CHAPTER 8

Lands Department

Civil Engineering Department

The acquisition and clearance of shipyard sites

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THE ACQUISITION AND CLEARANCE OF SHIPYARD SITES

Contents

			Para	agraj	phs
SUMM	IAR	Y			
PART	1:	INTRODUCTION		1.1	
	Ac	quisition of shipyard sites		1.2	
	Au	dit review		1.3	
PART	2:	RESUMPTION AND CLEARANCE OF THE NORTH TSING YI SHIPYARD SITE	2.1	-	2.4
	Re	sponsibility for clearance of the shipyard sites	2.5	-	2.11
		Audit observations	2.12	-	2.13
		Audit recommendations		2.14	
		Response from the Administration		2.15	
	De	contamination cost of the North Tsing Yi shipyard site	2.16	_	2.24
		Audit observations	2.25	-	2.27
		Audit recommendations		2.28	
		Response from the Administration		2.29	
PART	3:	ASSESSMENT OF CONTAMINATION AT THE PENNY'S BAY SHIPYARD SITE		3.1	
	Ba	ckground	3.2	-	3.4
	Dis	scovery of contamination at the Penny's Bay shipyard site	3.5	-	3.14
	Die	oxins found at the Penny's Bay shipyard site	3.15	-	3.16

Paragraphs

Previous complaints about open burning 3 of wastes at the Penny's Bay shipyard site		
Audit observations	3.20 - 3.24	
Audit recommendations	3.25 - 3.27	
Response from the Administration	3.28 - 3.30	
4: SURRENDER OF THE PENNY'S BAY SHIPYARD SITE TO THE GOVERNMENT	4.1	
Surrender of the site on an "as is" basis	4.2 - 4.11	
Indemnity clause included in Deed of Surrender of a Tsing Yi site 4.12		
Environmental protection clause in lease conditions	4.14 - 4.24	
Audit observations	4.25 - 4.28	
Audit recommendations	4.29	
Response from the Administration 4.30		

Appendices

PART

- A: Complaints about open burning of wastes at the Penny's Bay shipyard site in 1995 and 1999
- B : Surrender of a Tsing Yi site in which the Government would be indemnified if contamination was subsequently found
- C: Chronology of key events
- D: Acronyms and abbreviations

THE ACQUISITION AND CLEARANCE OF SHIPYARD SITES

Summary

1. The Government may acquire land for public purposes either by resumption of land, or by negotiation with the landowners for the surrender of land. For land let out under a short term tenancy (STT), the Government may terminate the STT so as to acquire the land for public purposes. In 1997, the Government resumed 6 leased shipyard sites and terminated 15 STTs at North Tsing Yi, Kwai Tsing (hereinafter referred to as the NTY shipyard site) for the construction of district open space and government/institution/community facilities. In 2001, the Government also negotiated with the lessee for the voluntary surrender of a leased shipyard site) for the future development of a theme park project. Audit found that the Government incurred significant costs of clearance and decontamination of the sites after their acquisition (paras. 1.1 and 1.2).

AUDIT FINDINGS

Clearing the North Tsing Yi shipyard site

2. For the NTY shipyard site, there were conditions in the STTs stipulating that the tenants were responsible for clearing the structures at the sites on termination of the tenancy agreements. However, on termination of the 15 STTs, the Lands Department (Lands D) did not take action to enforce such provisions on the grounds that it might be difficult to enforce them effectively. In the event, the Government had to spend about \$5.5 million to clear the site. Audit found that the Lands D has not yet stated in the Lands Administration Office Instruction the specific justifications under which an STT tenant may be exempted from clearing the site (paras. 2.2 to 2.6, 2.12 and 2.13).

Decontaminating the North Tsing Yi shipyard site

3. After the leased sites had reverted to the Government in April 1997 and the STTs had been terminated from April to July 1997, about 75,000 cubic metres of soil were found contaminated. The Government had to incur about \$64.5 million to decontaminate the sites. Audit found that there were conditions in the 6 leases and in 5 of the 15 STTs prohibiting contamination of the site. The lessees and the STT tenants concerned might have responsibility for decontaminating the sites. The Lands D has asked the Department of Justice on whether these lessees and STT tenants breached the conditions prohibiting contamination. Audit considers that if the Department of Justice confirms that the lessees and tenants are liable for clearing up the contamination, the Lands D should take prompt action to recover the decontamination cost from them (paras. 2.3, 2.4 and 2.18 to 2.27).

Assessment of contamination at the Penny's Bay shipyard site

4. The PB shipyard site was surrendered to the Government on 3 April 2001. According to the lease conditions of the PB shipyard site granted in 1970, the Government was *not* empowered to inspect the site to ascertain whether there was any breach of the lease conditions. After carrying out a limited scale preliminary site investigation under the consent of the lessee, it was reported in early 2001 that there was only localised surface contamination at the site. However, after the acquisition of the site in April 2001 and the carrying out of a detailed site investigation, in October 2001 it was found that the level of contamination was more serious than originally expected. Dioxins were also found in the contaminating the site (paras. 3.1, 3.4(3), 3.11 to 3.15 and 3.19(c)).

5. This case has highlighted the need for the Government to have the authority to carry out necessary site investigations *before* sites are resumed or surrendered. Audit considers that the Lands D should refine the wording of the standard clause of leases so that the Government is empowered to enter a site to conduct site investigations before the resumption or surrender of the site to the Government (para. 3.22).

Scope for improvement in surrender procedures

6. The PB shipyard site was surrendered to the Government on an "as is" basis on 3 April 2001. Up to the date of surrender of the PB shipyard site, the Lands D might not be well-positioned to estimate the final cost of cleaning up the contamination. Audit considers that the potential risks and financial implications of accepting the "as is" clause, having regard to the fact that there had been findings of contamination before the surrender of the site, should have been critically evaluated by the Lands D. The Lands D should seek approval from the relevant policy bureaux before accepting the "as is" surrender clause. Audit noted that in another case of land surrender involving a site at Tsing Yi, a clause had been included in the Deed of Surrender to indemnify the Government from liabilities in connection with contamination found *after* the surrender of the site. Audit considers that, in future, an indemnity clause should be included in all Deeds of Surrender to protect the public interest (paras. 4.2, 4.3, 4.10, 4.12 and 4.25 to 4.28).

AUDIT RECOMMENDATIONS

7.

Audit has made the following main recommendations that:

Land resumption procedures and the termination of STTs

- (a) the Director of Lands should:
 - before committing government funds to clear STT sites, strictly enforce the conditions of the STTs, especially those which require the tenants to clear the sites upon the termination of the STTs (para. 2.14(a));
 - state clearly in the Lands Administration Office Instruction the specific justifications under which an STT tenant may be exempted from clearing the site upon termination of the tenancy (para. 2.14(c));
 - (iii) if legal advice confirms that the lessees and tenants breached the relevant conditions of the leases and the STT agreements, take prompt action to recover the decontamination cost from them (para. 2.28(a)); and
 - (iv) stipulate in the lease conditions that the Government has the right to carry out site investigations prior to the resumption or surrender of sites to the Government (para. 3.26(a));
- (b) the Director of Civil Engineering should ensure that necessary site investigations are carried out for assessing contamination for leased sites which are to be acquired by the Government (para. 3.25(a));

Procedures for surrender of sites and the lease conditions

- (c) the Director of Lands should, if a lessee proposes that the Government should accept the surrender of a leased site on an "as is" basis, or if the lessee does not wish to be held liable for site clearance, critically evaluate the risks and financial implications especially if there are indications of contamination, and seek approval from the relevant policy bureaux before accepting the lessee's proposal (para. 4.29(c)); and
- (d) the Director of Lands should incorporate clauses into Deeds of Surrender to ensure that ex-lessees indemnify the Government against the risk of contamination of sites (para. 4.29(b)).

Response from the Administration

8. The Administration generally agrees with the audit recommendations.

— v —

PART 1: INTRODUCTION

1.1 The Government may acquire land for public purposes by the following methods:

- (a) **Resumption of leased land.** The Government can order the resumption of leased land after the Executive Council (ExCo) has decided that the proposed resumption is for public purposes. The Lands Resumption Ordinance (Cap. 124 LRO) empowers the Government to compulsorily acquire leased land required for a public purpose (Note 1). When resuming land, the Government makes an offer of compensation to the landowners. If the offer is not accepted, the landowners may make a claim to the Lands Department (Lands D). If no agreement is reached, the claim may be referred to the Lands Tribunal. Land resumption is usually a very time-consuming process;
- (b) **Surrender of leased land.** The Lands D may also acquire leased land by negotiating with the landowners for a voluntary surrender of the land, instead of resuming the land under the LRO. During such negotiations, the Government allows the landowners a reasonable period of time to consider its offer, to arrange surrender agreements and to make alternative business arrangements. The Government pays compensation to the landowners who voluntarily surrender the land on the same basis as that paid for the resumption of land. If there is a time limit for the acquisition of land, negotiations for the voluntary surrender of land are often carried out in parallel with the resumption proceedings; and
- (c) **Termination of short term tenancy (STT).** For land let out under an STT, the Government may terminate the tenancy to acquire the land for public purposes. The Government normally does not need to pay any compensation to the tenant if the STT is terminated in accordance with the terms of the STT.

