in a certified nursery and allowed to grow to sapling stage (approximately 2 years)

Construction

A period of approximately 12 months is required for site preparation which entails the following:

- Clearing of approximately 300 hectares of indigenous vegetation
- · Leveling and shaping the area for orchards
- Construction of a storage dam (approximately 40 000 m³) for irrigation water
- Installation of water reticulation and irrigation infrastructure
- · Construction of gravel surfaced internal access roads

Site preparation needs to be completed to coincide with the planting of the crop, which occurs annually in the last quarter of the year between December and January. San Miguel Fruits SA proposes a three phased crop planting period towards the end of each year, as follows:

- Phase 1 2013/14, approximately 120 hectares
- Phase 2 2014/15, approximately 120 hectares
- Phase 3 2015/16, approximately 100 hectares

The capital investment prior to the harvesting and exporting of the crop is estimated to be approximately R68 million. This can be broken down to approximately R75 000 per ha for the value of the land and approximately R125 000 per ha for site preparation (bush clearing, infrastructure development, irrigation infrastructure etc).

Operation

Once suitably prepared the site is proposed to be used for the cultivation of various citrus varieties for international export. Project activities during the operational phases of the project will entail:

- Equipment required for the new operations will be stored in the storage sheds associated with the existing operations.
- Water for the development will be supplied from the Sundays River Water Users Association's canals which will be reticulated via the balancing dam.
- It is estimated 325 additional seasonal and 25 permanent employment opportunities will be created by the project.
- It is proposed that existing infrastructure at the farm be used to provide technical and logistical support to the expanded farming operation.

Site Description

The farm has established farming infrastructure such as offices; workshops; storage sheds; and workers rest-areas as well as ablution facilities. The remainder of Farm 82 Wolve Kop is bisected into a west and east portion by the gravel Zuurberg Road (R335). Only the western half forms part of this assessment as the eastern half currently forms part of the Addo Elephant National Park concession area. The study area is also divided into a northern and southern section by the already existing orchards that have been planted on either side of the Coerney River which flows in an east-west direction through the middle of RE/82 Wolve Kop.

The sections of the property that are being assessed in the Scoping and EIA process are covered largely by indigenous vegetation (Sundays Thicket), which is intersected by a variety of cut-lines, animal paths, and internal vehicle tracks; attesting to past agricultural use of the property. In addition, the undeveloped portion of land in the southern section of RE/82 Wolve Kop includes a number of labourers' dwellings within a fenced compound.

Legal Framework

In terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) as amended ("NEMAA") and the NEMA EIA regulations, 2010, GN R 543, 544, 545 and 546 published in Government Gazette 33306 on the 2 August 2010 (as amended), the project requires Scoping and Environmental Impact Assessment (EIA) because it includes, amongst others, the following listed activity in GN R 545:

16. The physical alteration of virgin soil to agriculture, or afforestation for the purposes of commercial tree, timber or wood production of 100 hectares or more.

Other listed activities triggered by the project are:

```
GN R544: Listing Notice 1 Activities: 11.(iv); 18. (i) and 42 GN R546: Listing Notice 3 Activities: 2.(a) iii (dd) & (ff); 4.(a) ii (ee) & (gg); 12.(a); 13.(a) & (c) ii (ff); 14.(a) I; 23.(a) ii (gg)
```

The decision making authority is the Provincial Department of Economic Development, Environmental Affairs and Tourism, Cacadu Region. The environmental assessment needs to show the responsible authority (DEDEAT), and the project proponent, San Miguel Fruits SA (Pty) Ltd, what the consequences of their choices will be in biophysical, social and economic terms.

