Status Report on Sand Dredging and Mud Disposal in Hong Kong

Purpose

This paper aims at providing a status report to Members on sand dredging and mud disposal in Hong Kong covering the period from August 2002 to February 2003. The last six-monthly status report was issued to Members in August 2002 (ACE Paper 27/2002).

Overview of Marine Fill Sources, Mud Disposal Areas and Major Reclamation Areas

2. The locations of marine fill sources, mud disposal areas and major reclamation areas in Hong Kong are shown in the drawing MFC-001F (Attachment A). During the reporting period, sand dredging was only active at the South Tsing Yi Marine Borrow Area for supplying sand fill for the Container Terminal 9 (CT9) Project. Disposal of mud suitable for open sea disposal continued at South Cheung Chau, East of Ninepin and South of Tsing Yi, and for capping the mud Pit CMP IVb at East Sha Chau. Mud requiring confined marine disposal was continued to be disposed of at the dedicated facility located at East Sha Chau.

Marine Borrow Area

3. Sand dredging at the South Tsing Yi Marine Borrow Area, which commenced in November 2000, was completed in September 2002. The Environmental Monitoring and Audit (EM&A) programme for the CT9 Project, which covered the reclamation and the marine borrow area, comprised water quality monitoring at 34 stations. The EM&A results indicated that the dredging had not caused unacceptable impact on the nearby sensitive receivers.

Mud Suitable for Open Sea Disposal

- 4. The open sea floor mud disposal areas at South Cheung Chau and East of Ninepin were being used for disposal of mud suitable for open sea disposal from various projects in Hong Kong. Mud suitable for open sea disposal was also used for capping the mud pit CMP IVb at East Sha Chau. Mud suitable for open sea disposal arising from the CT9 Project was continued to be disposed of in the exhausted marine sand borrow pits at South of Tsing Yi. Disposal of mud at East Tung Lung Chau's exhausted marine sand borrow pit may resume in the coming dry season in October 2003 for other projects in Hong Kong.
- 5. The results of water quality monitoring at the above active disposal areas have so far indicated no unacceptable impact on the environment. The monitoring work will continue, and mitigation measures will be implemented where necessary, in order to ensure that the impact on the environment is kept within an acceptable limit.
- 6. The EM&A Manual and Operation Plan are being prepared for the proposed year-round open sea disposal of both Category L¹ sediment and Category M² sediment that pass the biological screening in the exhausted marine sand borrow pits at North of the Brothers. The Manual and the Plan, together with the environmental assessment, will be submitted to the EIA-Subcommittee for discussion later this year.

Mud Requiring Confined Marine Disposal

- 7. Disposal of mud requiring confined marine disposal from various projects in Hong Kong continued at the East Sha Chau disposal facility. With implementation of a comprehensive EM&A programme and appropriate mitigation measures, the results of the monitoring indicated that the disposal activities had not caused any unacceptable impact on the environment.
- 8. The consultancy study to identify a suitable site for a new confined marine disposal facility commenced in June 2002. The consultant has identified two potential sites for the new facility, one at Airport East and another at the East of Sha Chau area. The consultant has suggested that the contained aquatic disposal (CAD)

¹ Category L: Sediment with all contaminant levels not exceeding the Lower Chemical Exceedance Level as defined under Environmental, Transport and Works Bureau Technical Circular (Works) (ETWB TCW) No. 34/2002

² Category M: Sediment with any one or more contaminant levels exceeding the Lower Chemical Exceedance Level and none exceeding the Upper Chemical Exceedance Level as defined under the ETWB TCW No. 34/2002.

method similar to that currently being used for the disposal of contaminated mud at East Sha Chau be adopted. We plan to brief Members on the consultant's recommendations later this year upon completion of the study. Environmental impact assessments are being carried out for the potential sites, and findings are expected to be available in early 2004.

Efforts to Reduce Mud Dredging

9. Measures have been put in place to minimize mud dredging. However, readily available capacity is always needed for disposal of mud from maintenance dredging for our harbour and port facilities and essential dredging for certain development projects. A Government internal circular on Management of Dredged/Excavated Sediment (Environmental, Transport and Works Bureau Technical Circular (Works) No. 34/2002) had been issued in August 2002 to reinforce the policy to minimize mud dredging wherever possible.

Attachment

Attachment A: Drawing No. MFC-001F – Marine Fill Resources, Mud Disposal Areas and Major Reclamations

Marine Fill Committee Secretariat Geotechnical Engineering Office Civil Engineering Department February 2003