Note 1: Besides the LRO, the Government may also resume land under the authority of, among others, (a) the Roads (Works, Use and Compensation) Ordinance (Cap. 370); (b) the Mass Transit Railway (Land Resumption and Related Provisions) Ordinance (Cap. 276); and (c) the Land Acquisition (Possessory Title) Ordinance (Cap. 130).

Acquisition of shipyard sites

1.2 In 1997, the Government resumed 6 leased shipyard sites and terminated 15 STTs of shipyard sites at North Tsing Yi, Kwai Tsing (hereinafter referred to as the NTY shipyard site) to provide land for the construction of district open space and government/institution/community (GIC) facilities. In 2001, the Government also negotiated for the voluntary surrender of a leased shipyard site at Penny's Bay, Lantau (hereinafter referred to as the PB shipyard site) for the development of a theme park project. In acquiring these shipyard sites, the Government incurred the costs shown in Table 1.

Table 1

Acquisition, clearance and decontamination costs of the North Tsing Yi and Penny's Bay shipyard sites

		Compensation including ex-gratia	Decommis	ssioning cost	
		payment	Clearance	Decontamination	Total
		\$ million	\$ million	\$ million	\$ million
(a)	6 leased shipyards at the NTY shipyard site	131	1.2	64.5 (Note 1)	202.2
(b)	15 shipyards held under STTs at the NTY shipyard site	Nil	5.5		
(c)	PB shipyard site	1,506	10.0 (Note 2)	440.0 (Note 2)	1,956.0
		1,637	16.7	504.5	2,158.2

Note 1: This is the total estimated decontamination cost of the 21 shipyards at the NTY shipyard site. The cost has not yet been finalised.

Note 2: This is the estimated amount only. The final cost is not yet available.

As shown in Table 1, the Government had to spend \$1,637 million to acquire the sites. After acquisition, it also incurred significant costs of clearance and decontamination of the sites. (See PARTs 2 to 4 for details.)

Audit review

1.3 Audit has recently carried out a review on the acquisition and clearance of the shipyard sites. The review focused on the following areas:

- (a) the resumption and clearance of the NTY shipyard site (see PART 2);
- (b) the assessment of contamination at the PB shipyard site (see PART 3); and
- (c) the surrender of the PB shipyard site (see PART 4).

PART 2: RESUMPTION AND CLEARANCE OF THE NORTH TSING YI SHIPYARD SITE

2.1 This PART examines the resumption and clearance of the NTY shipyard site. The audit has revealed that there is scope for improvement in land resumption procedures and in the termination of STTs.

2.2 **Acquisition of land.** The approved Tsing Yi Outline Zoning Plan (OZP – Note 2) included an area of 7 hectares required for the construction of the district open space and GIC facilities. About 5.3 hectares of this land was occupied by 21 shipyards. Of these 21 shipyards:

- (a) 6 were on leases expiring in June 2047; and
- (b) 15 were on government land held under STTs, which the Government was empowered to terminate at any time with advance notice.

To provide land for the North Tsing Yi district open space and GIC facilities project (hereinafter referred to as the North Tsing Yi project), the Government had to resume the 6 shipyard sites and terminate the 15 STTs. The Government also relocated the 21 shipyards to a new site 200 metres to the west of the original location. Photograph 1 shows the location of the North Tsing Yi project.

Note 2: The Town Planning Board prepares and publishes OZPs which are statutory plans under the provisions of the Town Planning Ordinance (Cap. 131). The OZPs show the proposed land uses and major road systems of individual planning scheme areas. The OZPs cover areas which are zoned for uses such as residential, commercial, industrial, and government, institution and community uses.

— 4 —

Photograph 1

The site of the North Tsing Yi district open space and GIC facilities project



Source: The Civil Engineering Department's records of April 2003. The top of this photograph is direction south-west.

2.3 **Resumption of the leased shipyard sites.** In January 1997, ExCo ordered the resumption of the 6 leased shipyard sites for public purposes under the LRO. In late January 1997, a gazette notice was affixed at the shipyard sites, stating that the sites would be resumed and revert to the Government on the expiry of three months from the date of the notice. On 26 April 1997, the sites reverted to the Government at the resumption cost of \$131 million.

2.4 **Termination of the STTs.** For the shipyards under STTs, the operators were not eligible for land compensation upon termination of the tenancies. During the period from April to July 1997, the Government terminated the 15 STTs. The Government allowed the 15 STT tenants a holding-over period of 12 months for the re-establishment of their business. By June 2000, the Government had cleared the 15 shipyards.

Responsibility for clearance of the shipyard sites

2.5 **Leased sites.** In May 1998, when considering the responsibility for funding the clearance of the shipyard sites, the Financial Services and the Treasury Bureau (FSTB) queried whether, under the conditions of the 6 leases, the shipyard operators rather than the Government should undertake the site clearance. In this regard, the Civil Engineering Department (CED), which was responsible for the North Tsing Yi project, asked the Lands D whether there was any condition in the leases requiring the shipyard operators to undertake site clearance *before* the resumption of the land. The Lands D replied that such a condition did not exist. Upon resumption, the structures became government properties and the Government should undertake the site clearance. Therefore, the Government had to bear the cost of the site clearance.

2.6 **STT sites.** In May 1998, the Lands D also informed the CED that there were conditions in the 15 STTs (already executed) stipulating that *the tenants*, on termination of their tenancies, should demolish and remove *at their own expense* any building or structure. The conditions set out that:

(a) the tenant should maintain and keep to the satisfaction of the Lands D the site in good and tenantable repair and condition and hand over the same on termination of the STT;

(b) the tenant should demolish and remove at the tenant's expense, if so required by the Lands D, any building or structure without any compensation to the tenant; and

(c) the tenant should indemnify and keep indemnified the Lands D against all actions, suits, costs, claims, demands and expenses arising out of or in connection with the occupation and the use of the site. If the tenant failed to demolish and remove any structures, the Lands D could carry out such

demolition at the cost of the tenant. The tenant would have to pay to the Lands D on demand a sum equal to the demolition cost. (Audit notes that the current standard STT Master Documents also contain similar requirements —see Note 3).

15 STT tenants not required to clear the sites

2.7 In May 1998, the Lands D said it might be difficult to enforce the STT conditions effectively. The Lands D considered that:

- (a) the tenants affected might be reluctant to clear the site;
- (b) although the conditions stated that the tenants should demolish and remove the affected structures upon the termination of the STTs, it was *both politically and practically difficult*, if not impossible, to enforce the conditions effectively. It was very likely that the tenants would resist the clearance; and
- (c) if the Lands D insisted on asking the tenants to clear the affected structures and the tenants refused to do so, the Lands D might have to institute legal action. Eventually, the Government might have to face a lot of criticism and the North Tsing Yi project might be delayed.

2.8 In August 1998, the FSTB expressed reservations over why the 15 STT tenants had not been asked to clear the structures. In response, in September 1998, the Housing, Planning and Lands Bureau (HPLB) gave the following justifications to the FSTB:

- (a) some Legislative Council (LegCo) Members supported the shipyard operators and there was sympathy from the public. The Government's requirement for the shipyard operators to demolish the structures might be considered unreasonable and might arouse criticism; and
- (b) the structures contained asbestos and chemical wastes which should be handled by specialists during the demolition. There was a possibility that
- **Note 3:** The Master Documents are standard documents issued by the Technical Information Unit in close collaboration with the Legal Advisory and Conveyancing Office of the Lands D. The Lands Administration Office of the Lands D uses them to ensure uniformity among all the Lands D's offices. Such documents incorporate the latest policy relating to the form of land disposals. The Lands D's staff must always follow the latest Master Documents.

shipyard operators would handle the asbestos and chemical wastes in an improper manner to the detriment of the people in the neighbourhood and the surrounding environment. The improper handling might also affect any subsequent contamination study at the site.

