

**For discussion on
23 June 2003**

Legislative Council Panel on Environmental Affairs

Decommissioning of Cheoy Lee Shipyard at Penny's Bay

Purpose

This paper informs Members of the details of the incidents associated with the decommissioning of the Cheoy Lee Shipyard at Penny's Bay. They were reported and rectified under Government's monitoring mechanism currently in place and covered in some press reports on 2 June 2003. We will also explain how the monitoring mechanism has been operating and what precautionary measures will be taken to continue with our vigilance and to cater for contingency.

Background

2. Construction of the Hong Kong Disneyland and associated infrastructure and facilities requires decommissioning of the Cheoy Lee Shipyard. With the issue of an Environmental Permit (EP), the decommissioning project has started since October 2002 and comprises, amongst other things, treatment of contaminated soil found in the site. Soil contaminated with dioxin or organics will be treated off-site at To Kau Wan, a nearby location, as recommended in the approved Environmental Impact Assessment (EIA) report. Thermal desorption and biopiling will be adopted respectively for the treatment. The transportation of the contaminated soil to To Kau Wan was completed in April 2003.

Monitoring mechanism

3. As part of the EP conditions, the decommissioning project is subject to vigorous monitoring. First of all, an Environmental Monitoring and Audit (EM&A) programme is in place to help ensure full compliance with all the environmental standards and speedy rectification for any malpractices. Accordingly, the contractor has set up a dedicated Environmental Team to carry out environmental monitoring work, site inspection and any necessary remedial works. It also tenders environmental advice as necessary. An Independent Environmental Checker is appointed and tasked to audit the work of the Environmental Team and to advise on related environmental issues.

4. Separately, the Civil Engineering Department has established an Environmental Project Office on site to monitor the cumulative environmental effects of all construction works under different contracts in the area. The project consultant of the Department has also deployed a team of experienced staff full-time on site to step up supervision to help ensure, amongst other things, that the environmental standards are met.

5. The project has also been independently monitored by the Environmental Protection Department, the regulatory body under EIA Ordinance and various pollution control legislations. Its enforcement teams pay visits to the site from time to time to conduct independent, surprise inspections. Additional inspections are conducted where necessary having regard to the monthly EM&A reports. A total of 15 inspections were made during the period from November 2002 to April 2003. They would also have meetings with the contractor, the Environmental Team, the Independent Environmental Checker, the Civil Engineering Department and its project consultant to discuss issues of concern including those revealed in the monthly EM&A reports. The objective is to ensure that any potential issues of concern could be addressed promptly in accordance with the EP conditions and relevant pollution control legislations.

Incidents

6. The incidents as reported in the press took place between November 2002 and March 2003. They were reported by the Environmental Team and the Independent Environmental Checker and published in the monthly EM&A reports, to which members of the public have access through the project website of the Civil Engineering Department. These incidents are minor in nature and were rectified speedily and in most cases immediately on the spot. They have not caused any adverse environmental impact. Details are set out at *Annex A*. The incidents are grouped into three categories according to their nature.

7. Category (A), totaling four in number, relate to those associated with the transportation of dioxin-contaminated soil. On the two specific incidents where the trucks did not have their wheels properly washed, it is worth pointing out that the trucks were stopped immediately and diverted back to the washing facilities to have the cleaning job properly completed. In other words, the cleaning procedure was followed through in the end before the trucks were allowed to leave Penny's Bay. It is also important to point out that there was no spillage of dioxin-contaminated

soil in any of these four incidents, nor was there any exceedance of environmental standards for dioxin in the ambient air.

8. Incidents in Category (B) are about transportation of soil contaminated with organics only. There was no dioxin-contaminated soil involved. Remedial measures were taken promptly.

9. Category (C) incidents involve site housekeeping matters only. They are unrelated to transportation of contaminated soil. Nevertheless, speedy remedial actions were taken.

10. The inspections carried out by the Environmental Protection Department so far have not revealed any violation of the EP conditions and requirements under relevant pollution control legislations.

Way forward

11. The vigilant monitoring and site supervision have served their purposes and are working well. The reporting of the incidents and the speedy actions taken to remedy the situation show that.