Identification of Issues

Issues and concerns identified for inclusion in the Scoping Report that require specialist assessment in the environmental assessment phase of the EIA have been identified using the following methods:

- Specialist Site Visit
- Desktop review of regional planning documentation and frameworks

- Scoping of issues and concerns with I&APs through correspondence received (emails, comment forms) in response to the project announcement
- Scoping of issues with authorities (affected organs of state)

Based on issues identified thus far in the process, the following specialist studies / input needs to be obtained:

- Biophysical Assessment including vegetation / habitat sensitivity mapping, identification of species of special concern, and faunal assessment
- Wetlands & Drainage Lines study to identify and delineate wetlands and drainage lines; and determine the potential aquatic sensitivity of these features.
- Paleontological Assessment in order to determine the type and location of fossils that may be present within the study area.
- Phase 1 Archaeological Assessment
- Soil Suitability Assessment to establish the suitability of the soil for the proposed orchards.
- Technical input with regards to irrigation water supply and storage, as well as the design and configuration of internal roads, and irrigation infrastructure.
- The terms of reference for the specialist studies to be undertaken in the EIA phase of the assessment have been included in the Plan of Study for EIA (Chapter 6 of the Final Scoping Report).

Current Stage in the Process

This EIA process is currently at the stage where the Final Scoping Report, including the Plan of Study for EIA, has been submitted to the DEDEAT for their decision-making. I&APs have been given an additional 21 day comment period on the Final Scoping Report. Any comments I&APs may have on the Final Scoping Report must be submitted directly to the DEDEAT and a copy thereof sent to Public Process Consultants. All comments received from I&APs during the review of the Draft Scoping Report have been included in the Final Scoping Report. The next stage in the process will entail undertaking the specialist studies in line with the approval for the Plan for Study for EIA; followed by the release of the Draft EIA for a 30 day I&AP comment period. All comments will be included in the Final EIA prior to submission to the DEDEAT for their decision making.

TABLE OF CONTENTS

		Page
		No.
CHADI	TER ONE: INTRODUCTION	1.1
	BACKGROUND AND PROJECT OVERVIEW	1.1
1.1 1.2	NEED AND JUSTIFICATION FOR THE PROJECT	1.1
1.3	REQUIREMENTS FOR SCOPING AND ENVIRONMENTAL ASSESSMENT	1.3
1.4	EIA TEAM	1.3
1.5	DETAILS AND EXPERTISE OF THE ENVIRONMENTAL ASSESSMENT	1.4
1.5	PRACTITIONER (EAP) AND EXPERTISE TO CARRY OUT SCOPING AND EIA	1.4
1.6	OBJECTIVES OF THE DRAFT SCOPING REPORT	1.5
1.0	OBSECTIVES OF THE BIOAFT GOOFING REFORM	1.0
СНАРТ	TER TWO: PROJECT DESCRIPTION	2.1
2.1	INTRODUCTION	2.1
2.2	PROJECT BACKGROUND AND OVERVIEW	2.3
2.2.1	Vegetation clearing and landscaping	2.5
2.2.2	Roads and access	2.5
2.2.3	Orchards	2.5
2.2.4	Irrigation Reservoir / Balancing Dam	2.6
2.2.5	Irrigation Infrastructure	2.7
2.2.6	Water Use Entitlements	2.7
2.2.7	Chemical Storage and Use	2.7
2.3	PROJECT SCHEDULE	2.8
2.4	CAPITAL INVESTMENT AND EMPLOYMENT GENERATION	2.8
2.5	CONCLUDING REMARKS	2.9
	TER THREE: DESCRIPTION OF THE AFFECTED ENVIRONMENT	3.1
3.1	INTRODUCTION	3.1
3.2	SITE LOCALITY AND OVERVIEW	3.1
3.3	SURROUNDING LAND USES	3.2
3.4	BIOPHYSICAL ENVIRONMENT	3.4
3.4.1	Climate	3.4
3.4.2	Landscape and Geology	3.4
3.4.3	Geohydrology and Surface Water	3.6
3.5.	VEGETATION National Content	3.10
3.5.1 3.5.2	National Context	3.10 3.10
3.5.2	Regional Context Vegetation on Site	
	Transformed vegetation / cultivated lands	3.12 3.13
	Wetland Habitat	3.13
3.5.4	Critical Ecological Process and Biodiversity Areas	3.13
3.5.5	Concluding Remarks	3.14
3.6 3.7	FAUNA AGRICULTURAL POTENTIAL	3.14 3.14
3.8	HERITAGE RESOURCES	3.15
3.9	SOCIO-ECONOMIC	3.16
3.10	CONCLUSION AND RECOMMENDATIONS	3.17
СНАРТ	TER FOUR: ENVIRONMENTAL IMPACT ASSESSMENT PROCESS AND PUBLIC	4.1
	CIPATION	- '
4.1	INTRODUCTION	4.1
4.2	LEGAL CONTEXT FOR THIS EIA	4.1
4.2.1	Legislation and Guidelines Pertinent to this EIA	4.4
4.3	OVERVIEW OF THE EIA PROCESS	4.4
431	Principles for Scoping and Public Participation	45