2.9 **Despite the HPLB's explanation, the FSTB still considered that there needed to be a good reason for the Government not to exercise the discretion conferred on it by the STTs to require the tenants to restore the sites to the original condition, i.e. the condition** *before* **the commencement of the STTs. If eventually the Government had to clear the structures, the work would be maintenance in nature and should normally be funded by the maintenance vote of the Lands D instead of that of the CED.**

2.10 In reply, in January 1999, the HPLB explained to the FSTB that the demolition clause in the STTs was a standard clause. Normally, the Lands D would enforce this clause upon the termination of the STTs. However, the Lands D might not require the tenants to demolish the structures in the following circumstances:

- (a) if the STTs concerned were converted from Government Land Licences and the structures bore squatter survey numbers allocated by the Housing Department. When these structures were involved, the Housing Department was responsible for making them uninhabitable on the clearance dates. The demolition costs were normally charged to the relevant public works contracts;
- (b) if the new tenants had expressed a willingness to take up the structures; or
- (c) if there was justification for the Government being responsible for the demolition work, such as was the case in the clearance of the NTY shipyard site.

2.11 In June 2000, the Lands D cleared the NTY shipyard site at the cost of \$6.7 million. Audit estimated that the cost of clearing the 15 STT shipyard sites was about \$5.5 million (Note 4).

Note 4: *The estimation is as follows:*

the total area of the 6 leased and 15 STT sites was 53,200 square metres. The area of the 15 STT sites was 43,370 square metres. The total clearance cost was (43,370/53,200) (56.7 million = (55.5 million).

Audit observations

2.12 The STTs clearly stipulated that the tenants were responsible for the clearance of structures on termination of the tenancy agreements. Audit could not find evidence showing that the Lands D had attempted to take action to enforce the STT conditions (see para. 2.7). In the event, the Government had spent some \$5.5 million to clear the site for the 15 STTs.

2.13 In 1999, the HPLB listed the circumstances under which the Lands D might not require tenants to remove structures (see para. 2.10). However, Audit found that the Lands D has *not* yet stated in the Lands Administration Office Instruction the specific justifications under which an STT tenant may be exempted from clearing the site.

Audit recommendations

- 2.14 Audit has *recommended* that the Director of Lands should:
 - (a) before committing government funds to clear STT sites, strictly enforce the conditions of the STTs, especially those which require the tenants to clear the sites upon the termination of the STTs;
 - (b) seek the prior approval of the Secretary for Financial Services and the Treasury for any proposed waivers of, or variations to, the STT conditions, if such waivers or variations would have financial implications to the Government (e.g. bearing the cost of site clearance); and
 - (c) state clearly in the Lands Administration Office Instruction the specific justifications under which an STT tenant may be exempted from clearing the site upon termination of the tenancy.

Response from the Administration

2.15 **The Director of Lands generally agrees with the audit recommendations.** He has also said that:

(a) with regard to the audit recommendations in paragraph 2.14(a) and (b), he will review the matter bearing in mind the practical difficulties involved;

- (b) with regard to the audit recommendations in paragraph 2.14(c), the Lands Administration Office Instructions are not clear on the issue and he will be issuing appropriate instructions after consulting with the relevant bureaux; and
- (c) it is not uncommon *not* to strictly enforce all terms of tenancies when STTs are terminated to make way for government projects. This is because under such situation, the Government needs to ensure that the site is recovered in a timely manner. If the Lands D leaves the site clearance to the tenant, there will be uncertainty as to whether the tenant can vacate the site at the time specified. If the tenant fails to do so, the Government can only take legal action to recover the site. This will be a prolonged process and is likely to jeopardise the timetable of the public project.

Decontamination cost of the NTY shipyard site

2.16 In 1995, the CED completed an environmental impact assessment (EIA) study of the North Tsing Yi project. The EIA report of August 1995 stated that:

- (a) the study had included a preliminary survey of potential land contamination. A detailed survey of land contamination had *not* been undertaken due to lack of access to the site;
- (b) after relocation of the shipyards, the materials that were likely to remain on the site included general wastes (such as shipyard structures) and chemical wastes (such as residual paints, oils and solvents);
- (c) land contamination *might have an impact* on the marine environment, on construction workers, and on surrounding land users during site clearance, reclamation and construction works; and
- (d) some of the wastes and contaminants required special handling prior to site clearance, in-situ treatment and off-site disposal.

2.17 The EIA report recommended that a land contamination study (LCS) should be carried out to determine the extent of contamination, its implications on future land uses, and the decontamination measures needed.

Land Contamination Study of the NTY shipyard site

2.18 In March 1999, the CED appointed a consultant to undertake the LCS. In May 2001, the consultant for the North Tsing Yi project completed the final LCS report. The contaminants identified were mainly hydrocarbons and heavy metals (Note 5). Asbestos was also detected in a soil sample. According to an information paper on the North Tsing Yi project, in July 2001 the Public Works Subcommittee of the Finance Committee was informed that:

- (a) it was estimated that the contaminants were spread over most of the site and extended down to three metres deep in some areas;
- (b) about 75,000 cubic metres of soil were contaminated by hydrocarbons, of which one-third was also contaminated by heavy metals;
- (c) in the light of an earlier investigation which confirmed that contaminants in the groundwater were within internationally acceptable levels, the risk of contaminants leaching out into the sea was rather minimal; and
- (d) the LCS did not report any sign of dioxin (Note 6) contamination.

2.19 As an additional measure to safeguard the public, the consultant later conducted an assessment of dioxin contamination. In June 2002, he concluded that the maximum dioxin concentration did not exceed the clean-up target. Therefore, the NTY shipyard site was not considered to be contaminated with dioxins.

Lessees and tenants not held responsible for decontamination cost

2.20 In May 2001, on receipt of the LCS report, the Territory Development Department (TDD) informed the Lands D that the NTY shipyard site was heavily contaminated by hydrocarbons and heavy metals. Decontamination costing about \$60 million would be required. Compared with the project estimate of \$117 million for

- **Note 5:** The hydrocarbons included total petroleum hydrocarbons, polyaromatic hydrocarbons and traces of polychlorinated biphenyls. The heavy metals included lead, copper, zinc, chromium, nickel, tin and cadmium.
- **Note 6:** Dioxins are mainly by-products of industrial and thermal processes. Once dioxins have entered the environment or the human body, they are there to stay due to their ability to dissolve in fats and their rock-solid chemical stability. In the environment, dioxins accumulate in the food chain. Dioxins are toxic and one type has been classified as carcinogenic.

the North Tsing Yi project (Note 7), the decontamination cost was significantly out of proportion. The TDD, therefore, asked the Lands D to advise whether the STTs contained conditions requiring the shipyard operators to undertake decontamination at their own expense.

- 2.21 In reply, the Lands D said that:
 - (a) there was no condition in the STTs requiring the tenants to undertake decontamination upon termination of the STTs. Under Clause 2(h) of the STTs (Note 8), the tenants' obligations were just to demolish and remove the structures on the sites upon termination of the STTs; and
 - (b) no encumbrance was found being registered against the sites for any decontamination work required upon resumption of the land.

The Lands D did not comment on whether the lessees of the leased shipyard sites should be held responsible for the decontamination.

2.22 In May 2001, in response to a press enquiry, the Environmental Protection Department (EPD) informed the CED that:

- (a) under existing environmental legislation, there was *no* provision for enforcement action against land contamination;
- (b) there was no legislative provision for the Government to recover decontamination cost; and
- **Note 7:** In July 2001, the Finance Committee of LegCo approved the upgrading of the reclamation and site formation works for the North Tsing Yi project to Category A of the Public Works Programme in the sum of \$117 million in money-of-the-day prices. In May 2003, the latest estimated cost of the decontamination works was \$64.5 million.
- **Note 8:** Clause 2(h) of the STT stated that if so required by the Director of Lands on the termination of the agreement, the tenant should demolish and remove at his own expense all or any structures then standing on or forming part of the said premises without any compensation therefor being paid by the Landlord to the Tenant; in the event of the Tenant being so required and failing to demolish any structures, the Landlord might carry out such demolition at the cost of the Tenant who should pay to the Landlord on demand a sum equal to the cost thereof.

(c) there was also no provision in the leases for the Government to recover decontamination cost.

Lease and STT conditions prohibit contamination of sites

2.23 Audit noted that General Condition No. 9 of the lease conditions of the 6 NTY shipyard sites stated that:

"The purchaser shall not permit sewage or refuse water to flow from the lot on to any adjoining land or allow any decaying, noisome, noxious, excrementitious, or other refuse matter to be deposited on any portion of the lot and shall see that all such matter is removed daily from the premises in a proper manner."

2.24 In 5 out of the 15 STT shipyard sites, Audit also noted that the Special Conditions of the STT agreements required the tenants:

"Not to permit sewage or refuse water to flow from the said lot on to any adjoining land or allow any decaying, noisome, noxious, excrementitious, or other refuse matter to remain or be deposited on any portion of the said lot and to have all such matter removed from the said lot in a proper manner."

