

環境事務委員會特別會議  
**Panel on Environmental Affairs Special Meeting**

監控傾倒和疏浚活動對海洋環境的影響  
**Controlling the Impact of Dumping and  
Dredging Activities on the Marine Environment**

二零一三年六月十四日  
**14 June 2013**

# 香港海泥卸置區的管理

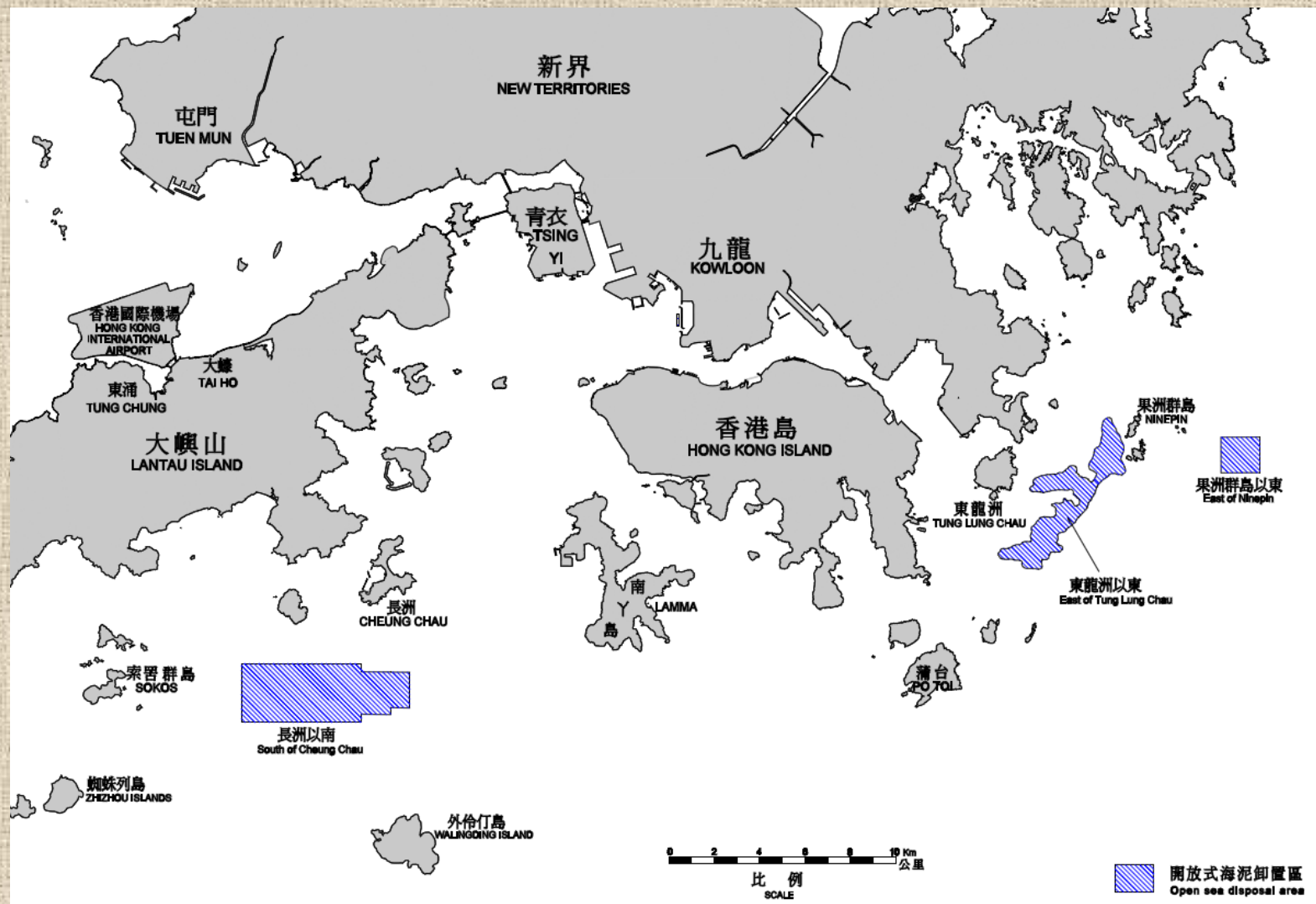
## Management of Marine Mud Disposal Facilities in Hong Kong

莫鵬程先生  
土木工程拓展署總工程師/  
填料管理

Mr Peter MOK  
Chief Engineer/Fill Management  
Civil Engineering and Development Department

