ACE 8/95 for information

Review of Contaminated Mud Disposal at East Sha Chau: Interim Report I

Purpose

To inform members on the progress of implementing the recommendations presented in the overview report (reported to ACE on 17 October 1994) on the disposal of contaminated mud at the East Sha Chau disposal facility.

Background

- 2. At the ACE meeting on 21 November 1994, an update on the implementation of the follow-up activities and work progress undertaken by the Civil Engineering Department (CED) and their consultants, EVS Environment Consultants of Canada, were presented to the members.
- 3. ACE members acknowledged the prompt actions taken by CED but requested an interim report on the progress of the follow-up activities be circulated for members' information in February 1995.

Work Progress

4. The table below summarizes the work progress since the update to ACE on 21.11.94.

Recommendations	Activities as of 21.11.1994	Activities as of 20.2.1995
QA/QC Review (EVS)	A full review of the quality assurance and quality control (QA/QC) procedures started on 31.10.1994.	Draft report received on 2.12.1994. The report with recommendations to improve the existing QA/QC procedures was sent to relevant Government departments for review. Report finalized on 7.2.1995. See paragraph 5 below.
Retrospective Statistical Analysis (EVS)	A detailed statistical analysis of the current environmental monitoring data started on 21.10.94.	Draft report received on 2.12.1994. The report with recommendations to refine the current monitoring programme was sent to other relevant Government departments for comment. Report finalized on 7.2.1995. See paragraph 6 below.
Sediment Toxicity Testing (EVS)	EVS was preparing a summary document on the relative roles of sediment chemistry results and toxicity tests results.	Sediment sampling for the toxicity tests will be carried out in late February 1995. The tests will be conducted at the EVS Laboratory in Vancouver, Canada.

Comparative Risk Assessment (EVS)	(i) The selection of appropriate locations in the Victoria Harbour area for the risk assessment in comparison with East Sha Chau was initiated in December 1994. (ii) An ecological risk calculation of the Chinese White Dolphin was initiated on 7.11.94.	(i) Trawling for finfish and invertebrates in the Harbour will be carried out in late February 1995. Tissue of selected species will be analyzed for heavy metal contents. (ii) EVS Consultants are gathering specific information, such as dolphin's diets and foraging range, needed to refine the risk calculation. Lack of information of the Chinese White Dolphin in Chinese waters is a major difficulty.
Source Characterization (CED)	A scheme was devised for the collection of samples of dredged source material from barges as they arrived at East Sha Chau.	The sampling was carried out from 28.12.1994 to 26.1.1995. The sediment samples are being analyzed for heavy metals, moisture contents and particle size distribution. Results will be ready by the end of March.
Sediment Loss Survey (CED)	A survey to determine the extent of the suspended sediment plumes and the concentrations of sediment in the plumes was scheduled for December 1994.	Because there were few disposal activities in December 1994, the survey was postponed. A trial survey was conducted on 24.1.95. A detailed survey is scheduled for late February to coincide with a period of high tidal fluctuations.
International Practices (CED)	Efforts were initiated to keep up-to- date with international practice and technological advances related to the disposal of contaminated mud.	CED have made contacts with local universities and external agencies which have research interests in ecotoxicology and/or contaminated mud disposal. Officers from EPD, CED anf AFD attended the International Conference on Marine Pollution and Ecotoxicology held on 22-25 January 1995 in Hong Kong.

- 5. The recommendations of the QA/QC procedures have been forwarded to BCL/CES, consultants undertaking the current environmental monitoring programme, for follow-up actions.
- 6. Implementation of the recommended changes to the present monitoring programme will involve the reduction of some monitoring efforts while increasing activities in some monitoring parameters. The logistics for implementing the revised programme will be finalized and be implemented by the end of February 1995.

Next Report to ACE

7. EVS Consultants will undertake a six month review of the revised monitoring programme. CED plan to provide the next interim report to ACE in June 1995.

Geotechnical Engineering Office Civil Engineering Department February 1995