In view of these lease and STT conditions prohibiting contamination, the 6 lessees and the 5 STT tenants might have responsibility for removing contaminants from the site. However, up to September 2003, the Lands D had not attempted to hold the 6 lessees and the 5 STT tenants responsible.

Audit observations

2.25 In May 2003, Audit informed the Lands D of the above findings. Audit asked why no attempt had been made to recover the decontamination cost. In reply, the Lands D said that they were gathering information with a view to seeking advice from the Department of Justice.

2.26 In July 2003, the Lands D asked the Department of Justice for advice on the liability of the 6 lessees and the 15 STT tenants in view of the terms and conditions of their occupation and use of the shipyard sites, and whether they, or any of them, were liable for any breach relating to the contamination of the sites found. 2.27 The Department of Justice has considered the problems and is seeking the opinion of an outside leading counsel. Audit considers that, if the Department of Justice confirms that the lessees and tenants are liable for clearing up the contamination, the Lands D should take prompt action to recover the decontamination cost from them, having regard to the Polluter Pays Principle promulgated in 1989 (Note 9).

Audit recommendations

- 2.28 Audit has *recommended* that the Director of Lands should:
 - (a) if legal advice confirms that the lessees and tenants breached the relevant conditions of the leases and the STT agreements, take prompt action to recover the decontamination cost from them; and
 - (b) in consultation with the Director of Environmental Protection, take appropriate lease enforcement action against acts of contaminating a leased or STT site which are in contravention of the relevant conditions of the lease or the STT.

Response from the Administration

2.29 **The Director of Lands generally agrees with the audit recommendations.** He has also said that:

- (a) upon receiving advice from the Department of Justice, the Lands D will consider whether to take action to recover decontamination costs from the lessees and tenants of the NTY site; and
- (b) when the Lands D becomes aware of any contamination (e.g. on being advised by the EPD that contamination exists), and provided legal advice confirms lease conditions have been breached, the Lands D is willing to take lease enforcement action if the case merits priority action.
- **Note 9:** According to the second review of the 1989 "White Paper: Pollution in Hong Kong A time to act", the Polluter Pays Principle is that those who cause environmental damage should pay for the costs of that damage, without subsidy, and should seek to curtail such damage by internalising the costs of pollution.

PART 3: ASSESSMENT OF CONTAMINATION AT THE PENNY'S BAY SHIPYARD SITE

3.1 This PART examines the assessment of contamination at the PB shipyard site *before* it was surrendered to the Government. The audit has revealed that there is room for improvement in the assessment of the contamination at the site. At the outset, it is pertinent to state certain key facts:

- (a) the lease granted by the Government in 1970 to the lessee at Penny's Bay did *not* empower the Government to enter this (private) site to conduct site investigations;
- (b) on two occasions in the 1990s, complaints were made to the EPD about open burning of wastes at the shipyard site; and
- (c) the shipyard site was surrendered to the Government on 3 April 2001.

Background

3.2 The PB shipyard site is located on the north-eastern shores of Penny's Bay, Lantau, with an area of about 186,700 square metres. (See Figure 1.) The lease of the site was granted in 1970. The site had been used for the building, repair and maintenance of boats. The 1970 lease did *not* contain clauses empowering the Government to inspect the site to ascertain whether there was any breach of the lease conditions.

Figure 1



Location of the PB shipyard site

Source: CED's records

3.3 In November 1999, the Government announced that a theme park would be built at Penny's Bay. To support the development of the theme park, the Government had to provide reclaimed land, associated infrastructure and GIC facilities. Hence the Government needed to:

- (a) acquire the PB shipyard site; and
- (b) undertake the decommissioning of the shipyard, estimated to cost \$22 million at September 1999 prices (Note 10).

The Government informed the Public Works Subcommittee of the Finance Committee in November 1999 that it would carry out a detailed EIA study specifically for the theme park project to address environmental issues (see para. 3.4(2)).

EIA studies for the PB shipyard site

3.4 In April 1998, the Environmental Impact Assessment Ordinance (Cap. 499 – EIAO) came into force. The project development on the PB shipyard site was subject to the statutory requirements of the EIAO (Note 11). For the PB shipyard site, three EIA studies had been carried out:

- 1. **The Northshore Lantau Development EIA study.** In June 1998, the CED commissioned an engineering consultant (hereinafter referred to as Consultant A) to carry out an EIA study (Note 12) for the Northshore Lantau Development to assess the environmental impact of the proposed development on north Lantau. The key events were as follows:
- **Note 10:** In November 1999, the Finance Committee accepted in principle the financial implications estimated at \$13.6 billion at September 1999 prices, for site formation, construction and associated infrastructure and GIC work in connection with the development of the theme park. The Finance Committee was informed that \$22 million was estimated for the decommissioning of the PB shipyard site.
- **Note 11:** Projects that may have potential adverse impact on the environment are classified as designated projects under Schedules 2 and 3 of the EIAO. Project proponents must follow the statutory EIA process. Schedule 2 projects require environmental permits before commencement of the construction, operation or decommissioning of the projects. Schedule 3 projects, e.g. engineering feasibility studies of certain projects, cover projects requiring EIA reports only.
- **Note 12:** This was an integrated planning and engineering feasibility study of the proposed development of port and port-related facilities, business/industrial, residential, tourism/recreational and major GIC facilities in the Northshore Lantau area (including Penny's Bay). The Northshore Lantau Development project was a Schedule 3 project under the EIAO.

- (i) as the PB shipyard site was located within the feasibility study area, the EIA study also included an assessment of potential land contamination there. As the site was leased land, the CED could not enter the site to carry out an EIA site investigation without the consent of the lessee, but consent was not given despite repeated requests;
- (ii) though access to the PB shipyard site was not available, in February 2000, Consultant A conducted some preliminary sampling along a stream bed discharging from the south-eastern boundary of the PB shipyard site. Five soil samples were collected. The results indicated that there was a low concentration of total petroleum hydrocarbons and metals. There was also no sign of elevated levels of contamination in the marine sediment samples taken from outside the seaward boundary of the shipyard; and
- (iii) in view of the findings in (ii), the EIA report for the Northshore Lantau Development considered that contamination at the PB shipyard site was expected to be limited and "would not be an insurmountable problem to the development of the Northshore Lantau as a recreation/tourism area" (Note 13). In April 2000, the Director of Environmental Protection approved the EIA report.
- 2. **The theme park EIA study.** In November 1999, the CED commissioned Consultant A to carry out another EIA study for the theme park project. The study evaluated the impact of the project on the environment. Making reference to the EIA study for the Northshore Lantau Development, the theme park EIA report stated that there would be "no insurmountable conditions for the future use" of the site for the proposed development. In April 2000, the Director of Environmental Protection approved the theme park EIA report. This April 2000 EIA study did *not* cover the decommissioning of the PB shipyard site. A detailed EIA study for the decommissioning of the PB shipyard site would be carried out before the decommissioning of the shipyard.
- 3. **The decommissioning EIA study of the PB shipyard site.** In April 2000, the CED commissioned an engineering consultant (hereinafter referred to as Consultant B) to conduct an EIA study on the decommissioning of the shipyard site. The EIA report identified a number of substances including
- **Note 13:** The CED said that such conclusion was based on the results of the limited site investigation at the periphery of the PB shipyard site and on the understanding that a detailed EIA study for the decommissioning of the shipyard would be carried out before the decommissioning took place.

dioxins (Note 14) which would require specialised treatment to ensure their eradication from the site. The Government would need to treat the dioxin-contaminated soil in a thermal desorption plant to be installed at To Kau Wan in north Lantau. Based on the findings of the EIA report, Consultant B estimated that the decommissioning work would cost \$450 million (\$440 million for decontamination and \$10 million for clearance), of which \$352 million was related to the excavation, transportation and treatment of the dioxin-contaminated soil. In April 2002, the Director of Environmental Protection approved the EIA report and issued the environmental permit for the decommissioning work (see paras. 3.5 to 3.16 for details).

Discovery of contamination at the PB shipyard site

Consultants appointed to assess contamination

3.5 In April 2000, the CED appointed Consultant B to undertake the "Infrastructure for Penny's Bay Development – Engineering Design and Construction" consultancy study. Consultant B was also tasked to assess the contamination at the PB shipyard site.

3.6 According to the consultancy brief of this consultancy study and in connection with the decommissioning of the site, in April 2000, an independent environmental consultant (hereinafter referred to as Consultant C) was appointed to monitor:

- (a) the preparation of a remedial investigation work plan (Note 15); and
- (b) the implementation of the work plan and the remedial activities to ensure that they could be effectively and safely conducted in accordance with the relevant legal requirements.