12. Nonetheless, we shall continue with our vigilance and step up our monitoring to avoid slippage in performance. The decommissioning project is progressing to the thermal desorption process, which will start in July 2003 for completion in early 2005. In the process, dioxin residues will be generated. During the period, they will be transported by batches to the Chemical Waste Treatment Centre at Tsing Yi. The residues are non-volatile, insoluble in water and not inflammable. So the risk is extremely low. Nevertheless the EM&A programme will continue to run. There will be full implementation of the precautionary measures required under the EP. We will also go an extra mile to take extra precautionary measures to cater for contingency. Details are set out at *Annex B*.

13. The decommissioning project shall also continue to be totally transparent. All environmental data collected under the EM&A programme including the monthly EM&A reports prepared by the Environmental Team and verified by the Independent Environmental Checker will continue to be posted in the internet for public inspection. A webcam system will continue to be in place at To Kau Wan for round-the-clock, real-time monitoring of the thermal desorption process.

Civil Engineering Department
June 2003

Nature of Incidents	Details and Remedial Actions Taken
(A) Related to transportation of dioxin contaminated soil	
Truck not passing through the wheel washing bay at the CLS exit	All the transportation trucks are required to have their wheels washed twice on each trip. One is done at a standalone automatic wheel-washing facility installed within the CLS site, intended for decontamination. There is another wheel washing bay at the exit of the site for the second-time washing, designed for suppressing dust emission. The truck concerned had completed the decontamination washing, but not the second-time washing. But on the spot, the truck was immediately stopped and diverted back to the wheel washing bay. So the truck left the CLS site with their wheels washed twice as required in the end.
Truck observed to be speeding on the haul road at 30km/hr, instead of the speed limit of 16km/hr	The speeding problem was rectified on the spot immediately.
Truck giving too little time on wheel washing	The incident happened within the CLS site. The truck concerned was stopped on the spot immediately and diverted back to the standalone washing facility to properly complete the cleaning process.
Escort car having no flashing light	The light bulb was burnt off. Replacement was quickly made afterwards.
(B) Related to transportation of non-dioxin contaminated soil	
Truck observed to be overloaded with contaminated soil	The material was improperly heaped when placed on the truck. The problem was rectified on the spot immediately.
Truck not well labeled to indicate the type of contaminated soil being carried	The proper labels were provided subsequently.
Truck not covered with a tarpaulin sheet within CLS site	The problem was rectified immediately on the spot.
(C) Related to general site housekeeping practices (Not related to transportation of contaminated soils)	
Drum having chemical leakage	The drums were left behind by the (former) shipyard operator. After Government's entry into the site, the drums were stored within a designated area which was bunded, fenced off and roofed to prevent contamination with soil. The drums were subsequently removed and the floor slab decontaminated.
Fuel drum, wrongly labeled as "Chemical waste", used as rubbish tanks	Proper labeling was provided subsequently.
Excessive dust observed on site	Frequency of watering was increased immediately.
Drainage beside the wheel washing bay blocked by mud	Wheel washing bay was cleaned up immediately. There was no overflow of the wheel washing basin.
No clear labelling for container for waste oil	Clear labeling was provided subsequently.
Fuel drum/oil tank without drip tray	Drip trays were provided subsequently. No spillage was observed.

**Precautionary measures to be taken for transportation of dioxin residues
to the Chemical Waste Treatment Centre (CWTC) at Tsing Yi**

(A) Precautionary measures (as required by the Environmental Permit)

- (a) the residues will be transported only in small consignments to CWTC each time for incineration over a period of over a year to reduce risk. Only about 1 or 2 trips will be made per week;
- (b) the residues will be packaged in drums, labelled and stored in accordance with the Waste Disposal (Chemical Waste) (General) Regulation before a licensed collector can take it to the CWTC;
- (b) each consignment will be tracked by means of a trip-ticket system and the contractor will notify EPD for each delivery; and
- (d) the transportation will take place only during non-peak hours and in a safe speed limit. The transportation will be via a dedicated route away from residential areas and escorted by two vehicles, one in the front and the other at the back.

(B) Extra precautionary measures

A contingency plan has been devised where -

- (a) a site emergency response centre has been established to coordinate speedy responses to emergencies including spillage of the residues, however unlikely;
- (b) arrangements are being made to enable quick and effective response of the Fire Services Department and Hong Kong Police Force;
- (c) EPD's advice is being incorporated into the plan to ensure safe and quick removal and disposal of spilled material; and
- (d) the contractor has arranged for adequate stand-by site staff and equipment to deal with emergencies.