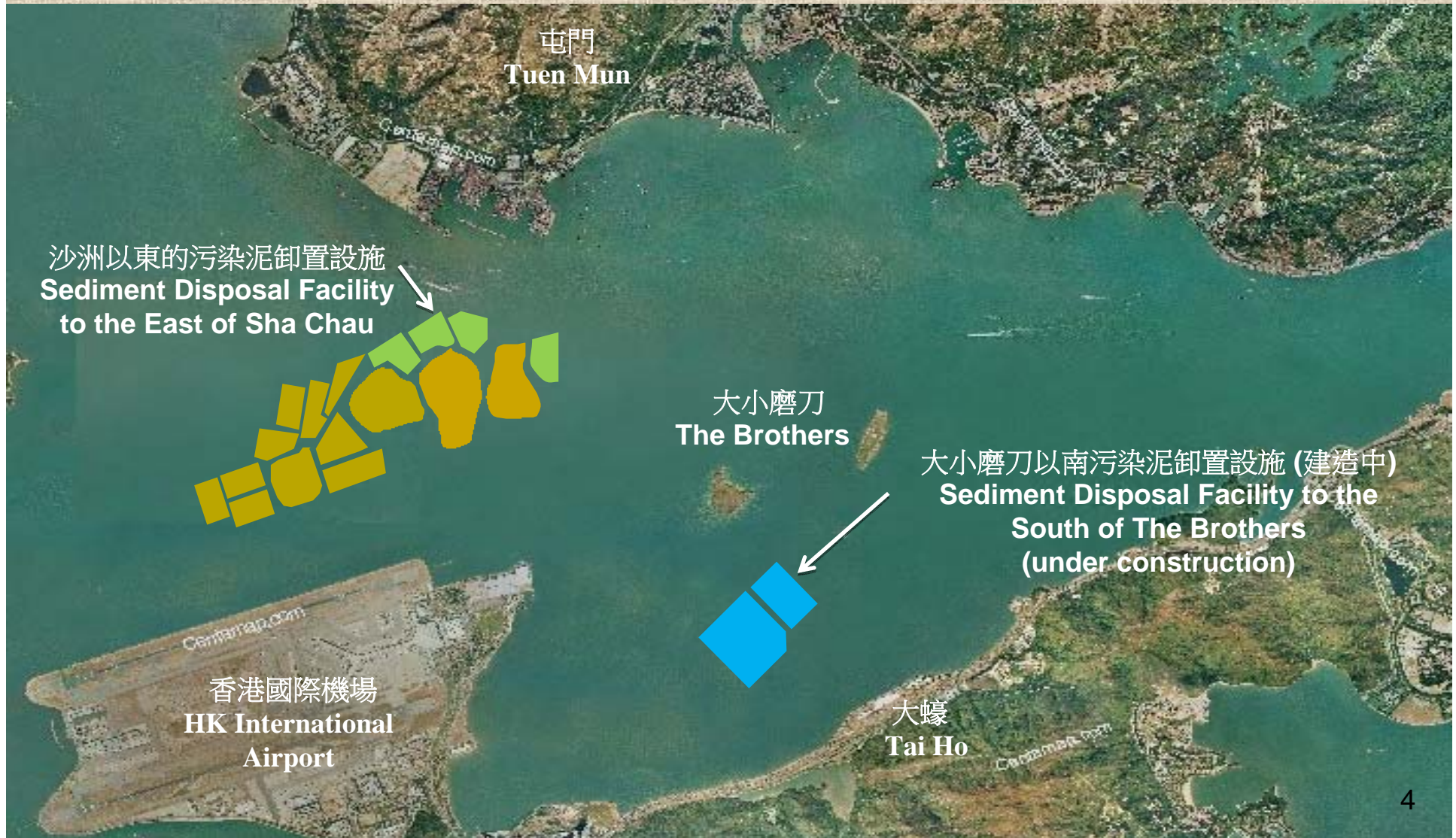
# 非污染海泥之開放式海洋卸置設施

## Open Sea Disposal Facility for Uncontaminated Sediment



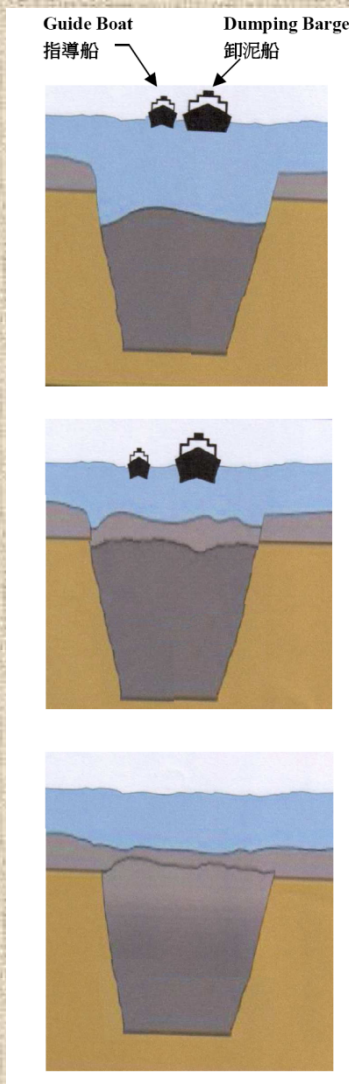


# 密封式海上卸置 (污染泥卸置坑) Confined Marine Disposal (Contaminated Mud Pits)



## 卸置海泥的管理

# Management of Marine Mud Disposal



Disposal of contaminated mud in