According to the CED, the work of Consultant C was separated into 2 phases. Phase I was for the marine soil work and was started in April 2000. Phase II was for the shipyard site and was started in late December 2000. A written certification for

- **Note 14:** According to the CED, dioxins are mainly generated in trace quantities as the by-product of combustion and chemical processes, including the incineration of chlorinated organic substances and chlorinated wastes. The likely cause of dioxins in the PB shipyard site was the open burning of plastic materials on site.
- **Note 15:** The work plan prescribed the scope of field and laboratory testings to be undertaken to complete the site investigation. It included a field sampling plan and a quality assurance project plan, which specified the methods and protocols to be used for conducting field investigations and analysing samples.

satisfactory completion of the remedial activities was issued by Consultant C in August 2003.

3.7 According to the CED, Consultant B had initially proposed a full scale investigation. The proposal was *rejected* by the shipyard operator in July 2000, and after discussion with the Lands D and the CED, the shipyard operator indicated that he could accept the drilling of 13 boreholes on condition that these boreholes were *not* drilled within the workshops, working areas or in any areas which would have an adverse effect on shipyard operations. In August 2000, an inspection of the site with the lessee's representatives was carried out to agree on the location of the boreholes. Consultant B was requested to plan the site investigation.

3.8 In November 2000, the CED and the lessee signed an agreement allowing the CED to carry out the site investigation. The agreement included a drawing showing the location of 13 proposed boreholes.

Preliminary site investigation in late 2000 did not reveal widespread contamination

3.9 After the EPD had approved the EIA study brief for the decommissioning of the PB shipyard site, in November 2000, a preliminary site investigation commenced. In December 2000, the field work for the preliminary site investigation was substantially completed. The preliminary results indicated that, of the 13 boreholes drilled, only one showed traces of fuel contamination. It was considered that the contamination at the PB shipyard site "appeared localised and superficial". To complete the remedial investigation work plan in accordance with the EPD's guidance notes, a comprehensive survey of the site was still necessary. However, this could *not* take place *until after* the site had been surrendered to the Government.

3.10 **Estimated decontamination cost.** In January 2001, Consultant B estimated that \$100 million would be required for the decontamination of the site. This amount was substantially more than the \$22 million figure which the Finance Committee had been informed of in November 1999 (see Note 10 in para. 3.3). However, Consultant B said that the exact cost of the decontamination work could only be accurately assessed after the completion of the EIA study.

3.11 In February 2001, the CED reported to the Steering Committee for the implementation of the theme park project (hereinafter referred to as the Steering Committee — Note 16) that the preliminary site investigation revealed that there was

Note 16: In February 2000, a Steering Committee chaired by the Financial Secretary was set up to oversee the development of the theme park project. Members of the Steering Committee included representatives of relevant bureaux, the Commissioner for Tourism and the Director of Civil Engineering. only localised surface contamination (such as total petroleum hydrocarbon and heavy metals at some of the workshop buildings). There was no widespread contamination in the open area.

More contamination found in 2001

3.12 In early 2001, the lessee allowed Consultant C to carry out a preliminary site survey at the site. According to the Steering Committee paper, Consultant C found more contamination than expected. He recommended the collection of some disturbed samples of apparent waste or burn-pit materials for chemical analysis (Note 17). Consultant B was requested to conduct a detailed site survey to identify all the chemical wastes.

3.13 After the surrender of the PB shipyard site on 3 April 2001, the CED immediately commenced the detailed site investigation for the decommissioning of the site.

3.14 In July and August 2001, the CED informed the Steering Committee that the extent of contamination which had been found was *not considered very serious*. However, in September 2001, Consultant C considered that as the extent of contamination would be greater than that expected, Consultant B was recommended to carry out additional trench work.

Dioxins found at the PB shipyard site

3.15 In late September 2001, after the completion of the additional trench work, the EPD considered that the level of contamination was more serious than expected. In October 2001, Consultant B found that the soil was contaminated by dioxins (see Note 14 in para. 3.4(3)).

3.16 **Removal of dioxins at a cost of \$352 million.** In December 2001, the CED submitted the final decommissioning EIA study report of the PB shipyard site to the EPD. **The report stated that:**

Note 17: In addition, Consultant C observed that there was suspected chemical waste disposal practice by shipyard workers and alerted the EPD to such an incident. Upon receipt of the complaint, the EPD immediately took action to stop the illegal waste disposal. In July 2001, the EPD prosecuted the shipyard operator for the offence of failure to deliver the chemical waste (non-halogenated organic compounds) to a reception point, contrary to Section 8(1)(a) of the Waste Disposal (Chemical Waste) (General) Regulation (Cap. 354C). The shipyard operator was convicted on 10 July 2001 and fined \$30,000.

(a) about 87,000 cubic metres of soil were contaminated, of which some 30,000 cubic metres contained metals and dioxins;

- (b) the Government should excavate the contaminated soil and transport it by land to To Kau Wan at north-east Lantau for off-site treatment; and
- (c) the Government should set up a thermal desorption plant at To Kau Wan for the treatment of dioxins. After desorption, it should take the residue to the Chemical Waste Treatment Centre at Tsing Yi for incineration. According to the EPD, the proposed treatment method would meet international environmental standards.

According to a LegCo Panel on Economic Services Paper dated 20 March 2002, the estimated cost of decommissioning the shipyard was \$450 million, of which \$352 million was for the excavation, transportation and treatment of the dioxin-contaminated soil.

Previous complaints about open burning of wastes at the PB shipyard site

3.17 Audit noted that during the 1990s, complaints were made to the EPD about the open burning of wastes at the PB shipyard site (see Appendix A for details).

3.18 In December 2001, when the serious land contamination problem at the PB shipyard site was beginning to unfold, the EPD informed the Department of Justice that:

- (a) according to the EPD's record of inspection made to the PB shipyard site from 1990 until its closure in March 2001, there was no violation of the Air Pollution Control Ordinance (Cap. 311) and Water Pollution Control Ordinance (Cap. 358);
- (b) in March 2001, there was a case of contravention of the Waste Disposal (Chemical Waste) (General) Regulation (Cap. 354C). It discovered the case at the time of site clearance. The shipyard operator was prosecuted and convicted in July 2001 (see Note 17 in para. 3.12); and

(c) there was no evidence indicating that the lessee had committed similar offences in the past.

CED's explanations for not finding dioxins during the preliminary site investigation

3.19 When asked why dioxin contamination was not found during the preliminary site investigation which was substantially completed in December 2000, the CED explained to Audit in mid-2003 that:

- (a) prior to acquisition of the PB shipyard site, two site investigations had been carried out:
 - (i) **Site investigation in February 2000.** Five soil samples taken from along a stream bed at the south-eastern boundary of the shipyard site were analysed; and
 - (ii) **Preliminary site investigation in December 2000.** In June 2000, Consultant B had initially proposed a full scale investigation. The proposal was rejected by the shipyard operator in July 2000, but after discussion with the Lands D and the CED, the shipyard operator indicated that he could accept the drilling of 13 boreholes on condition that these boreholes were not within the workshops, working areas, or in any areas where they would have an adverse effect on shipyard operations.

These two site investigations carried out *prior to* the acquisition of the shipyard site did provide initial information for formulating the detailed site investigation to be carried out after the site was surrendered to the Government;

(b) the findings of the preliminary site investigation were significantly different from those of the detailed site investigation because the detailed site investigation was far more comprehensive, as shown in Table 2; and

Table 2

A comparison between the preliminary and the detailed site investigations

		Preliminary site investigation conducted in November and December 2000	Detailed site investigation conducted from April to November 2001
(i)	Number of boreholes drilled	13	440
(ii)	Trenching	None	3,100 metres
(iii)	Number of groundwater monitoring wells	None	56
(iv)	Geophysical survey	None	39,000 metres
(v)	Duration	2 months	7 months
(vi)	Standards	Dutch Guidelines	Dutch Guidelines and U.S. Standards (including dioxins)

Source: CED's records

(c) the preliminary site investigation was limited in scale. As dioxins were not commonly associated with shipyard activities, they were not targeted for testing. After the surrender of the site to the Government, the detailed site investigation revealed that there were burnt chlorinated wastes buried in the southern portion of the site. Such findings triggered the move to take soil samples for dioxin testing, having regard to the concerns of green groups and environmentalists. Some soil samples revealed elevated dioxin levels.

Audit observations

Difficulties encountered in undertaking site investigations

3.20 While the small-scale preliminary site investigations in February and December 2000 revealed no major contamination, the detailed site investigation completed in November 2001 (after the site had been surrendered to the Government) found that the extent of contamination at the site was more serious than had been

thought. Because of the need to treat and dispose of the dioxin-contaminated soil, the cost for decommissioning was estimated at \$450 million – see paragraph 3.4(3).

