INTEGRATED WASTE MANAGEMENT

REGIONAL APPROACH

Morton Hubbe
Chief: District Waste Management
Eden District Municipality
Eden District Municipality

- One of five District Municipalities in the Western Cape Province
- Situated on the south-eastern coast and covers approximately 23 330 km²
- Population of ± 603 000
- Seven Municipalities in the jurisdiction area of Eden DM
  - Hessequa, Mossel Bay, George, Knysna, Bitou, Oudtshoorn and Kannaland
- Total General Waste generated ± 213 536 tons per year

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Eden District
Overview

• Integrated Waste Management Plan

• Regional Projects
  – Regional Landfill Facility
  – Alternative Waste Technology Feasibility Study
  – Public, Private Partnership
  – Green Waste Composting
  – Used Motor oil Recycling/ Responsible Electronic Waste Disposal
  – Wise Up On Waste Education Program
Where it all started

- First generation IWMP – one service provider compile all in 2006
- Cost effective – Uniform waste management approach in Eden
- Regional IWMP – November 2006
  - Establish a Integrated Waste Management Forum
  - Need included in Regional IWMP.
  - Forum meets on a two monthly basis.
  - Agenda/ minutes kept
  - Eden Chair the meetings
  - All Waste Management Officers from seven Municipalities members
  - Forum serves as Project Steering Committee for all Regional Projects
Landfill Facility Location Selection
Negative Mapping, Site Inspections and Transport Arrangement Study
Regional Landfill Facility

- Acceptance of Final Scoping Report and Plan of Study for EIA – 26 September 2011
- Final Environmental Impact Assessment and comments to DEADP - 10 January 2013
- Environmental Authorization under NEMA received - 27 May 2013 from DEADP
- Record of Decision received from DWA.
- Waste License issued on 07 February 2014
- Cost R 2.5 million
- Property valuation report approved by council – July 2013
- Land use zoning finalised and approved Mossel Bay Municipality – September 2013
- Land purchase progressed to finalisation of purchase contracts
Regional Landfill Facility

- Household waste area
- Hazardous waste area (Class 3 + 4 Rating)
- ± 50 year landfill airspace
- ± 205 hectare
- Construction waste recycling facility (Mossel Bay Municipality) (Roaming crusher for use by other municipalities.)
- Green Waste chipping/composting facility (Mossel Bay Municipality)
- Waste Recovery Facility
- Accessible from the N2 on the south side and from the railway line on the northern side
Regional Landfill Facility Layout
Alternative Waste Technology Feasibility Study

- Technologies to divert waste from landfill to save on landfill cost and extend lifespan of landfill
- In each municipal area to save on transport cost
- Regional basis (All Municipalities)
- The type of Alternative Waste Technology implemented will be determined by the ranking order prescribed in the Waste Management Hierarchy.
- Department of Agriculture partner/ PetroSA indicated interest to be included.
- Include as far possible private bulk waste generators in Eden
- Funding received from National Treasury – R 421 000.00 and Development Bank of South Africa – R 1 399 599.00
Public Private Partnership

Section 78 of the Municipal Systems Act 2000 (Act 32 of 2000)

- Evaluation of Internal Service Delivery Mechanisms – 16 May 2011

Public, Private Partnership

- Final Feasibility Study completed – 05 Augustus 2013
  - Build, Operate and Transfer model
  - 10 Year Contract period
  - Approved by Council – 29 October 2013
  - Mossel Bay, Knysna, George and Bitou Municipal Councils have committed to the 10 year contract period and the cost per year.
  - TVR i National Treasury

- Preparation of Tender and Draft PPP agreement in progress for National Treasury and Council approval (TVR ii)
Public Private Partnership (continues)

Section 120 Municipal Finance Management Act Investigation implement Public, Private Partnership process

• Preparation procurement phase in progress.
  • Request for Qualifications Regional Landfill Facility Build and Operation
  • Request for Qualifications Alternative Waste Technology

• Shortened Feasibility Study

• Request for Proposals
  • PPP regional Landfill Facility build and Operation
  • PPP implementing Alternative waste Technology

• Tender evaluation National Treasury and Council Approval
Green Waste Composting Project

- Green waste management identified as problem waste at the municipalities of Bitou, George and Mossel Bay

- Invitation for funding proposals for capital and operating development projects linked to the key performance areas of the Eden District Municipalities to deliver on their 5 year IDP targets

- Briefings session were held – presentation were done to technical evaluation committee – technical evaluation committee recommendations/plan submitted to Bid Evaluation Committee for approval - Approved recommendations/plan submitted to municipalities for acceptance approval.

- Service providers appointed to source funding – Business Plan presented to Eden DM for approval – Business plan to municipalities for acceptance approval

- Funding sourced from Green fund (DBSA) and IDC. Total amount 45 million rand

- DBSA decide to change grand option to a loan

- Cost too high

- Business Plan send to DBSA and National Treasury for their analysis and recommendations
Electronic Waste Disposal

- Private Service Provider partner with Eden DM to manage E-Waste
- *Specific Electronic Waste drop-off days where held in Hessequa, Mossel Bay, George, Knysna and Bitou municipal areas*
- A total of 3 tons of e-waste were dropped-off at the temporary drop-off points.
- *Two containers were donated by Valley Containers to accommodate electronic waste of which one was placed at Mossel Bay and the other at Knysna as the first phase.*
- *George citizens can dispose of their e-waste at the depot of Ma’bone in Fichat Street, George Industry.*
- *Bitou Municipality has made an existing building available at the landfill site for residents to drop e-waste.*
- *Containers will be rolled out to the other municipalities as soon as they are available.*
Used Motor Oil Recycling

• Rose Foundation and OSS Sales and Services Partner with Eden DM to recycle all used motor oil

• Motor oil recycling containers were placed in all of the municipal areas as mentioned above (excluding Kannaland Municipality)

• Households and small business can dispose of used motor oil to prevent unlawful disposal.

• The facilities are not available to business as they must appoint a service provider to dispose of their used oil at a recycling facility.

• The used motor oil is removed to a recycling depot in Mossel bay by the service provider OSS Sales and Services at no cost to the municipalities
Other projects in Eden District

Wise Up On Waste Program

- In 2006 the Wise Up On Waste Schools Programme was implemented in the Eden District.
- Rolled out to a total of 182 pre-schools and 90 primary schools.
- The programme included waste education regarding waste management in general and focused on reducing, re-using and recycling waste.

- The Eden Integrated Waste Management Forum is in the process to compile a strategic waste minimisation plan to implement in the whole of the Eden District Municipal area.

- The plan is currently in a draft format and will be finalised at the end of June 2014. It must still be approved and adopted by the different municipal Councils.

- Eden District Municipality, with the assistance of the Waste Management Officers of the municipalities, is in the process of implementing a continuous waste minimisation public awareness and education campaign.

- Redundant Chemicals were removed from 52 schools in the whole of the Eden district area over a period of eight months. The next phase in the programme will be to assist the Department of Education of the Western Cape to implement a programme to manage chemicals on a regular basis to prevent stockpiling.
Other projects in Eden District

• The Eden Integrated Waste Management Forum drafted a draft Waste Management Bylaw to adapt to the National Environmental Management Waste Act, 2008 and to replace all outdated Waste Management By-laws.
Thank You

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