We have developed an ISO14001 system for environmental control of our construction activities. We secure contractors' commitment to our Environmental Policy and have a stringent control and monitoring system in place to ensure full compliance throughout the construction period. Furthermore, we do our utmost to adopt environmentally-friendly materials and tools.



Environmental
Control of
Construction
Activities
建築工程的
環係監控

我們制訂了一套ISO14001的系統,監控建築工程。我們首先要求承建商承諾遵守我們的環保政策,並採用嚴謹的監控機制,確保他們在工程期間遵守有關規定。此外,我們亦致力採用環保物料及工具。

# Securing Contractors' Commitment to Environmental Management

Contractors are alerted to our environmental requirements early on. At tender, short-listed contractors are required to acknowledge their willingness to comply with our Environmental Policy. Environmental concerns particular to the tendered project are discussed in detail at the tender briefings and then, during the selection process, we thoroughly review contractors' construction methodologies with respect to environmental impact.

Upon appointment, contractors for demolition, rehabilitation, foundation and superstructure works are required to prepare a project-specific environmental management plan with reference to best practices and guidelines recommended in our Environmental Management System. All our contractors are willing to support environmental protection by adopting environmentally-friendly construction methodology and materials.



Regular fire drill at construction site





Regular anti-mosquito control 定期進行防蚊患措施

# 承建商承諾環境管理

承建商必須清楚了解我們在環保方面的要求。在招標過程中,經甄選合資格的承建商須承諾願意遵從我們的環保政策。在招標簡介會上,我們會詳細討論有關工程的環保事項;而在遴選時,亦會詳細評估承建商採納的建築方法對環境的影響。

在正式委聘進行拆卸、復修、地基及上蓋工程後, 承建商必須擬備一套就有關項目而設的環境管理計 劃書,而該計劃書須參考我們的環境管理系統中的 良好守則和指引。此外,所有承建商亦願意採用環 保的建築方法和物料,以支持保護環境。

# **Stringent Control and Monitoring System**

During construction, project teams regularly review the environmental performance of our contractors on site. Periodic site inspections are carried out by resident site staff and our in-house supervision representatives to check compliance with the environmental management plan and legal requirements. Environmental matters are discussed and reviewed at regular site meetings, with any shortcoming being followed up with corrective action.

Moreover, we apply the 5-S management system in a bid to further our on-site quality control. Following the five principles of Structurise, Systematise, Sanitise, Standardise, and Self-discipline, our system has been certified by the Hong Kong 5-S Association. Not only does the management system enhance the working environment and operational efficiency of the sites, but it also contributes to better environmental control.

Upon the completion of every foundation, demolition or site formation contract, and before any subsequent contract is begun, all vacant sites are properly secured and then regularly checked for environmental soundness.



Asbestos abatement work 消減石棉工作





#### 嚴謹的監控系統

施工期間,項目隊伍會定期檢討承建商在工地的環保表現。我們的地盤監督及建築師/工程師的監督代表會定期巡查工地,確保承建商遵守有關的環境管理計劃和法例要求。我們亦會在定期的工地會議討論環保事宜,如發現有地方需要改善,會作出適當跟進。

同時,我們已取得「五常法」認證,並採用該管理系統,透過「常組織」、「常整頓」、「常清潔」、「常規範」和「常自律」五大原則,提高工地的品質監控。「五常法」除了能夠提高施工效率和改善工地的工作環境外,更有利環保監控的工作。

在完成每項地基、拆卸及土地平整工程後,我們會確保空置工地已妥善清理,並符合環保要求。



Environmental Control of Construction Activities 建築工程的環保監控

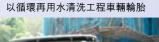
# Harnessing Environmentally-friendly Materials and Tools

Before demolition works begin, asbestos surveys are conducted by specialist engineers and their recommended abatement plans are strictly followed to prevent environmental contamination. During demolition and construction at urban sites, we use hydraulic crushers for concrete cutting to mitigate noise – by at least 15dB compared with conventional breakers - and minimise dust generation with water spray.

In place of the traditional timber hoarding and formwork, we provide re-usable metal hoardings along site boundaries and at strategic locations within common areas for the safety of the public and existing residents, and aluminium formwork for the construction of concrete structure. Use of metal formwork has saved over 4,400 trees from the development projects in the last five years.