3.21 In response to Audit's enquiry about the adequacy of the preliminary site investigation, in May 2003, the CED said that it had *no* legal authority to enter private sites (including the PB shipyard site) to conduct site investigations. The CED normally obtained right of access through the Lands D under relevant provisions in land leases or tenancy agreements. Any improvement on access for site investigations should come about through provisions in the relevant leases, STT agreements or the relevant ordinances.

3.22 Audit considers that this case has highlighted the need for the Government to have the authority to carry out necessary site investigations before sites are resumed or surrendered. Audit accepts that according to the conditions of the lease of the PB shipyard site, the Government was *not* empowered to inspect the site to ascertain whether there was any breach of the lease conditions. However, Audit has noted that the *current* standard clause of leases does empower the Lands D to inspect sites to ascertain whether the lessee has breached or failed to observe the lease conditions (Note 18). However, this current standard clause provides for site inspections only. Audit considers that the Lands D should refine the wording of the standard clause so that the Government is empowered to enter a site to conduct site investigations during the period of the lease, i.e. before the resumption or surrender of the site to the Government.

Coordination in conducting contamination assessment needs improvement

3.23 Complaints were made to the EPD about the open burning of wastes at the PB shipyard site in 1995 and 1999 (see Appendix A for details). However, Audit has not seen evidence that the EPD alerted the CED of such complaints during the time that the three EIA studies mentioned in paragraph 3.4 were being carried out. In response to Audit's enquiry, the EPD has said that:

(a) it did not do so because the EPD did *not* consider the information relevant to the decommissioning EIA study; and

Note 18: The General Condition for the current master documents for lease conditions states that: "The Grantee shall throughout the tenancy, at all reasonable times, permit the Director or his authorised representatives, with or without having given notice, to enter in or upon the lot or any part thereof or any building or part of any building erected on the lot for the purpose of inspecting the same so as to ascertain that there is no breach of or failure to observe any of these Conditions."

(b) a forum to exchange information related to the EIA process does exist. According to Works Bureau Technical Circular No. 18/1998 (superseded by Technical Circular (Works) No. 13/2003 of September 2003), the Director of Environmental Protection may convene Environmental Study Management Group meetings to provide a forum for discussion on the requirements for the EIA study brief, the methodology and the initial findings of the EIA study, and liaison with the proponent department. Relevant authorities within the Government would be invited to attend.

3.24 Audit considers that, in carrying out the EIA studies, inter-departmental coordination could have been improved, i.e. information obtained by the EPD should have been shared with the other departments concerned. This would have alerted the works department undertaking the EIA study to any contamination on the leased land already known to the EPD.

Audit recommendations

- 3.25 Audit has *recommended* that the Director of Civil Engineering should:
 - (a) for leased sites which are to be acquired by the Government:
 - (i) ensure that necessary site investigations are carried out for assessing contamination and, if necessary, seek assistance from relevant government departments; and
 - (ii) give priority to carrying out investigations of industrial sites which are more prone to serious contamination;
 - (b) **improve the planning of site investigations (such as taking adequate soil** samples for thorough analysis) so as to ascertain the extent of contamination; and
 - (c) in consultation with the Director of Environmental Protection, *prior to* taking over leased sites:
 - (i) determine the extent of the site investigations, especially for those sites (e.g. shipyard sites) which are more prone to contamination; and

- (ii) inform other government departments, such as the Lands D, of the extent of contamination so that immediate action can be taken to protect the Government's interest before the sites are resumed.
- 3.26 Audit has *recommended* that the Director of Lands should:
 - (a) stipulate in the lease conditions that the Government has the right to carry out site investigations prior to the resumption or surrender of sites to the Government; and
 - (b) specify in the Lands D's Lands Administration Office Instructions that, prior to the resumption or surrender of a site to the Government, the Lands D officers responsible should:
 - (i) find out from other relevant departments, such as the EPD, whether users of the site/the lessee have breached any environmental protection legislation; and
 - (ii) share the information obtained with other relevant departments (e.g. the CED), which are responsible for carrying out EIA studies for the future use of the site.

3.27 Audit has *recommended* that the Secretary for the Environment, Transport and Works should notify all works departments of the recommendations in paragraph 3.25.

Response from the Administration

3.28 **The Director of Civil Engineering welcomes the audit recommendations in paragraph 3.25.** He has also said that:

(a) in the case of the PB shipyard site, the lease conditions did *not* provide for the Government to conduct site investigations. Notwithstanding this, the CED did seek the assistance of the Lands D and obtained access to the site to conduct the small-scale preliminary site investigation (which was substantially completed in December 2000). However, the precise nature and extent of contamination could only be fully revealed by a detailed site investigation when unhindered access was allowed;

- (b) the site investigations for the assessment of the contamination at the PB shipyard site as part of the relevant EIA studies had been carefully planned and carried out in phases as far as practicable in accordance with the EIAO requirements;
- (c) there were different levels of inter-departmental coordination and monitoring of the progress and the findings of the above site investigations and the EIA studies;
- (d) the findings of the above site investigations were included in the relevant draft EIA study reports and commented on by all relevant government departments before their finalisation. It is important to mention that the EIA studies came under close scrutiny by the relevant Environmental Study Management Groups. These Groups comprised members from all relevant departments including representatives of the relevant District Lands Office and the EPD (see para. 3.23(b)). They provided useful forums for detailed discussions on the requirements for the site investigations and the EIA studies, the methodologies and the findings of the studies including the nature and extent of the possible contamination at the shipyard site. The three relevant EIA studies were all carried out in accordance with established procedures and approved by the Director of Environmental Protection under the EIAO; and
- (e) the CED also convened and chaired regular inter-departmental coordination meetings to oversee the progress of, and discuss and resolve any issues relating to, the relevant EIA studies. The nature and possible extent of the contamination at the PB shipyard site was a subject of concerns in these inter-departmental meetings.

3.29 The **Director of Lands** accepts the audit recommendations as mentioned in paragraph 3.26.

3.30 **The Secretary for the Environment, Transport and Works welcomes the audit recommendation mentioned in paragraph 3.27.** She has also said that she will notify all works departments to take on board the recommendations as mentioned in paragraph 3.25 for general application in future Public Works Programme projects.

PART 4: SURRENDER OF THE PENNY'S BAY SHIPYARD SITE TO THE GOVERNMENT

4.1 This PART examines the procedures for the surrender of the PB shipyard site. The audit has revealed that there is scope for improvement in surrender procedures and the drafting of lease conditions.

Surrender of the site on an "as is" basis

4.2 On 3 April 2001, the lessee of the PB shipyard site executed the Deed of Surrender and received a compensation of \$1,506 million from the Government. On the same date, the lessee surrendered the PB shipyard site to the Government on an "as is" basis (Note 19). On 9 April 2001, the Lands D handed over the site to the CED.

4.3 As mentioned in PART 3, the Government later found that the PB shipyard site had been contaminated. Because of the huge cost of decontaminating the site, Audit carried out a review to ascertain whether there are lessons to be learnt regarding the processing of the surrender documents, and whether action could be taken to recover the decontamination costs from the lessee (see paras. 4.4 to 4.24).

4.4 **Acquisition process to be expedited.** To achieve the theme park target opening date in 2005, the Government had to expedite the acquisition of the PB shipyard site. In mid-2000, the Lands D negotiated with the lessee for a voluntary surrender of the site. This would expedite the process of the land acquisition.

4.5 **Lessee would not clear toxic waste.** In October 2000, at a meeting with the surveyors of the lessee, the Lands D said that it was the Government's intention that the lessee of the PB shipyard site should surrender the site with vacant possession and free of any legal encumbrances. The lessee's surveyors indicated that the lessee would give legal vacant possession of the site to the Government. However, they said that the lessee would not remove all structures and buildings on the site and would *not* clear any possible toxic waste caused by the operation of the shipyard. *The Lands D confirmed that the above arrangement was acceptable to the Government.*

4.6 Between December 2000 and February 2001, the Lands D and the lessee negotiated on the terms for the lessee to surrender the site to the Government. After the CED, Consultant B and the Lands D had conducted site inspections, in March 2001, the Lands D informed the lessee's solicitors that the Government had no objection to accepting the PB shipyard site on an "as is" basis.

Note 19: The "as is" basis means that the Government agrees to accept the surrender of the site in the state and condition as at the date of surrender (see para. 4.9).

4.7 In December 2000, the lessee's solicitors gave the Lands D a *draft* agreement which included a clause saying that the Government would accept the site on an "as is" basis. The Lands Administration Office of the Lands D, noting that the CED would carry out an EIA study of the site before applying for an environmental permit for the decontamination and clearance of the site, said that the Lands D had no objection to accepting the PB shipyard site on an "as is" basis.

