

CONTENT FOR CONCEPT DESIGN OF WASTE MANAGEMENT SYSTEMS

- 1. Introduction**
 - 1.1 Island description
 - 1.2 Scope of work
 - 1.3 Local design standards and requirements
 - 1.4 Waste facility project lifecycle
- 2. Existing waste management infrastructure and facilities**
- 3. Culturally and environmentally Protected areas, zones, and reserves (if applicable)**
- 4. Waste Generation (conceptual data)**
 - 4.1. Island demographics and population projections
 - 4.2. Design parameters
 - 4.3. Present per capita waste generation rate
 - 4.4. Future waste generation rates
 - 4.5. Design horizons
- 5. Surveys**
 - 5.1. Socio-economical
 - 5.2. Physical survey
 - 5.3. Groundwater assessments
- 6. Stakeholder consultation with attached meeting minutes**
- 7. Waste Management and Disposal System**
 - 7.1. Overview
 - 7.2. Design approach and system flow diagrams
 - 7.3. Waste collection system
 - 7.4. Waste Storage arrangements
 - 7.5. Waste Management Facility
 - a) Type of treatment
 1. Incineration facilities
 2. Composting facilities
 3. Other mechanical/biological/chemical treatment option
 - b) Waste storage and Storage capacity (segregated)
 - c) Waste processing and treatment capacity
 - d) Concept layout of waste management facility
 - e) Power/water requirements
 - 7.6. Disposal options
 - 7.7. Waste Transfer/Transport mechanism
- 8. Construction material standards**

9. Power supply

- 9.1. Existing infrastructure
- 9.2. Backup power source
- 9.3. Power supply upgrade and connection requirements
- 9.4. Power requirement for Waste management facility (conceptual)
- 9.5. Renewable energy integration (recommended)

10. Land approvals for Waste Management Facilities

11. Risk mitigations and climate change resilience

12. Environment Friendly design considerations

13. System Expansion options

- 13.1. Capacity expansion
- 13.2. Area of Expansion

14. Financial and economic analysis for Waste management facility operations (conceptual)

15. Expected Environmental impacts due to the project

16. Conclusions