4.4 SCOPING PROCESS	4.6
Task 1: I&AP identification, registration and database maintenance	4.6
Task 2: Announcement of Scoping Process and Public Participation	4.7
Task 3: Authority Consultation	4.7
Task 4: Scoping and Identification of Issues	4.8
Task 5: Review of the Draft Scoping Report (Current Stage in the Process)	4.11
Task 6: Final Scoping Report and Plan of Study for EIA	4.15
4.5 CONCLUDING REMARKS	4.15
CHAPTER FIVE: ASSESSMENT OF ALTERNATIVES	5.1
5.1 APROACH TO THE ASSESSMENT OF ALTERNATIVES	5.1
5.2 NO-GO OPTION 5.3 GO OPTION	5.1 5.2
	5.2
•	
5.3.2 Technology (windbreak) Alternatives	5.2
CHAPTER SIX: PLAN OF STUDY FOR EIA	6.1
6.1 INTRODUCTION	6.1
6.2 OVERVIEW OF THE APPROACH TO THIS EIA	6.1
6.2.1 The NEMA EIA Regulations 2010	6.3
6.3 ENVIRONMENTAL IMPACT ASSESSMENT REPORT AND EMPr	6.3
6.3.1 Public Participation Process	6.3
Task 1: Compile Draft Environmental Impact Report and EMPr	6.3
Task 2: Review of the Draft EIA (and EMPr) and Ongoing Communication	6.3
Task 3: Comments and Responses Trail	6.4
Task 4: Compilation of the Final EIA and Submission to Authorities	6.4
Task 5: Decision on Application and Appeal Period	6.4
6.3.1.1 Authority Consultation	6.4
6.3.2 Generic Terms of Reference for the Assessment of Impacts	6.5
6.3.3 Specific Issues to be Addressed in Specialist Studies	6.7
6.3.3.1 Biophysical Assessment	6.8
6.3.3.2 Faunal Assessment	6.8
6.3.3.3 Wetlands and Drainage Lines	6.8
6.3.3.4 Palaeontological Assessment	6.9
6.3.3.5 Phase 1 Archaeological Assessment	6.9
6.3.3.6 Soil Suitability Assessment	6.9
6.3.4 Technical Input	6.9
6.3.4.1 Water Demand	6.9
6.3.4.2 Infrastructure Layout	6.9
6.3.5 Proposed Scheduling of EIA Phase	6.10
CHAPTER SEVEN: REFERENCES	7.1

MAPS		
Map 1.1	Locality of the study area showing the entire San Miguel Estate as well as towns and major roads near the site.	1.2
Map 2.1	Aerial view of the affected property portions and the area proposed for agricultural expansion indicated in green dots (proposed orchards).	2.2
Map 3.1	Proposed site (Remainder of Farm 82 and Portion 1 and 3 of 77) and surrounding properties (Portion No. / Farm No.).	3.3
Map 3.2	Geology of the study area: J-Kk (Yellow) - Kirkwood Formation - Reddish and greyish mudstone and sandstone; Cream – Recent Alluvial Deposits (Study site outlined in black).	3.4
Map 3.3	Contour map showing topography of portions 1 and 3 of farm 77.	3.5
Map 3.4	Contour map showing topography of the remainder of farm 82.	3.6
Map 3.5	Dams/wetlands and watercourse/drainage lines noted at the site during initial investigations.	3.9
Map 3.6	Vegetation on the proposed properties as mapped in VegMap showing the two vegetation types present on site.	3.10
Map 3.7	ECBCP Mapping for the affected area. (Dark Green - CBA1, Light Green - CBA2, Yellow – Cultivated Land).	3.11
Map 3.8	Vegetation on the proposed properties as mapped in STEP showing the three vegetation types present on site.	3.12
Map 3.9	Agricultural Land Capability (AGIS, 2007, www.agis.agric.za)	3.15

