

## **Discussion Paper**

### **Islands District Council**

#### **Tourism, Agriculture, Fisheries, Environmental Hygiene and Climate Change Committee**

#### **Paper No. TAFEHCCC 16/2022**

#### **Public Works Programme Item No.: 5824CL/B**

### **Dredging, Management and Capping of Contaminated Sediment Disposal Facility at West of Lamma Island**

#### **Purpose**

1. This paper aims to present the Contaminated Sediment Disposal Facility at West of Lamma Island Project (“the Project”) proposed by the Civil Engineering and Development Department (CEDD) and to seek members’ comments on the Project.

#### **Background**

2. Hong Kong is one of the busiest ports in the world. For maritime safety, maintenance dredging is required to be carried out at the harbour fairways on a regular basis to remove sediment from the seabed. In addition, sediments from the drainage channels have to be removed regularly to maintain their flow capacity for flood protection. The excavated sediment (commonly known as marine sediment or marine mud) shall be disposed of at designated disposal facilities.

3. CEDD has been adopting a stringent marine sediment management strategy to minimize the need for marine sediment disposal and reduce the impact of disposal operation on the surrounding environment. Project proponents are required to avoid and reduce dredging works as far as possible and reuse the

marine sediment generated by the project as much as possible. Disposal of marine sediment is allowed only when absolutely necessary. We have also been conducting environmental monitoring for the marine sediment disposal operation. The monitoring results over the years have shown that there is no unacceptable impact to the surrounding environment.

4. The existing contaminated sediment disposal facility is located in the waters to the east of Sha Chau. As the capacity of this facility is expected to be exhausted in 2027, and there is no room for expansion of the facility in that area, a new contaminated sediment disposal facility has to be planned for in another location in order to meet the contaminated sediment disposal demand after 2027 to ensure maritime safety and maintain smooth drainage.

5. In the long run, we will continue to carry out investigation to keep reducing the demand for contaminated sediment disposal and explore alternative options other than disposal of marine sediment in seabed.

#### **Site Selection, Planning and Operation of the Proposed Facility**

6. In 1998, the Government engaged a consultant to conduct a site selection study of contaminated sediment disposal facility in the Hong Kong waters. At that time, the waters to the west of Lamma Island were not selected for further investigation because the area had been reserved for development of ancillary facilities to support the future development of container terminals. Subsequently, according to the "Hong Kong Port Development Strategy 2030 Study" published by the Government in 2014, the need for reserving the waters to the west of Lamma Island to support the future container terminal development was no longer required. Upon review, we considered the waters to the west of Lamma Island would have potential for developing a new contaminated sediment disposal facility. A consultant was engaged in 2020 to carry out further study.

7. After taking into account various factors including marine ecological habitats (including finless porpoises), fisheries resources, beaches, coastal protection areas and sites of conservation importance, the consultant recommended to develop the new contaminated sediment disposal facility in the

waters to the west of Lamma Island (refer to **Annex 1** for the Project location). The proposed facility will consist of a number of individual mud pits, which will be implemented and operated in phases according to the actual disposal demand. Based on preliminary estimate, each mud pit will be operated for approximately 3 years. Overall, subject to future actual disposal demand, the whole facility is expected to have a service lifetime for around 20 years.

8. In terms of operation, we will continue to adopt the well-established operation mode of the existing disposal facility, including the phased construction and operation of mud pits, provision of full time site personnel to supervise the disposal activities on 24-hour basis, granting permission on disposal activities solely to vessels with valid marine dumping permits, as well as conducting environmental monitoring works regularly, etc. Upon exhaustion, the mud pit will be covered by uncontaminated sediment up to the original seabed level for habitat restoration.

### **Environmental Impact of the Proposed Facility**

9. The environmental impact assessment (EIA) of the Project has been substantially completed and the result concluded that the Project will be environmentally acceptable. The key assessment results are as follows.

- (1) Water Quality: The impact of the Project on water quality is only temporary in nature and unacceptable impacts to nearby water quality sensitive receivers, such as beaches, fish culture zones and marine ecology, are not expected.
- (2) Marine Ecology: Habitat loss and disturbance to marine ecology from the Project are temporary in nature. The Project area is not the key occurrence habitat for finless porpoise, and only common species of the coral and benthic communities are found within the Project area. Unacceptable impacts to marine ecological resources are not anticipated.
- (3) Fisheries and Hazard to Health: The Project area is located as far as possible from the more important fisheries production and

fishing operation areas, and at a distance from the fisheries sensitive receivers. Unacceptable impacts on fisheries are not anticipated. In addition, consumption of seafood captured from around the Project area is not expected to cause unacceptable hazard to health.

- (4) Air Quality and Noise: The Project Site is located at least 2.5 km away from the relevant sensitive receivers. Adverse impacts on these sensitive receivers are not anticipated.

10. CEDD has consulted relevant fishermen's groups and green groups on the preliminary findings and recommendations of the EIA in the first quarter of this year and has duly considered their feedback, where the fishery resources and water quality monitoring in the proposed Environmental Monitoring and Audit programme has been suitably enhanced.

### **Way Forward**

11. We are planning to submit the EIA Report of the Project to the Environmental Protection Department in the second quarter of this year for their approval. We also plan to gazette the Project under the Foreshore and Sea-bed (Reclamations) Ordinance in the third quarter of this year. It is targeted to commence construction of the facility in 2024 and complete the first mud pit for operation by 2025 the earliest. We will continue to listen to comments from relevant stakeholders (including fishermen's groups, etc.) about the Project.

### **Advice Sought**

12. Members' support and comments on this Project are sought.

**Civil Engineering and Development Department**

**Fill Management Division**

**May 2022**