

# DECOMMISSIONING OF FORMER CHEOY LEE SHIPYARD

Civil Engineering Department awarded the second infrastructure contract for Penny's Bay Development in July 2002. The contract, at a cost of HK\$1.38 billion, comprises the decommissioning of the former Cheoy Lee Shipyard, site formation of about 20 hectares of land and construction of about 3.9km of roads and vehicular bridges together with the associated drainage and sewerage works. The contract also involves the construction of an arboretum and a tree farm in the public water recreation centre.

The most critical part of the contract is to decommissioning the former Cheoy Lee Shipyard so as to release land for the construction of infrastructure associated with the Hong Kong Disneyland Theme Park. The works have to be carried out in accordance with the recommendation of the Environmental Impact Assessment (EIA) study completed by CED in December 2001, which was subsequently endorsed by the Advisory Council on the Environment in March 2002 and approved by the Environmental Protection Department in April 2002.

The EIA study found that soil in the northern and central portion of the CLS site has been predominantly impacted by metals, total petroleum hydrocarbons (TPH), and some semi-volatile organic compounds (SVOCs). Soil in the southeastern portion of the site has been found mainly contaminated with metals and dioxins. In summary, a total of about 87,000 m<sup>3</sup> contaminated soils needs to be cleaned up. Their estimated volumes by contaminant types are summarized below:

Metals only	48,000m <sup>3</sup>
Metals/TPH/SVOCs	9,000 m <sup>3</sup>
Dioxins/Metals	30,000 m <sup>3</sup>

The study evaluated various treatment options and treatment techniques and recommended a comprehensive solution to the soil decontamination. Soil contaminated with metals only will be treated by cement solidification on site within the CLS site. Soil contaminated with TPH/SVOC will be treated by biopiling method at To Kau Wan. Soil contaminated with dioxins and metals will also be treated at To Kau Wan by thermal desorption followed by cement solidification. Oily residue generated from the thermal desorption process will be collected and incinerated at the Tsing Yi Chemical Waste Treatment Centre.

The on-site decontamination works, commenced in October last year, will be completed in mid 2003, while the decontamination works at To Kau Wan in mid 2005.

## 前財利船廠清拆工程

土木工程署於 2002 年 7 月批出竹篙灣第二項基建工程合約。這項總值約 13 億 8 千萬港元的合約，所涉及的工程範圍包括拆卸前財利船廠，平整約 20 公頃的土地，建造約 3.9 公里的道路及行車天橋，以及相關的排水及排污工程。此外，合約還包括在水上康樂活動中心興建植物標本林。

合約最關鍵的部分是要清拆前財利船廠，供應土地用以興建配合香港迪士尼樂園的基建設施。工程要按照土木工程署於 2001 年 12 月完成的環境影響評估報告的建議進行。該評估報告隨後於 2002 年 3 月被環境諮詢委員會確認及於 2002 年 4 月獲得環保署批核。

環境影響評估報告顯示在船廠北面及中央部份的泥土主要是受到金屬、總石油碳氫化合物及半揮發性有機化合物所污染。廠址東南部份的泥土主要是受到金屬和二噁英所污染。總括而言，合共約 87,000 立方米受污染的泥土需要清理。其估計數量摘錄如下：

金屬	約 48,000 立方米
金屬、總石油碳 氫化合物及半揮 發性有機化合物	約 9,000 立方米
金屬和二噁英	約 30,000 立方米

報告評核過各種不同處理受污染泥土的方案及技術之後，建議了一套全面的方案來淨化受污染的泥土。只受金屬污染的泥土，會在船廠原址以混凝土凝固法來處理。受總石油碳氫化合物/半揮發性有機化合物污染的泥土，會運送到倒扣灣以生物堆積法加以處理。受二噁英及金屬污染的泥土，和會運送到倒扣灣以熱力解吸法處理，繼而再以混凝土凝固法來處理。在熱力解吸法處理過程中所產生的剩餘物，會被收集及運送至青衣化學廢物處理中心焚化。

在船廠原址進行的泥土淨化工程已於去年 10 月展開，及將會於 2003 年中完成，而在倒扣灣的工程，則預計會在 2005 年中完成。



Choi Lee Shipyard site at present

前財利船廠原址現況