Annex L

Baseline Seabed Survey Final Report

Additions and Amendments

The Hong Kong Electric Co. Ltd.

Baseline Marine Ecological Monitoring for Lamma Power Station Extension

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This document refers to the Baseline Marine Ecological Monitoring for the Lamma Power Station Extension Report prepared for the Hong Kong Electric Company on the 15th December 2000.

Below are additional remarks and amendments to this report.

1. para. 2. (methodology)

Section 2.1. Baseline Survey

The ROV survey carried out in 1998 examined the Reclamation Site Zone and outer soft sediment areas of the adjacent seawall of the ash lagoon. The swathe of footage along each transect was ~0.5 m, however, there was a degree of variability as the handling of the ROV was dependent on sea conditions and the topography of the seabed. The survey covered a total area of ~ 1500 m^2 (four transects). In comparison the Rapid Ecological Assessment (REA) will be carried out by scientific divers using 100 m belt transects with a maximum width of 2 m. The planned surveys will encompass a total transect length of 1000 m (10 x 100 m) within the Reclamation Site Zone and also include two additional survey areas, i.e., the Ash Lagoon Seawall Zone and Ash Lagoon Seawall Base Zone. Five transects of 100 m length will be surveyed using belt transects within each location, respectively. Dive survey teams will assess a minimum survey area of 2000 m^2. The REA survey technique will involve visual census of dominant benthic organisms that should allow for improved identification of soft corals and gorgonians and abundance estimates. *In situ* field notes detailing notable features of such organisms will be compiled and complemented with photographic records. Coral specialists will also make a limited collection of unidentified specimens for examination at a later stage.

2. para. 3 (Results)

3.2.1. Soft coral, gorgonian and hermatypic coral abundance

A. Reclamation Site Zone

Eight gorgonian genera and five soft coral genera were recorded using the REA survey technique as compared to three gorgonian and three soft coral species by the ROV method. Density (number of colonies. m^{-2}) of each genera also differed with a higher density of the dominant gorgonian (*Euplexaura*) recorded in the year 2000 (2.682 colonies. m^{-2}, as compared to 0.815 colonies. m^{-2} in 1998). Low numbers of seapens and the azooxanthellate scleractinian coral *Tubastrea* sp. were recorded by both survey methods.

B. Ash Lagoon Seawall

No comparison of soft coral and gorgonian density between surveys carried out in the years 1998 and 2000 can be made as the ROV transects only fringed the outer soft sediment area adjacent to the Ash Lagoon Zone Base. Construction of the Ash Lagoon Seawall occurred in mid-1996 and the soft coral and gorgonian fauna recorded in November 2000 reflected the settlement and colonisation processes taking place on the rubble mound seawall in a relatively short period of time (~ three and half years).

3. para. 4 (Discussion)

4. Discussion

A higher density (number of colonies. m^{-2}) of gorgonian and soft coral colonies were recorded within the Reclamation Site Zone by the REA survey in 2000 as compared to the ROV results from 1998. Such results are a reflection of the following:

(1), A further two years of possible colonisation by soft corals and gorgonians may have taken place between the two surveys carried out in 1998 and 2000, respectively.

(II), There were limitations in the use of ROV survey techniques for the quantitative assessment of benthic organisms within the Reclamation Site Zone, i.e., the ROV did not perform well in low visibility conditions.

(III), There was greater accessibility afforded by the dive surveys that allowed for:

(a), *In situ* identification of benthic organisms.

(b), Collection of detailed notes, photographic records, video footage and specimens which aided identification of soft corals and gorgonians.

(c), Improved estimates of abundance by the visual census carried out by divers.

Although, there are inherent difficulties in accurately documenting potential discrepancies between the two survey methods the longer time spent on underwater transects by scientific divers would indicate that the above points are valid.

END OF AMMENDMENTS