the disposal pit up to a level of 3m below the surrounding seabed

將污染泥料卸置在坑中，最高回填水平必須低於周圍海床3米

Capping using uncontaminated mud to isolate the disposed contaminated mud from the environment

將清潔泥料覆蓋在污染泥料上，使之與周圍環境隔離

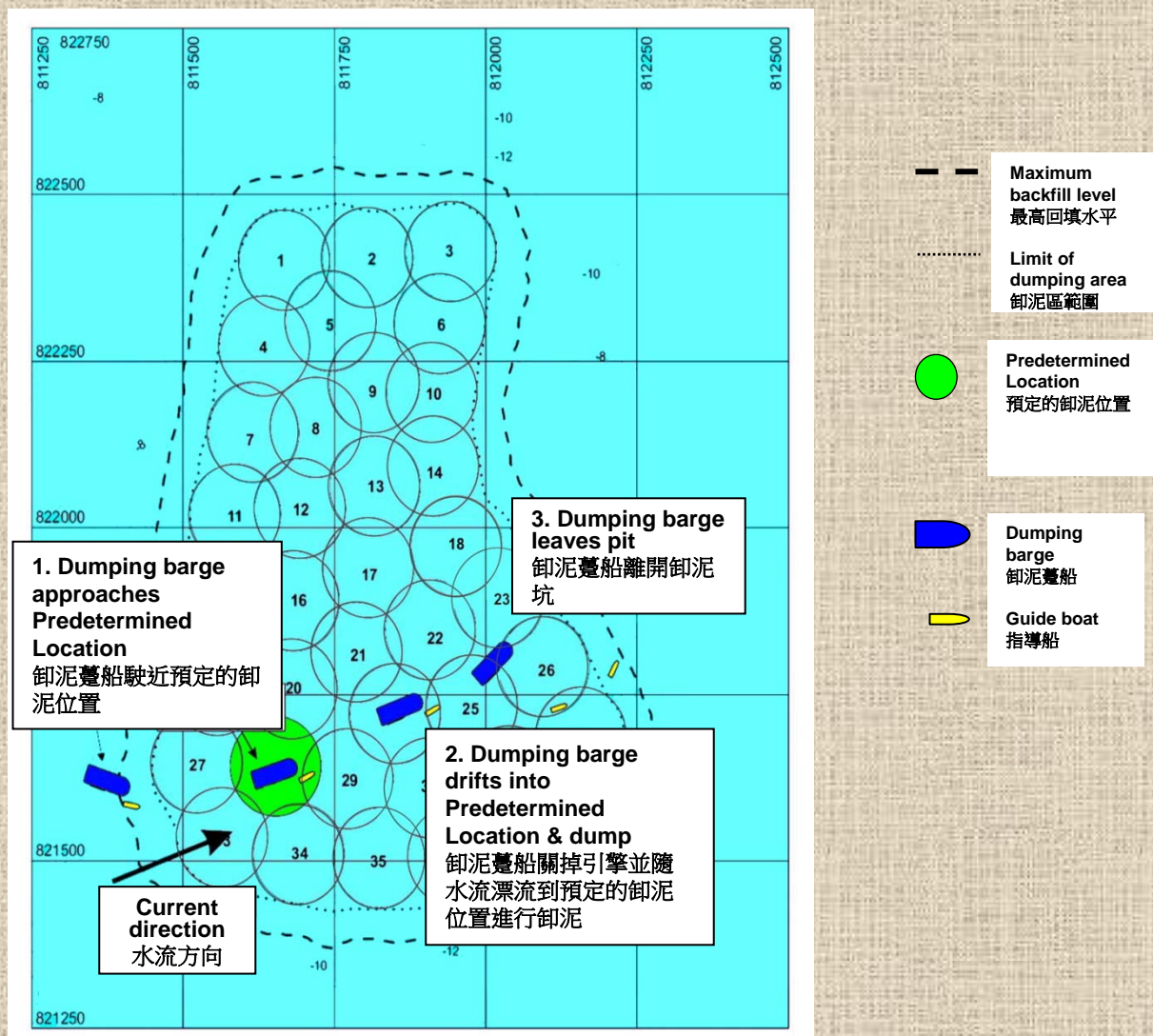
Completion of capping the pit to the original seabed level

