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**Section 15**



## 15 IMPLEMENTATION

### 15.1 INTRODUCTION

There are a number of issues which would not be expected to be resolved during this planning and outline design stage of the LAPH project. There are also some issues which The Environmental Assessment process has identified as potentially significant and requiring further specialist study. These have been listed in this Section. Many of these issues will need to be resolved prior to implementation of Phase I and are, therefore, urgent. Others may not become a problem until the later phases of the proposed port development and while no less important, they can be addressed at a later stage or over a longer period and where this is the case, it has been indicated.

Where the issue is purely related to a later phase of the port development, then the need for further work/study will be dependant on a future decision to proceed with the respective phases and would be triggered if and when such a decision is made.

### 15.2 FURTHER STUDIES/REQUIREMENTS

#### 15.2.1 Air Quality

It is recommended that at least one permanent air control monitoring station should be established within the Study Area. This could be an addition to EPD's existing network of stations however there is no current proposal for this. Alternatively it could be as a part of the monitoring and audit requirements imposed on the developer/operator. This would be the preferred Option. A suggested mechanism for establishing this is that at least one year before award of development rights, the station is set up by Government to allow sufficient baseline monitoring to occur. A condition of the development contract would then require the developer to reimburse the Government for the expenditure on award of contracts.

#### 15.2.2 Noise

The use of quietened equipment in the operation of the container port is central to achieving the noise standards. Further confirmation of the extent of noise reduction achievable towards 'ultra quietened equipment' and the likely associated cost, will be required. This information could then be used in a cost benefit analysis to enable practicable noise minimisation.

#### 15.2.3 Water Quality Modelling

Hydraulic and water quality modelling of the finalised port layout should be undertaken to optimise the preferred shape, hydraulic and water quality aspects. This includes the water channel between Phase II and Phase III, the treated Peng Chau sewage and the diverted sewage loadings at Siu Ho Wan (or elsewhere if the recommendation is not adopted).

#### 15.2.4 Ecology

It is suggested that further survey work should be undertaken to promote the understanding of various rare or protected species which will be affected by the LAPH development and their habitat requirements. These include:-

- a survey of the Chinese Pangolin in the Rural Hinterland; and
- a survey of the breeding habitats of the Reef Egret and also the White-bellied Sea-eagle. (This will be required for design of Phase IV).

The scope of these surveys will need to be agreed with AFD prior to commencement. However, it is considered that they should include as a minimum:-

- distribution;
- population estimates;
- viability;
- behavioural aspects; and
- an assessment of the territory wide importance.

In addition, monitoring the effects of the road links in the saddle between Penny's Bay and Ta Shui Wan on mammal movement is recommended.

It has been identified that the fishing industry within the Study Area will be significantly affected by the physical presence of the port and its construction and operation. It is therefore essential that comprehensive fisheries data, gathered over a substantial time period, is both available and readily interrogated. This will provide a baseline which will enable any compensation claims from

fishermen to be adequately and fairly judged. The need for and scope of such surveys must be decided by AFD, bearing in mind the data already gathered by this department. It would need to include for mapping of important fishing grounds and collecting catch statistics (species, quantities, value, etc.) relating to specific fishing grounds and possible relationships to season, water quality and dredging.

It is also recommended that habitat preservation and the potential for habitat creation in the Yam O Wan embayment should be studied during the detailed design of the North Shore Development.

These works could be carried out by the detailed design consultants.

#### **15.2.5 Waste**

A contaminated land investigation is recommended at the site of the Cheoy Lee Shipyard to determine the nature and extent of any required remedial measure prior to redevelopment. A study of reprovisioning requirements is currently under way and it is anticipated that this will confirm that this investigation is required.

Further studies are recommended to confirm MARPOL waste storage, treatment and disposal options, requirements and policy.

#### **15.2.6 Risk**

It is recommended that further consideration is given to the nature of DGs traffic at the North Shore and also through the Kap Shui Mun channel.

Detailed procedures should be developed to cope with emergency situations.

### **15.3 IMPLEMENTATION ISSUES**

Many of the issues identified for further study above would logically be addressed during the detailed design stage and the need for a strong environmental input during that stage has already been identified and is underlined here. In order to briefly summarise these implementation issues and to ease the process of taking them forward to the next stage, a list with a suggested responsibility for the respective items is given in Table 15.1

TABLE 15.1  
 IMPLEMENTATION ISSUES

ISSUE	PROPOSED RESPONSIBILITY
Noise generation from port-related industries.	Detailed Design Consultants/Developers.
Noise reduction achievable by quietening of major port requirement.	Detailed Design Consultants/Developers.
Air Quality Monitoring Station.	Developers/EPD/CED.
Ecological study of the presence of Pangolins on Tsing Chau Tsai.	Detailed Design Consultants/Developers. This will probably form part of an overall assessment of the development plan for the Tsing Chau Tsai peninsula.
Water Quality and Hydraulic Modelling, optimisation including sewage treatment/diversion.	Detailed Design Consultants/CED/EPD.
Alternative breeding sites for reef egret and white-bellied sea-eagle.	Government/Developers (not required until Phase IV).
Fisheries surveys.	Detailed Design Consultants/AFD/EPD.
Confirmation of contamination level in sediments and quantification of contaminated mud requiring disposal.	Detailed Design Consultants.
Solid waste disposal arrangements.	Design Consultants/Developers.
Monitoring of Waste arisings.	Developers.
Contamination of Cheoy Lee shipyard.	An initial study regarding provisioning is under way. This may recommend a contamination survey is required.
Recommendations on the lease and construction conditions for the purposes of advancing CT#10 and other further developments on Lantau port.	Detailed Design Consultants.
Provision of setbacks adjacent to main roads, possibly through the RODP.	Detailed Design Consultants.
Emissions budget for breakwater land uses.	If the breakwater project proceeds, a separate assessment will be necessary to examine the potential impacts in more detail, with emphasis on air pollution and hazards.
Tree planting for visual relief.	Detailed Design Consultants.
Preservation of archaeological sites at Pa Tau Kwu and Luk Keng.	Detailed Design Consultants.
Assuming they are a practical option, use of trailer/hydraulic dredgers where appropriate.	Detailed Design Consultants.
Employment of specialist environmental staff.	Developers (with approval by EPD).
Monitoring and Audit Schedules and Action Plans update and confirmation.	Detailed Design Consultants (with approval by EPD).
Monitoring and Audit Manual.	Developers/Operators (with approval by EPD).