4.8 In February 2001, the Lands D proposed that the lessee proceeded directly to execute a Deed of Surrender the terms of which would be more or less similar to the usual document adopted by the Government. The lessee raised no objection to the Lands D's proposal.

Deed of Surrender executed on an "as is" basis

4.9 In March 2001, the lessee's solicitors asked the Lands D to include an "as is" clause in the Deed of Surrender. The Lands Administration Office of the Lands D raised no objection. In mid March 2001, the following clause was incorporated into the Deed of Surrender:

"Without prejudice to any provisions in this deed, the Government agrees to accept the surrender of the Premises in the state and condition as at the date hereof."

4.10 On 17 March 2001, the Director of Lands attended a meeting of the Steering Committee (see Note 16 in para. 3.11). At the meeting, the Steering Committee was informed that Consultant C had found more contamination than expected.

4.11 On 3 April 2001, the lessee executed the Deed of Surrender and the site was surrendered to the Government on an "as is" basis (i.e. the Government accepted the surrender of the site in the state and condition as at that date). On 24 April 2002, the Director of Environmental Protection approved the EIA report and issued an environmental permit to the CED for the decommissioning work.

Indemnity clause included in Deed of Surrender of a Tsing Yi site

4.12 Audit noted that in another case of land surrender involving a special purpose site at Tsing Yi (hereinafter referred to as the Tsing Yi site), a clause had indeed been included in the Deed of Surrender to indemnify the Government from liabilities in connection with contamination found *after* the surrender of the site. In 2000, when the Lands D was processing the surrender of this site, the lessee proposed to surrender a portion of the site, with some underground structures left intact, to the Government. To protect the Government's interest, the Lands D included an indemnity clause in the Deed of Surrender whereby the lessee undertook to indemnify the Government from liabilities in connection with contaminants found *within 7 years* after

the date of the Deed of Surrender (Note 20). In June 2001, the lessee executed the Deed of Surrender. The salient points of the case are summarised in Appendix B.

4.13 In response to Audit's enquiry about this site, in October 2003 the Lands D said that:

- (a) this site was held on a special purposes lease which was due to expire at the end of June 1997. At that time, it was apparent that the lessee no longer required a substantial area of the site;
- (b) as part of a lease extension exercise, a lease modification had been agreed (prior to the lease extension) for the surrender of a substantial area of the site following demolition and reinstatement. This included the carrying out of the decontamination; and
- (c) the PB shipyard site case was different. The acquisition of the PB site was for public purposes and was made under "the threat of resumption". Since resumption would not have involved indemnities, it was not appropriate or practical to require indemnities for the surrender of the site.

Environmental protection clause in lease conditions

4.14 Apart from the inclusion of an indemnity clause into the Deed of Surrender (see para. 4.12), it would appear that the incorporation of an environmental protection clause into lease conditions, *ab initio*, would also help protect the public interest. Audit has also examined the events of including such a clause in lease conditions of other land grants. The audit findings are in paragraphs 4.15 to 4.24.

4.15 In 1986, the EPD prepared, for the Lands D's consideration, draft special conditions on environmental matters for inclusion in leases. In June 1988, after considering the EPD's proposal, the Lands D incorporated the following standard environmental protection clauses into leases:

(a) "except with the prior written consent of the Director of Environmental Protection, the Purchaser/Grantee shall not.....use or permit or suffer to be used any fuel or any method or process of manufacture or treatment that might in any circumstance result in the discharge or emission of any pollutant or any noxious, harmful or corrosive matter....."; and

Note 20: The indemnity would only apply if the level of any contaminants found exceeded the level set out in the Land Contamination Assessment Plan of the site.

(b) "the Purchaser/Grantee shall not permit.....or allow any waste matter which is not part of the final product from waste processing plants to be deposited anywhere within the lot and shall have all such matter removed from the lot.....".

From mid-1988, the Lands D had incorporated these clauses into the lease conditions in most of the *draft* leases. The Lands D also sent these draft leases to the EPD for comments before the grant documents were executed between the parties.

Environmental protection clauses not included in the lease conditions after November 1997

4.16 In September 1997, the EPD informed the Lands D that, except for cases that the EPD considered necessary, there was no need to send the draft leases to the EPD for comments. The EPD said that:

- (a) the EPD had progressively brought pollution control legislation into operation; and
- (b) the EIAO had become effective. The administrative EIA process had been put in place to resolve issues up front in the planning of projects.

4.17 In response, the Lands D requested the EPD to confirm as to whether the standard environmental protection clauses should continue to be incorporated into normal leases. In October 1997, the EPD confirmed to the Lands D that it would not oppose to retaining the clauses if the Lands D considered that the Government should have a "last resort" protection as a matter of land policy. The EPD said that, from a pollution control point of view, it should be able to rely on the relevant ordinances to deal with the problem. The EPD could not foresee under what circumstances the EPD would still have to rely on the clauses.

4.18 In November 1997, the Lands D ceased the practice of incorporating the clauses mentioned in paragraph 4.15 into the standard leases (Note 21). The Lands D issued a technical circular stating that:

Note 21: Upon being informed that the EPD no longer needed the standard environmental protection clauses in the lease conditions for addressing environmental concerns, the Lands D took the opportunity to simplify the lease conditions. The Lands D considered it preferable for such issues to be handled under legislation.

- (a) with the enactment of the EIAO and various pollution control ordinances, the EPD was able to exercise environmental control through legislation; and
- (b) the EPD envisaged that it would no longer need to rely on the lease conditions to address environmental concerns.

The need for environmental protection clauses reconsidered in 1998

4.19 In 1998, the Lands D reviewed the need for the environmental protection clauses. After consultations, in February 1998, the EPD requested the Lands D to reconsider incorporating the environmental protection clauses into leases so that the lessees should be held responsible for cleaning up the sites. The EPD considered that such clauses should be incorporated into the leases for certain types of land uses (such as oil depots, petrol filling stations, shipyards/boatyards and industrial plants).

4.20 Since March 1998, the Lands D and the EPD have been discussing the incorporation of the environmental protection clauses into some special land leases.

LegCo Member's concern over land contamination at industrial sites

4.21 In May 2002, a LegCo Member asked whether the Government had specific terms in the land grants of industrial sites to prohibit operators from contaminating the land. The Government replied that appropriate environmental protection clauses had been incorporated into the land leases of industrial sites. These clauses stated that the lessees should comply with the prevailing environmental laws and that the lessees would be responsible for decontamination of the sites upon expiry of the leases.

Environmental protection and indemnity clauses for special industries

4.22 In May 2002, the Lands Administration Office discussed with the Legal Advisory and Conveyancing Office of the Lands D about the detailed drafting of the environmental protection and indemnity clauses for industries which the EPD had identified as having the chance of causing contamination. The industries, among others, included oil depots, power stations and shipyards. The Lands D said that it would issue a technical circular in this regard. However, up to August 2003, such a circular had not been issued.

4.23 As from February 2003, the Lands D has incorporated the environmental protection and indemnity clauses into the standard lease conditions for *petrol filling station sites* (Note 22).

4.24 **Lands D's response to Audit's enquiry.** In response to Audit's enquiry, in May 2003 the Lands D said that:

Need for environmental protection and indemnity clauses

- (a) it was willing to incorporate the environmental protection clauses into the leases and the STT agreements for special industries. The Lands D was considering the wording of such clauses;
- (b) to indemnify the Government against the risk of contamination, for 5 petrol filling station sites tendered in late June 2003, the Lands D had incorporated environmental protection and indemnity clauses into the leases;
- (c) the environmental protection and indemnity clauses could become ineffective if the lessees went into voluntary liquidation or disappeared after the surrender of the site;
- (d) an alternative way of addressing the problem might be to introduce legislation requiring operators of *environmentally unfriendly* industries to certify that the sites were free from undue contamination, to submit reports to the EPD, and to implement clean-up measures for any contamination. Such legislation would have the effect of forcing lessees to adopt environmental protection and clean-up measures during the period of their occupancy; and

Note 22: The environmental protection and indemnity clauses state that the lessee shall take action to avoid soil and ground water contamination to the site. The lessee shall carry out at his own expense a soil and ground water contamination assessment to the satisfaction of the Director of Environmental Protection. The lessee shall at his own expense carry out decontamination work. If the lessee fails to carry out the decontamination work, the Government may carry out the work and the lessee shall pay to the Government the cost on a full indemnity basis.

Acceptance of the "as is" clause

(e) with regard to the acceptance of the "as is" clause in the Deed of Surrender of the PB shipyard site prior to the identification of contamination there, as far as the Lands D was aware, there had never been any question of the Government taking action against an ex-lessee of resumed property in respect of breaches of the lease. As far as the Lands Administration Office was concerned, once a site had reverted, the factual situation had been that breaches of the lease ceased to be an issue. The acceptance of the surrender of the site on an "as is" basis accorded with the position the Lands D had previously taken on resumption. What would have happened, had the Government *not* agreed to the "as is" clause being included, could only be the subject of speculation.