覆蓋完成後，泥坑位置的海床會回復原狀



# 卸置海泥的管理

## Management of Marine Mud Disposal



# 環境監察及審核計劃

## Environmental Monitoring and Audit Programme

### ■ 水質樣本 Water quality sample

- 確保水質不會超出設施所在的水質管制區的水質指標

Ensure water quality does not exceed the water quality objectives of the water control zone in which the facility is situated

### ■ 泥料樣本 Sediment sample

- 確保卸置坑附近的污染物濃度不會有上升的趨勢

Ensure contaminant concentrations near the facility do not show an increasing trend

# 環境監察及審核計劃

## Environmental Monitoring and Audit Programme

### ■ 漁業樣本 Fisheries resources

- 確保不會影響豐富的漁業資源，亦不會在一段時間後增加選定目標品種的組織或全身污染物濃度

Ensure rich fisheries resources are not affected, and whole-body contaminant concentrations of target species do not increase over time

### ■ 海洋生物樣本 Marine biota

- 確保海洋生物重返已覆蓋的卸置坑棲息繁殖

Ensure marine organisms continue to recolonize on the capping layer of mud pits



# 環境監察結果

## Environmental Monitoring Results

- 對水質及泥料質素沒有造成不可接受的影響  
No unacceptable impact on water & sediment quality
- 對漁業資源沒有造成不可接受的影響  
No unacceptable impact on fisheries resources
- 持續監察以確保符合環保規定  
Continuous monitoring to ensure compliance with environmental requirements

規管海上傾倒和疏浚活動  
**Regulatory Control on  
Marine Dumping and Dredging Activities**

王德威先生  
環境保護署助理署長  
(環保法規管理)

Mr David WONG  
Assistant Director (Environmental Compliance)  
Environmental Protection Department

## 規管海上傾倒和疏浚活動 (1)

### Regulatory Control on Marine Dumping and Dredging Activities (1)

#### 《環境影響評估條例》

#### Environmental Impact Assessment Ordinance (EIAO)

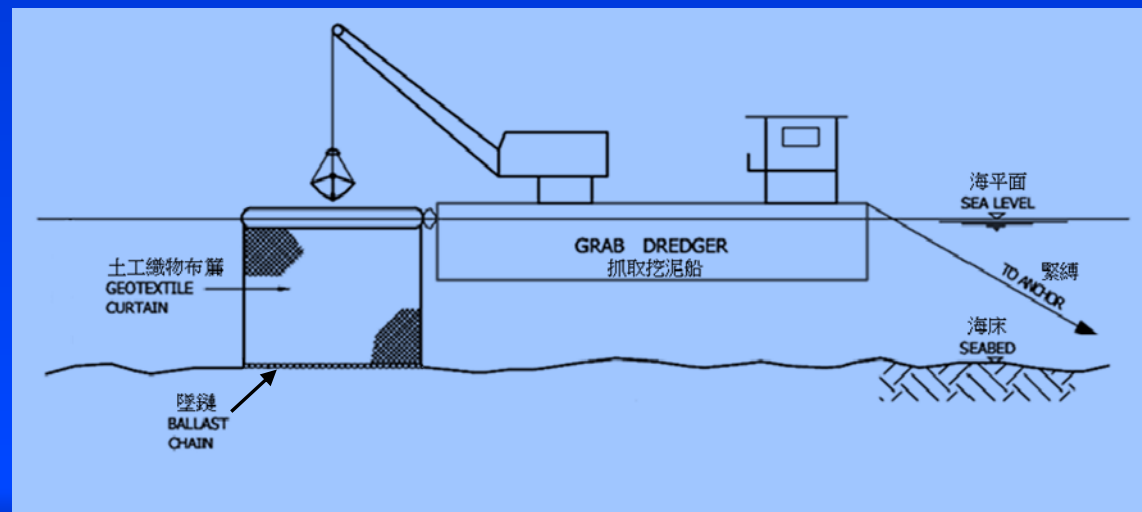
- 所有屬於指定工程的疏浚活動須申領環境許可證。
- 環境許可證列明有效防止或減少對海洋環境影響的緩解措施。
- 進行環境監察，量度實質影響及核實緩解措施效用。
  