PHOTOS	
Photo 2.1 Entrance River Bend Citrus Farm.	2.3
Photo 2.2 Existing River Bend Citrus Farm Offices.	2.3
Photo 2.3 Internal access road within the existing citrus orchards.	2.5
Photo 2.4 Citrus orchards with Beefwood tree windbreaks.	2.5
Photo 2.5 One of the existing irrigation dams on River Bend Citrus Farm.	2.6
Photo 2.6 Pumping infrastructure at an existing dam (pump-house & transformer).	2.6
Photo 2.7 The existing storage sheds and workshops on the farm.	2.7
Photo 3.1 A view across the site from the north, along a cutline through the thicket.	3.2
Photo 3.2 Labourers' dwellings in the southern portion of the site.	3.2
Photo 3.3 Broad grassed swale, which represents the drainage line in the eastern valley in the study area.	3.7
Photo 3.4 Ponding of runoff in a depression along the eastern drainage line leads to the establishment of hydrophytic vegetation.	3.7
Photo 3.5 Dam / pan associated with the western drainage line.	3.8
Photo 3.6 Sedges and hydrophytic grasses in a pan in the central portion of the site.	3.8
Photo 3.7 Orchards straddling the Coerney River.	3.13
Photo 3.8 Thicket vegetation in the northern portion of the subject site.	3.13
Photo 3.9 Typical wetland habitat associated with the wetlands in the northern portion of the site.	3.13

TABLES	
Table 1.1 EIA Team and Specialists	1.4
Table 1.2 Summary of where requirements for a Scoping Report (in terms of Section 28 and 29 of the NEMA EIA Regulations, 2010) are provided for in this report.	1.6
Table 2.1 Proposed project schedule	2.8

Table 2.2 Estimated employment opportunities during the construction and operational phase of the project.	2.9
Table 4.1 Listed activities according to GN R 544 and 546 requiring Basic Assessment in terms of the NEMA EIA Regulations, 2010 (as amended).	4.1
Table 4.2 Listed Activities in GN R 545 requiring Scoping and EIA in terms of the NEMA EIA Regulations, 2010 (as amended).	4.3
Table 4.3 Proposed EIA Schedule	4.4
Table 6.1 Proposed list of specialist studies and specialists	6.2
Table 6.2 Authority consultation schedule	6.5
Table 6.3 Table for rating of impacts	6.7
Table 6.4 Proposed EIA schedule	6.10

APPENDICES

APPENDIX A CV Sandy Wren and Dr Paul-Pierre Steyn

APPENDIX B Correspondence with Authorities APPENDIX C Advert and Site Notice Board

APPENDIX D I&AP Database

APPENDIX E Correspondence received from I&APs

APPENDIX F Correspondence sent to I&APs

ABBREVIATIONS

DEA National Department of Environmental Affairs

DEDEAT Department of Economic Development, Environmental Affairs and Tourism

DSR Draft Scoping Report

DWAF Department of Water Affairs and Forestry

Tourism

EIA Environmental Impact Assessment

EMPr Environmental Management Programme

FSR Final Scoping Report

I&AP Interested and Affected Party

NEMA National Environmental Management Act (Act 107 of 1998)

NEMAA National Environmental Management Amendment Act (Act 107 of 1998)

NEM:WA National Environmental Management Waste Act
NEM:AQA National Environmental Management Air Quality Act
NHRA National Heritage Resources Act (Act 25 of 1999)

NMBM Nelson Mandela Bay Municipality

POS Plan of Study

SAHRA South African Heritage Resources Agency

SDF Spatial Development Framework
SEA Strategic Environmental Assessment
STEP Subtropical Thicket Ecosystem Project

TIA Traffic Impact Assessment

ToR Terms of Reference