Recycled water for wheel washing of construction vehicles

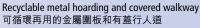






Aluminium formwork for construction 建築用的鋁質模板







# 採用環保物料及工具

在拆卸工程進行前,我們會委託環境保護署認可的 專業工程師進行石棉勘察,並採納他們建議的消減 石棉方案,以免對環境造成污染。在市區進行拆卸 和建築工程時,我們採用油壓鋼剪來剪斷鋼筋和混 凝土,使噪音較傳統清拆方法大幅減低15分貝;同 時,亦利用灑水系統減少清拆時產生的塵埃。

我們在地盤外圍設置可循環再用的金屬圍板取代傳 統的木製圍板,以保障附近居民及市民的安全;另 外,亦使用鋁質模板代替木模板作混凝土建築架。 在過去五年,我們在多個發展項目中利用金屬模 板,減少砍伐4,400棵樹木。



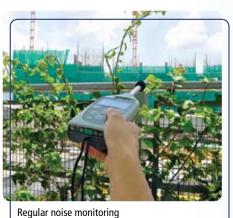
The pre-fabricated construction method and pre-bagged plastering system are adopted where appropriate to reduce on-site dust-generating activities. Wheel washing facilities for vehicles are provided at all construction sites and the water used is recycled after sedimentation. Use of recycled water for wheel washing at construction sites has saved over 5.5 million litres of water over the last five years. During rehabilitation works at some existing estates, we also install mechanical exhaust systems in common areas as a temporary measure to mitigate pollution arising from dusty activities.

# **Noise Control and Waste Disposal Management**

At every stage of construction, noise levels are measured daily by our main contractors and verified by site staff. No works are permitted during restricted hours without a valid construction noise permit issued by the Environmental Protection Department. When carrying out rehabilitation works at occupied estates, we adhere to a stringent schedule – working only from 9:00 a.m. to 6:00 p.m. during the work week to mitigate noise disturbance to existing tenants.











為了減少產生泥塵的工序,我們採用預製組件的建築方法和特製石膏系統。所有建築工地均設有清洗車輛輪胎的設施,清洗用水為循環再用水,經過沉澱處理後循環再用。使用循環再用水來清洗車輛輪胎,在過去五年節省了逾550萬公升用水。在復修部份屋邨時,我們亦在公眾地方安裝臨時抽氣系統,作為減低塵埃污染的措施。

定期監察噪音水平

### 減低噪音和廢物管理

在工程的每一個階段,我們的主承建商都會每日量度噪音水平,並由駐工地員工核實。除非事先獲環境保護署簽發「建築噪音許可證」,否則所有工程絕對不會在非指定時段內進行。而在現有屋邨進行復修工程時,我們設定嚴格的工作時段,即上午九時至下午六時,以盡量減低對居民造成噪音滋擾。

We oversee our contractors to ensure they check that the quality of construction waste water discharge complies with the waste water discharge licence.

On-site environmental drills are carried out on a regular basis to prepare ourselves to prevent contamination in the case of flood, fire or chemical spillage.

We encourage our main contractors to set targets for construction and demolition waste and to regularly submit disposal records to aid us in monitoring waste management. For demolition works, we require at least 50% of demolition waste to be recycled. In the case of the urban renewal project in Sham Shui Po, more than 4,000 tonnes of waste was recycled, representing some 70% of total waste. For construction works, over 150,000 tonnes of construction waste has been recycled over the last five years.

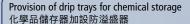
Any environmental complaint will be taken seriously. It will be thoroughly reviewed and followed through with appropriate corrective action, overseen by a project superintendent. We also require that our main contractors set up a customer service team to handle environmental complaints arising from rehabilitation works.

Treated waste water is tested prior to recycling

經處理的污水須通過測試才可循環再用









49

On-site sorting of demolition waste 工地內將拆卸廢物分類

在建築污水排放方面,我們監察排污水質,確保承建商的工作符合有關污水處理牌照的規定。

我們定期在工地進行環保演習,以防一旦發生水 災、火災或化學品洩漏事故時造成環境污染。

我們鼓勵主承建商為拆建廢料訂下指標,並定期提 交廢物處理記錄,以便我們監控其廢物管理。在拆 卸工程方面,我們要求回收再用最少五成的清拆 廢料。在深水埗的市區重建項目上,我們回收逾 4,000 公噸廢料再用,超逾總廢料量七成。至於建築工程方面,我們在過去五年回收再用的建築廢料達15萬公噸。

在處理投訴/意見上,我們對每一個個案都不會掉 以輕心。投訴個案由項目總管負責主理,經過詳細 研究後作出適當跟進。我們亦要求主承建商成立顧 客服務小組,處理由於復修工程所引致涉及環境事 宜的投訴。