- Environmental Permits (EPs) for dredging operation of designated projects
- Mitigation measures specified in EPs to effectively prevent and minimize the impacts on the marine environment
- Environmental monitoring programme to measure the actual impact and assess the effectiveness of mitigation measures



# 緩解措施例子

## Examples of Mitigation Measures

- 規限挖泥區面積
  - 限制整體挖泥速率
  - 規限挖泥船的種類和數目
  - 利用隔泥幕將影響局限於挖泥區內
- 
- Restricting the size of dredging area
  - Limiting the overall dredging rate
  - Restricting the type and number of dredgers
  - Using silt curtain to confine impact within dredging area



## Regulatory Control on Marine Dumping and Dredging Activities (2) 規管海上傾倒和疏浚活動 (2)

### 《海上傾倒物料條例》

#### **Dumping At Sea Ordinance (DASO)**

環境保護署根據《海上傾倒物料條例》，管制船隻、飛機或海事構築物在海上棄置物質及物品和將物質及物品傾倒入海和至海床下，以及就相關的裝載作業作出規定。凡從事以上作業，必須持有環保署署長所簽發的許可證。

Under DASO, EPD controls disposal and dumping of substances and articles from vessels, aircraft and marine structures in the sea and under the seabed and the related loading operation. Such operations are required to obtain DASO permits issued by Director of Environmental Protection.

## Regulatory Control on Marine Dumping and Dredging Activities (2) 規管海上傾倒和疏浚活動 (2)

### 《海上傾倒物料條例》 Dumping At Sea Ordinance (DASO)

#### 許可證管制 / Permit Control

- 所有卸泥躉船必須裝設自動監察系統，記錄躉船的方位和吃水深度、上載/傾卸路線和位置以及相片，連接至環保署實時追蹤及監察船隻系統
- 環保署人員經海陸空的巡查，以進行執法監察
- An automatic self monitoring device installed on board of dumping vessels to record position & draught, route & loading / dumping locations as well as photo records for connection with EPD's system of Real-Time Tracking & Monitoring of Vessel (RTTMV)
- EPD officers conduct enforcement surveillance with marine, land and helicopter inspections



# 實時追蹤及監察船隻系統 Real Time Tracking & Monitoring of Vessels (RTTMV)

實時監察於環保署控制中心  
Real Time Monitoring at EPD Control Centre



全球定位接收器天線  
GPS Antenna



吃水傳感器 Draught Sensor



網絡攝影機 Web Camera



# 政府應對海上垃圾的措施

## Government Measures to Tackle Marine Refuse

### 海上垃圾的清理

- 海上垃圾的清理工作由以下四個政府部門負責-
  - 漁農自然護理署 (漁護署)
  - 食物環境衛生署 (食環署)
  - 康樂及文化事務署 (康文署)及
  - 海事處
- The following four Government Departments are responsible for the cleaning up of marine refuse -
  - Agriculture, Fisheries and Conservation Department (AFCD);
  - Leisure and Cultural Services Department (LCSD);
  - Food and Environmental Hygiene Department (FEHD); and
  - Marine Department (MD).
- 海事處除負責清理在香港水域的海上垃圾外，亦負責收集停泊在避風塘內本地船舶及來自遠洋船的垃圾。
- In addition to the cleaning up of marine refuse within Hong Kong waters, MD is also responsible for collecting refuse from local vessels inside typhoon shelters and sea-going ships.

# 政府應對海上垃圾的措施

## Government Measures to Tackle Marine Refuse

### 打擊亂拋垃圾落海的執法

- 漁護署、食環署、康文署、海事處及香港警務處均可就海上或近岸亂拋垃圾的罪行執法。
- 違例者可被定額罰款**1,500元**，或罰款**\$10,000至\$50,000**，及/或監禁**6個月至1年**。

### Enforcement Against Marine Littering

- AFCD, FEHD, LCSD, MD and Hong Kong Police Force take enforcement actions against marine littering or nearshore littering.
- The offender is liable to a fixed penalty notice at a fine of \$1,500, or a fine of \$10,000 to \$50,000 and/or imprisonment of 6 months to 1 year upon conviction.

