



CONTENT FOR CONCEPT DESIGN OF WASTE MANAGEMENT SYSTEMS

1. Introduction
 - 1.1 Project background
 - 1.2 Local design standards and requirements
 - 1.3 Project lifecycle
 - 1.4 Scope of work
 - 1.5 Island description
2. Existing waste management infrastructure and facilities
3. Culturally and environmentally Protected areas, zones, and reserves
4. Waste Generation
 - 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. Material standards
9. Power supply
 - 9.1. Existing infrastructure
 - 9.2. Backup power source
 - 9.3. Power supply upgrade and connection requirements
 - 9.4. General Electric arrangements
 - 9.5. Renewable energy integration
10. Land approvals for Water Management Facilities



11. Logistics and procurement arrangement
12. Risk mitigations and climate change resilience
13. System sustainability
14. Environment Friendly design considerations
15. System Expansion options
 - 15.1. Capacity expansion
 - 15.2. Area of Expansion
16. Operation and maintenance schedule and plan
17. Estimated operation and maintenance cost
18. Financial and economic analysis
19. Operation emergency response plans
20. Expected Environmental impacts due to the project
21. Expected design deviations
22. conclusions