

**COVER**  
**TABLE OF CONTENTS**

1. INTRODUCTION
  - Background To The Study
  - Purpose and Scope of EIA
  - EIA Study Area
  - Structure of the Report
  
2. PROJECT DESCRIPTION
  - Location and Scale of Project
  - Construction and Operational Activities
  - Project Programme
  - Need of the Project
  - Consideration Of Alternative Transport Modes
  - Consideration Of Alternative Jetty Location and Design Options
  - Preferred Jetty Location and Design Option
  - Temporary Site Office
  
3. WATER QUALITY IMPACT
  - Introduction
  - Environmental Legislation and Standards
  - Baseline Conditions
  - Water Sensitive Receivers
  - Assessment Methodology & Criteria
  - Identification of Environmental Impacts
  - Evaluation of Impacts
  - Mitigation Measures
  - Residual Environmental Impact
  - Environmental Monitoring and Audit Requirements
  - Conclusion
  
4. ECOLOGY
  - Introduction
  - Environmental Legislation, Standards and Guidelines
  - Assessment Methodology
  - TERRESTRIAL ECOLOGY
    - Description of Existing Ecological Baseline Conditions
    - Backshore Vegetation
    - Grass/Shrub Mosaic
    - Wildlife
    - Ecological Value
    - Identification of Environmental Impacts
    - Impact Evaluation
    - Mitigation of Adverse Environmental Impacts
    - Residual Environmental Impacts
    - Ecological Monitoring and Audit (EM&A) Requirement
    - Conclusions
  - MARINE ECOLOGY

- Description of existing ecological baseline conditions
    - Intertidal habitats
    - Sub-tidal habitats
    - Marine Mammal Habitats
    - Chinese King Crabs
    - Ecological Value
  - Identification of Environmental Impacts
  - Evaluation of Ecological Impacts
  - Marine Mammal Habitats
  - Mitigation of Adverse Environmental Impacts
  - Residual Environmental Impact
  - Environmental Monitoring and Audit
  - Conclusions
  - References
- 5 FISHERIES IMPACT
- Introduction
  - Environmental Legislation and Standards
  - Assessment Methodology and Criteria
  - Baseline Conditions
  - Identification of Environmental Impacts
  - Evaluation of Impacts
  - Mitigation Measures
  - Conclusions
  - References
- 6 CULTURAL HERITAGE IMPACT
- Introduction
  - Environmental Legislation and Standards
  - Assessment Methodology
  - Baseline Condition
  - Identification and Evaluation of Potential Impacts
  - Mitigation Measures
  - Conclusion
- 7 WASTE MANAGEMENT IMPACT
- Introduction
  - Environmental Legislation and Standards
  - Assessment Methodology & Criteria
  - Baseline Conditions
  - Identification of Potential Sources of Impact
  - Mitigation Measures
  - Evaluation of Residual Impacts
  - Environmental Audit
  - Conclusion
- 8 LANDSCAPE AND VISUAL IMPACT ASSESSMENT
- Introduction
  - Legislation, Guidelines and Planning Policy
  - Landscape and Visual Impact Assessment Methodology

- Scope and Contents
  - Identification of Baseline Landscape and Visual Conditions
  - Identification of Potential Sources of Impact
  - Assessment of Landscape Impacts
  - Assessment of Visual Impacts
  - Mitigation Proposals
  - Residual Impacts
  - Conclusions and Prediction of Significance of Impacts
  - Scope and Contents of the Study
  - Identification of Baseline Landscape and Visual Conditions
  - Visual Elements of the Proposed Jetty
  - The Zone of Visual Influence and Visually Sensitive Receivers
  - Identification of Sources of Impact
  - Assessment of Potential Landscape Impacts
  - Assessment of Potential Visual Impacts
  - Mitigation Measures
  - Residual Impacts
  - Implementation and Maintenance
  - Conclusions
- 9 ENVIRONMENTAL MONITORING AND AUDIT
- Introduction
  - Water Quality Impact
  - Ecological Impact
  - Cultural Heritage Impact
  - Waste Management Impact
  - Landscape and Visual Impact
- 10 CONCLUSION
- Introduction
  - Water Quality Impact
  - Ecological Impact
  - Fisheries Impact
  - Cultural Heritage Impact
  - Waste Management Impact
  - Landscape and Visual Impact
  - Environmental Monitoring and Audit
  - Overall Conclusion
- 11 IMPLEMENTATION SCHEDULE OF THE PROPOSED MITIGATION MEASURES

