Legislative Council Panel on Environmental Affairs

Information Note on Decommissioning of the Former Cheoy Lee Shipyard and Formulation of Land Contamination Policy

Purpose

At the meeting on 26 April 2004, Members requested the Administration to provide a paper to brief them on the progress of decommissioning the former Cheoy Lee Shipyard (CLS) at Penny's Bay and formulation of a land contamination policy. This note sets out the requested information.

Decommissioning of the CLS site

- 2. Decommissioning of this shipyard site involves the in-situ treatment by cement solidification of about 60 000 m³ of soils contaminated with metals only, biopiling of about 12 000 m³ soils contaminated with total petroleum hydrocarbon (TPH)/semi-volatile organic compounds (SVOC) at To Kau Wan (TKW), and thermal desorption of about 30 000 m³ of soils contaminated with dioxins at TKW to be followed by incineration of the generated residues at the Chemical Waste Treatment Centre (CWTC) at Tsing Yi.
- 3. We have carried out the decommissioning works in accordance with the conditions of the Environmental Permit (EP) issued by the Director of Environmental Protection (DEP) under the Environmental Impact Assessment Ordinance (EIAO) and in strict compliance with the stringent and comprehensive requirements of the Environmental Monitoring and Audit Manual. We completed the in-situ cement solidification works at CLS site and the biopiling works at TKW in May 2003 and April 2004 respectively. As regards the soils contaminated with dioxins, we have also completed the first stage treatment by thermal desorption at TKW in April 2004. The dioxin-containing residues (less than 100 tonnes) are temporarily stored at TKW pending transportation to the Tsing Yi CWTC for ultimate destruction there by incineration.
- 4. We will implement stringent precautionary measures to ensure safe transportation of the residues. The CWTC at Tsing Yi also possesses state-of-the-art technology which can effectively and safely decompose dioxins into harmless carbon dioxide and water vapour. It can achieve a most stringent standard of 0.1ng/m³ for dioxin emissions, same as those adopted in other advanced countries like the United States, Europe and Japan.

- 5. Since July 2003, the Civil Engineering Department (CED) has liaised closely with the Working Group on Concern of the Incineration of Dioxins (formed under the Kwai Tsing District Council (KDTC)) to enable its monitoring on the transportation and incineration arrangements for the dioxin-containing residues. In the early morning of 4 February 2004, CED carried out a trial transportation (using sand as a substitute material) following the traffic route specified under the EP. However, we aborted this exercise enroute due to blockage by nine KTDC Members and six local residents at the junction of Cheung Tsing Highway and Tsing Yi Road West. At a special full KTDC meeting on 9 February 2004, Government explained further on the details of incineration arrangements. This meeting however passed a motion of objection to the incineration arrangement and also disbanded the Working Group.
- 6. To allay the concerns of KTDC Members and local residents, we subsequently staged a series of roving exhibitions and briefings from 12 March 2004 to 30 April 2004 to inform the public of the stringent precautionary and operational measures that Government would take to ensure utmost safety both during transportation and incineration of the residues. Notwithstanding these additional briefings, some KTDC Members and local residents still maintained their objection to the incineration arrangement. We received at the briefings 510 signatures from the residents of Villa Esplanada and another 164 standard petition letters which objected to the incineration arrangement.
- 7. In pursuance of the general principle to protect the environment by the reduction of persistent pollutants, we need to dispose of the dioxin-containing residues now temporarily stored at To Kau Wan as soon as practicable. We will re-fix the incineration programme carefully. In accordance with the EP requirements, we will carry out trial incineration on about 8 tonnes residues first. We will proceed with incineration of the remaining residues only after DEP is satisfied with the performance of the trial incineration.
- 8. The total residues will be incinerated in 5 to 6 consignments (of 15 to 20 tonnes each), at about bi-monthly intervals over a period of about 10 months. The treatment of each consignment will take just 4 days to complete and the residues will only constitute about 8% of the daily handling capacity of CWTC. We will maintain high transparency in the incineration work and will provide KTDC with regular progress updates (which can also be viewed in CED's project website through Internet). At the request of KTDC, CED has also employed an Independent Expert Assessor to monitor the effectiveness of the incineration process. He will collect air samples during incineration of the residues for analysis against a set of stringent alert indicators.

Legal Actions to Seek Recovery of the Decontamination Cost

9. Department of Justice has sought preliminary legal advice from retained Senior Counsel on the legal liability of Cheoy Lee Shipyard. Department of Justice and Lands Department are considering the legal advice. Further consideration and analysis are being given to the legal, procedural and evidential issues. If necessary, expert advice or legal advice will further be sought.

Land Contamination Policy

- 10. Land lease conditions and planning permissions are management tools used to require the lessees to conduct assessments and to remedy land contamination arising from activities that are potentially contaminating. A decontamination clause has been included in all new leases for industrial/godown and petrol filling station purposes since 2003. The decontamination clause was drawn up by Lands Department in consultation with the Environmental Protection Department (EPD). This clause is imposed as a land lease condition requiring the lessee of a site to prevent land contamination, to conduct contamination assessment and, if necessary, to clean up the site at his own expense before the site is returned to the Government. It also specifies that if the lessee fails to take up his responsibilities, the Government may carry out the works and demand the lessee to pay the full cost of the works.
- 11. Project proponents of "Designated Projects" as defined under the EIAO will need to go through the EIA process and obtain an EP from EPD before the relevant works can commence. If there is information to indicate that a "Designated Project" is to be carried out on land which is potentially contaminated due to previous polluting uses such as shipyard or underground oil tanks, the project proponent will need to prepare and submit a Contamination Assessment Plan (CAP) to EPD for endorsement prior to the commencement of the site investigation work. Based on the CAP, the project proponent shall conduct a contamination assessment and compile a Contamination Assessment Report (CAR) to document the findings for approval by EPD. If the findings confirm that the site is contaminated, a Remediation Action Plan (RAP) will be required. These actions have to be completed before any development can take place.
- 12. It is considered that the above control measures are adequate to prevent or to rectify land contamination. The Government is also reviewing international trends and control mechanisms adopted by overseas jurisdictions to enhance our knowledge and improve control over contamination issues in Hong Kong.

Environment, Transport and Works Bureau May 2004