### 海岸清潔跨部門工作小組

- 透過現正進行的海上垃圾研究以了解海上垃圾的來源，並制訂改善措施，以防止及減少海上垃圾。
- 透過舉辦宣傳及教育活動，提高市民保持海岸清潔的意識。

### Inter-departmental Working Group on Clean Shorelines

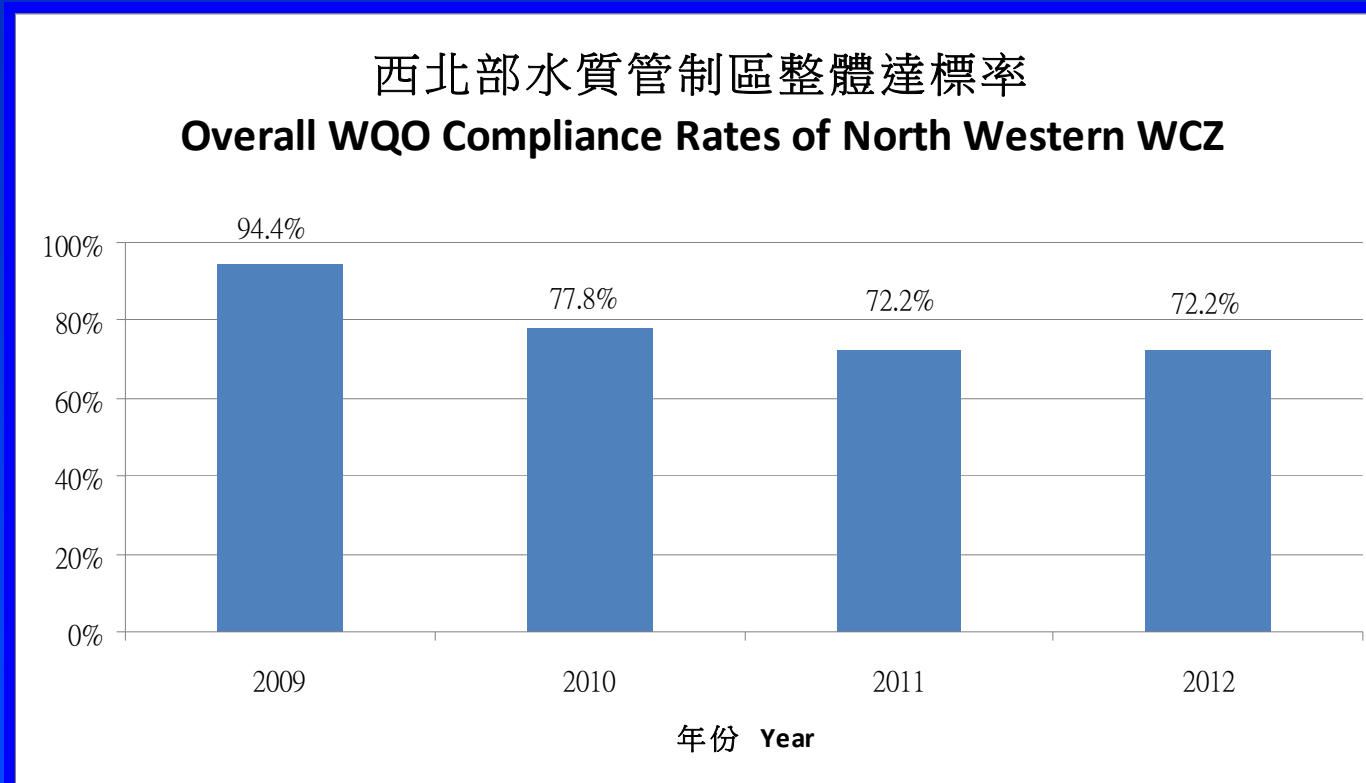
- To prevent and reduce marine refuse by conducting a marine refuse study to identify sources of marine refuse and to formulate improvement measures.
- To promote public awareness of keeping the shorelines clean by organising publicity and education campaigns.



## 西北部水質管制區的水質

### Water Quality of North Western Water Control Zone

- 如下圖所示，在**2009**年至**2012**年期間，西北部水質管制區的海水水質指標整體達標率達**72%**或以上。
- As shown in the below chart, the marine water quality of the North Western Water Control Zone (WCZ) has met an overall compliance rate on the Water Quality Objectives (WQO) of 72% or above from 2009 to 2012.



完  
End

多謝  
Thank You