## **APPENDICES**

- APPENDIX 3.1 Hydraulic & Water Quality Modelling Report
- APPENDIX 4.1 Ecological Survey Data

**LIST OF TABLES**

Table 2.1	Environmental Comparison of Alternative Jetty Location Options
Table 2.2	Summary of Alternative Design Options
Table 3.1	Summary of Water Quality Objectives for the North Western WCZ
Table 3.2	Summary Statistics of Marine Water Quality in the North Western WCZ at Station NM5 for 2000
Table 3.3	Summary Statistics of Water Quality of Sha Chau and Lung Kwu Chau Marine Park in 1997 – 2000
Table 3.4	Depth-Averaged Suspended Solids Concentrations For Monitoring Stations In Sha Chau And Lung Kwu Chau Marine Park
Table 3.5	Calculation of the Effects of Increased Suspended Sediment Concentrations on Dissolved Oxygen Concentrations
Table 4.1	Ecological Value of Terrestrial Habitat Types in the Assessment Area
Table 4.2	Overall Impact Evaluation of Backshore Vegetation
Table 4.3	Overall Impact Evaluation of Grassland/Shrubland Mosaic and Other Habitats
Table 4.4	Ecological Value of Intertidal and Subtidal Benthic Habitats
Table 4.5	Ecological Value of Marine Mammal Habitat
Table 4.6	Overall Impact Evaluation for Intertidal Habitat
Table 4.7	Overall Impact Evaluation for Subtidal Habitat
Table 4.8	Overall Impact Evaluation for Marine Mammal Habitat
Table 5.1	Production in Lung Kwu Sha Chau fishing area (all fishing vessels)
Table 5.2	Top ten adult fish caught at Lung Kwu Sha Chau Fishing Area
Table 7.1	Sediment Quality Criteria for the Classification of Sediment
Table 7.2	Results of Sediment Quality Analysis
Table 8.1	The Landscape/Visual Impact Assessment Matrix
Table 8.2	Categories of Receivers
Table 8.3	Visually Sensitive Receivers, their View Type and Sensitivity
Table 8.3a	Landscape Impacts
Table 8.4	Significance of Impacts on Affected Landscape Resources
Table 8.5	Significance of Visual Impacts on VSRs

**LIST OF FIGURES**

- Figure 1.1 Assessment Area
- Figure 2.1 Alternative Jetty Location Options
- Figure 2.2 Tentative Construction Programme for Lung Kwu Chau Jetty
- Figure 2.3 Location Plan of Preferred Jetty Option
- Figure 2.4 General Arrangement of the Jetty
- Figure 2.5 Proposed Locations of Temporary Site Office
- Figure 3.1 Locations of EPD Monitoring Stations NM5 and NS4
- Figure 3.2 Locations of Marine Park Monitoring Stations 1, 2, 3 and 5
- Figure 3.3 Typical Configuration of Silt Curtains
- Figure 4.1 Locations of Ecological Sensitive Receivers
- Figure 4.2 Summary of Dolphins Sightings from 1995 to 2001
- Figure 4.3 Habitat Map at Lung Kwu Chau
- Figure 4.4 Marine Ecological Field Survey Location Plan
- Figure 4.5 Monitoring Sites of Intertidal Communities for the Sha Chau and Lung Kwu Chau Marine Park Monitoring Programme
- Figure 4.6 Location of Dive and Trawl Surveys Undertaken for Proposed AFRF at Sha Chau
- Figure 6.1 Lung Kwu Chau Archaeological Site
- Figure 6.2 Location Plan of Auger Drills, Test Pits and Face Cut
- Figure 7.1 Sediment Sampling Location Plan
- Figure 8.1 Zone of Visual Influence and Location of Visual Sensitive Receivers
- Figure 8.2 Aerial View of Lung Kwu Chau Showing Existing Landscape Resource/Character Areas
- Figure 8.3 Side View of Lung Kwu Chau
- Figure 8.4 Typical Vegetation Covers of Lung Kwu Chau
- Figure 8.5 Disturbed Coastline of the Bay where the Existing and Proposed Jetties are Located
- Figure 8.5A Plan and Sections of the Jetty
- Figure 8.6 Representative Existing Views from Castle Peak and Lung Kwu Tan
- Figure 8.7 Representative Existing Views from Urmston Road and Marine Park
- Figure 8.8 Photomontage – View from Urmston Road
- Figure 8.9 Photomontage – View from Marine Park
- Figure 8.10 Landscape Impact Map
- Figure 8.11 Visual Impact Map
- Figure 8.12 Mitigation Measure Plan