



Camdeboo Municipality: Integrated Waste Management Plan Review

Final Report

January 2014

Camdeboo Municipality



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Executive Summary

Introduction

The National Environmental Management Waste Act 2008 states in Section 11 that each municipality must develop an Integrated Waste Management Plan (IWMP). An IWMP provides a framework within which local municipalities can deliver a waste management service to all residents and businesses. The responsibility for refuse removal, refuse dumps and solid waste disposal has been assigned to local government. District and local municipalities have different roles and responsibilities as described in the Municipal Structures Act (Act No. 117 of 1998).

The following section gives a helpful summary of the roles and responsibilities of local municipalities:

Specific local municipal functions include:

- *“Compiling and implementing integrated waste management plans and integrating these into IDPs;*
- *Running public awareness campaigns;*
- *Collecting data for the Waste Information System (WIS);*
- *Providing waste management services, including waste removal, waste storage and waste disposal services, in line with national norms and standards. Municipality specific standards for separation, compacting and storage of solid waste that is collected as part of the municipal service, may be set and enforced by the municipality.*
- *Implementing and enforcing waste minimisation and recycling (including the encouraging of voluntary partnerships with industry and waste minimisation clubs).”* (CSIR, 2011)

This report will therefore be guided by these key functions of a local municipality as listed above.

Terms of Reference

As a consequence of the above requirement of the Waste Act 2008, the Camdeboo Municipality (CM) called for tenders from service providers to:

“Review of the 2008 Integrated Waste Management Plan and align with the new development of the Waste Act: - NEMA 59 of 2008”.

Mott MacDonald PDNA (previously PD Naidoo & Associates Consulting Engineers (Pty) Ltd) was appointed by Camdeboo Municipality to review their 2008 Integrated Waste Management Plan. The following are the outputs and deliverables as set out in the Terms of Reference from CM:

- Phase 1: Project Initiation
- Phase 2: Situational Analysis
- Phase 3: Objectives, Strategies & Projects
- Phase 4: Implementation Plan

This report will therefore be guided by the key functions of a local municipality. These are listed under the following headings in each section:

Governance – Waste management policy and by-laws, landfill site audits, economic sustainability, institutional issues, staff training, compliance with relevant policies and legislation, managing private sector involvement, engaging Non-Government Organisations (NGOs) and Community Based Organisations (CBOs) interested in the waste field.

Waste avoidance and reduction – minimising waste by not creating the waste in the first place.

Treatment and recycling – recycling initiatives in particular glass, paper and cardboard, tins and cans. Treatment initiatives in particular composting of organics and the reuse of building waste.

Education and Awareness – public education and awareness initiatives regarding the impact of waste on the environment and people's health and the promotion of sound waste management practices.

Collections systems – residential, business, agricultural, medical and industrial waste. Number of people not receiving a waste collections service, public cleansing, equipment and vehicle fleet, route optimisation.

Waste disposal –licensing, management, capacity, etc. of landfill sites.

Waste information – waste information systems, weighbridges and collections.

Residents' monitoring committee - monitor compliance or non-compliance to permit conditions and the Minimum Requirements.

Financial – tariffs, income and expenses, major cost items, debt collection and non-payment for services, funding.

Background

The Camdeboo Municipality (CM) is situated in the Cacadu District municipal area in the western part of the Eastern Cape province, South Africa. The municipality covers an area of 12,422km² and is situated approximately 250km north-west of Port Elizabeth. The area is renowned for its pristine natural environment, rich heritage, diverse people and cultures. The area boasts a number of popular tourist attractions, beautiful landscapes and a healthy climate. The municipality has three towns, including Graaff-Reinet (the fourth oldest town in South Africa and referred to the "Gem of the Karoo") situated on route N9. The other two towns are Aberdeen (55km south west from Graaff-Reinet) and Nieu-Bethesda (55km north from Graaff Reinet) (www.camdeboo.gov.za). Graaff-Reinet is the centre where the largest concentration of the population lives and works.

CM consists of two landscapes, i.e. mountainous terrain and a valley. The municipal area has a well-developed drainage system. The Sunday's River drains the study area with several tributaries running through the study area. These tributaries drain into Nqweba dam for water storage and supply. The predominant activity in the area is farming. Large parts of the area are also severely impacted and replaced by intensive agricultural farming. The area is generally characterised by hot summers and very cold winters. The prevailing wind direction is from west and north-west, with an easterly and south-easterly component during summer months.

"CM faces many challenges, the biggest of which is water. Aberdeen and Nieu-Bethesda are in the fortunate position of having perennial springs that supply adequate and good quality water, which is used for both domestic consumption and irrigation. Graaff Reinet gets its supply from the Nqweba Dam; when dry, the town is dependent on borehole water ~ an unreliable source as the water table drops drastically when the rain stays away. The lack of a sustainable and permanent water supply is probably the most inhibiting factor in the area's economic development, as it restricts both agricultural and industrial activities." (www.camdeboo.gov.za)

The population growth rate within CM between 2001 (45 773) and 2011 (50 993) was positive (1,14%). The majority of the population falls within the "low" and "no income to very low" income earners (63%) followed by high income earners (21%) and middle income earners (16%). The employment status of CM population (age 15 to 64) shows that 30,1% are employed and 69,9% are unemployed. The economy of CM is largely based on agricultural, agri-industrial and tourist related activities.

The demographic projections indicate that there will be sustained pressure for urban development in Graaff-Reinet, Aberdeen and Nieu-Bethesda. It is expected that the future population growth will increase the pressure for green fields development in densification of land uses, demands for services and infrastructure, etc.