Audit observations

The Deed of Surrender of the PB shipyard site

4.25 Audit appreciates that, up to the date of surrender of the PB shipyard site, the Lands D might not be well-positioned to estimate the final cost of the cleaning up. Nevertheless, Audit considers that:

- (a) the potential risks and financial implications of accepting the "as is" clause, having regard to the fact that there had been findings of contamination before the surrender of the site (see para. 4.10), should have been critically evaluated by the Lands D and submitted to the relevant policy bureaux for consideration; and
- (b) the Lands D should not have accepted the "as is" surrender clause, without first having obtained explicit approvals from the relevant policy bureaux.

Indemnity clause in Deeds of Surrender

4.26 The Lands D's remarks in paragraph 4.24(e) are noted, insofar as the PB shipyard site is concerned. However, Audit considers that the overriding issue is whether an indemnity clause (see para. 4.12) should be included in all Deeds of Surrender to protect the public interest.

Environmental protection and indemnity clauses in lease documents

4.27 Since mid-June 2003, the Lands D has incorporated environmental protection and indemnity clauses into the leases of petrol filling station sites. Audit considers that it is desirable to incorporate similar environmental protection and indemnity clauses into the conditions of all leases, particularly those of industrial sites.

4.28 In spite of the fact that there was no environmental protection clause in the lease conditions of the PB shipyard site entered into in 1970, Audit noted that General Condition 7 (Note 23) of that lease stated that the lessee should not allow any noisome, noxious or other refuse matter to be deposited on any portion of the site, and that the lessee should remove all such matter from the site in a proper matter. Audit considers that the Lands D should assess whether the contaminants found in the PB shipyard site could fall within the meaning of noisome and noxious matter. It would be prudent to seek the Department of Justice's advice on whether the decontamination cost can be recovered from the lessee.

Audit recommendations

4.29 Audit has *recommended* that the Director of Lands should:

- (a) **expedite action to:**
 - (i) incorporate environmental protection and indemnity clauses into the standard lease conditions of all leases; and
 - (ii) promulgate a technical circular on the incorporation of the environmental protection and indemnity clauses into all leases so as to give guidance to the Lands D officers;

Note 23: General Condition 7 of the lease conditions of the PB shipyard site stated that "The grantee shall not permit sewage or refuse water to flow from the lot on to any adjoining land or allow any decaying, noisome, noxious, excrementitious, or other refuse matter to be deposited on any portion of the lot and shall see that all such matter is removed daily from the premises in a proper manner".

- (b) **incorporate clauses into Deeds of Surrender to ensure that ex-lessees indemnify the Government against the risk of contamination of sites;**
- (c) if a lessee proposes that the Government should accept the surrender of a leased site on an "as is" basis, or if he does not wish to be held liable for site clearance:
 - (i) critically evaluate the risks and financial implications before accepting the proposal, especially if there are indications of contamination; and
 - (ii) seek approval from the relevant policy bureaux *before* accepting the lessee's proposal;
- (d) in conjunction with the Director of Environmental Protection, take appropriate lease enforcement actions to stop and deter the contamination of sites; and
- (e) seek the Department of Justice's advice as regards whether the Government could recover the decontamination cost from the ex-lessee of the PB shipyard site or the shipyard operator.

Response from the Administration

4.30 The **Director of Lands** accepts the audit recommendations as mentioned in paragraph 4.29 and is taking action to incorporate appropriate clauses into new leases and to issue the technical circular.

Appendix A (paras. 3.17 and 3.23 refer)

Complaints about open burning of wastes at the PB shipyard site in 1995 and 1999

The 1995 complaint. In January 1995, the EPD received a complaint about the open burning of wastes at the PB shipyard site. During the site visits made in June and July 1995, the EPD found that a large quantity of wastes was dumped in an open area awaiting disposal by open burning. The EPD also found ashes and burnt remains. After issuing a warning letter to the shipyard operator, the EPD referred the case to the Lands D to investigate whether there was contravention of the lease conditions. In October 1995, the Lands D visited the site. It found no burning activities but some dumped wastes. According to the Lands D's records, no action was taken against the lessee.

The 1999 complaint. In February 1999, upon receipt of another complaint about the open burning of wastes, the EPD visited the site and found a large pile of burnt residue. The EPD issued a warning letter to the shipyard operator, as the open burning of wastes was in contravention of the Air Pollution Control Ordinance. In response, the shipyard operator agreed to stop the open burning of wastes. Audit has not seen evidence that the EPD reported the case to the Lands D.

Appendix B (para. 4.12 refers)

Surrender of a Tsing Yi site in which the Government would be indemnified if contamination was subsequently found

	Date	Salient points
(a)	October 1995	The lessee proposed to surrender a portion of the Tsing Yi site to the Government.
(b)	March 1997	The lessee proposed to clear only the above-ground structures, and leave the underground substructures intact.
(c)	April 1998	The EPD approved the EIA study for the clearance of the Tsing Yi site. The lessee would leave the underground substructures intact as there appeared to be no recognisable environmental risk in leaving them in place.
(d)	October 1998	The lessee submitted an undertaking to the Lands D that the Government would be indemnified against claims from adjacent land users. However, at that time the undertaking did not cover land contamination found after the surrender of the site.
(e)	November 1998	The Lands D agreed to accept the lessee's proposal in principle on condition that the lessee would carry out suitable treatment and backfilling of the underground structures at the lessee's own expense.
(f)	June 1999	The EPD expressed concern over the possibility of ground contamination. The EPD objected to accepting the site without the lessee indemnifying the Government for any contamination found after the surrender of the site.
(g)	April 2001	The Land Administration Meeting decided that the surrender should be subject to the inclusion, in the Deed of Surrender, of an indemnity against land contamination as required by the EPD.
(h)	May 2001	The EPD considered that there was only a remote possibility of unacceptable soil and groundwater contamination associated with the underground structures.
(i)	June 2001	The lessee executed the Deed of Surrender. The lessee undertook to indemnify the Government from liabilities in connection with contaminants found within 7 years after the date of the Deed of Surrender.

Appendix C

Chronology of key events

The NTY shipyard site

August 1995	The CED completed an EIA study for the North Tsing Yi project. The EIA report recommended that an LCS should be carried out.
January 1997	ExCo ordered the resumption of 6 leased shipyard sites for public purposes under the LRO.
April 1997	The 6 leased shipyard sites reverted to the Government.
May 1998	The FSTB queried why the shipyard operators were not responsible for the site clearance.
March 1999	The CED appointed a consultant to undertake the LCS of the NTY shipyard site in accordance with the recommendations of the North Tsing Yi project EIA study.
June 2000	The Lands D completed the site clearance of the NTY shipyard site at the cost of \$6.7 million.
May 2001	The LCS report indicated that the NTY shipyard site was heavily contaminated by hydrocarbons and heavy metals.

The PB shipyard site

June 1998	The CED commissioned Consultant A to carry out an EIA study for the Northshore Lantau Development.
November 1999	The CED also commissioned Consultant A to carry out an EIA study for the theme park project.
April 2000	The CED commissioned Consultant B to carry out an EIA study for the decommissioning of the PB shipyard site.
August 2000	The lessee allowed the CED to inspect the PB shipyard site.
December 2000	The preliminary site investigation at the PB shipyard site was substantially completed.
March 2001	The Steering Committee was informed that the level of contamination was more severe than expected. Chemical analysis of apparent waste or burn-pit materials was recommended.
April 2001	The lessee of the PB shipyard site surrendered the site to the Government.
September 2001	Additional trench work was carried out.
October 2001	Consultant B found that the soil was contaminated by dioxins.
December 2001	The decommissioning EIA report revealed that the estimated volume of contaminated soil was 87,000 cubic metres, of which about 30,000 cubic metres contained dioxins.

Appendix D

Acronyms and abbreviations

CED	Civil Engineering Department
EIA	Environmental Impact Assessment
EIAO	Environmental Impact Assessment Ordinance
EPD	Environmental Protection Department
ExCo	Executive Council
FSTB	Financial Services and the Treasury Bureau
GIC	Government/Institution/Community
HPLB	Housing, Planning and Lands Bureau
Lands D	Lands Department
LCS	Land Contamination Study
LegCo	Legislative Council
LRO	Lands Resumption Ordinance
North Tsing Yi project	North Tsing Yi district open space and GIC facilities project
NTY	North Tsing Yi
OZP	Outline Zoning Plan
РВ	Penny's Bay
STT	Short Term Tenancy
TDD	Territory Development Department