環保

報告

THE ENVIRONMENTAL REPORT

2006

香港消防處

Hong Kong Fire Services Department



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處長的話

本處在執行法定職責時,亦熱切保 護環境,以及支持香港的可持續發 展。

我們以這份報告書與你分享本處在 二零零六年所承諾的環保政策、措 施及計劃。

我衷心希望,這份報告書能夠為你 提供一些實用的資料。我亦希望你 踴躍提出意見,使本處能夠以更環 保的方式執行職責,從而協助香港 的可持續發展。請將意見寄往報告 第三十八頁所示地址或電郵至 hkfsdenq@hkfsd.gov.hk。

盧 振 雄 消 防 處 處 長

Director's Message

In the discharge of statutory duties, our Department is committed to supporting environmental protection and the sustainable development of Hong Kong.

In this Report we share with you our environmental policy commitments, initiatives and endeavours in 2006.

I earnestly hope that this Report will give you some useful information. I also encourage you to give your feedback on how we can discharge our duties in a more environmental friendly manner so as to make contributions to the sustainable development of Hong Kong. Please send your feedback to the address shown on page 38 of this Report or by e-mail to hkfsdenq@hkfsd.gov.hk.

(LO Chun-hung, Gregory)
Director of Fire Services



第1章 引言

Chapter 1 Introduction

The statutory duties of FSD are to protect life and property against fire and other calamities, provide emergency ambulance service and give advice on protection measures for community. As at 31.12.2006, there were 8.656 uniformed members and 596 civilian staff working in the Department. We managed 77 fire stations, 36 depots, ambulance 5 office-based workplaces, 4 fire appliance workshops, 2 training schools and a rescue training centre at West Kowloon which was commissioned in November 2006. carry out our duties, the Department operated a fleet of 856 fire appliances, ambulances and supporting vehicles plus 13 fire-fighting / rescue vessels.



西九龍救援訓練中心 The West Kowloon Rescue Training Centre

二零零六年,消防處處理了33,268 宗火警召喚、21,383 宗特別服務召喚,當中包括工業意外、氣體洩漏、山泥傾瀉及水浸;以及 575,666 宗救護召喚。對於有特別火警風險的樓宇及處所,本處發出了 2,488 份消除火警危險通知書及 5,589 份消防安全指示/改善消防安全指示。

消防處作為緊急服務的部門,不 單肩擔救火及拯救工作,並致力 在工作上維持環境保育,並經過 下列活動達至其效果:

- ◇ 減少事故中對環境的破壞:
- ◇ 發展及採用可減少環境傷害 的救火策略、滅火煤體及工 具;
- ◆ 舉行大型防止山火宣傳活動,帶出「防止山火」的訊息,從而達到 少山火的宗數,保護大自然的郊外;

In 2006, FSD responded to 33,268 fire calls, 21,383 special service calls which included industrial accidents, gas leakages, landslides and floods, as well as 575,666 ambulance calls. A total of 2,488 Fire Hazard Abatement Notices and 5,589 Fire Safety Directions/Fire Safety Improvement Directions were issued to owners/occupants of buildings and premises with special fire risks.

As an emergency service Department, FSD is not only responsible for fire-fighting & rescue, we are also committed to the environmental protection through the following activities:

- to reduce the impact of incidents on the environment;
- to develop and adopt more environmental friendly fire-fighting strategy, extinguishing medium and equipment;
- to launch hill fire prevention programme & publicity activities to disseminate hill fire prevention messages to the public for the purpose of reducing the number of hill fires, which in turn contributes to the conservation of our countryside;
- to handle incidents involving dangerous or chemical goods to minimize impacts of such hazardous materials on the environment;

- ◆ 重防火,提供專業意見及 實施規管政策,以期減少火 警及可能引致的污染,如空 氣及水源污染等。
- ★ to put emphasis on fire prevention, advisory and regulatory roles aiming at reducing the number of fires, which in turn reducing pollution to water, air, etc.

第2章 我們的承諾及環保政策

Chapter 2 Our Commitment and Environmental Policy

我們的承諾

我們致力保護環境。雖然面對資源限制,但我們為社會提供服務時,仍會在不影響核心服務的效率及成本效益的情況下,不斷改善我們在環境保護方面的表現。我們已制定紓緩計劃,減少在提供服務時可能會對環境造成的影響,計劃內容如下:

採取適當的滅火措施,例如:

在處理火警時使用不會破壞環境的滅火媒體:

避免在滅火時過量用水。

為緊急車輛召喚程序制定愛護環 境的指引,例如:

減低警報裝置的聲浪,例如消防車或救護車在緊急召喚出動時使用警號所產生的聲響;或

Our Commitment

Although limited by resources, we are committed to protecting the environment and, in this aspect, pursuing continual improvement in delivering our services to the community without undue hindrance the efficiency to cost-effectiveness of our core functions. We have established mitigating programmes to reduce the impacts on the environment, which may be caused during the delivery of our services. These include:

Adopting appropriate practices in fire fighting operations such as:

use environmental friendly extinguishing media to tackle fires;

avoid excessive use of water in fire suppression.

Establishing environmental care guidelines in the turn out of emergency vehicles such as:

Reduce noise generated from audio warning devices such as sirens of fire appliances & ambulances, or from our facilities like the PA systems and folding gates of fire stations and 減低消防局及救護站的廣播 系統及自動摺門所產生的聲 響。

ambulance depots;

節約能源及資源;例如:

Reducing the use of energy and resource such as:

透過減少 再用及循環來減少 能源及資源的使用。

minimize energy and resources consumption through reduction, reuse and recycling.

須符合有關的法例的要求; 例如:

Meeting the legal and regulatory obligations such as:

減少及監察在執行任務時或 由機械及裝備所產生的工業 廢料。

implement appropriate measures to handle wastes generated by operational activities, machineries or equipment.

減少消防車輛 船隻及救護車的氣體排放。

reduce emission from fire appliances, vessels & ambulances.

環保政策

Environmental Policy

在執行行動或提供服務時,我們 會採取對環境負責任的態度。為 此,我們致力: We would act responsibly to the environment in carrying out operations and delivering services. To achieve this end, we would endeavor to:-

遵守與本處有關的環保法 規; comply with all the legal requirements for environmental protection;

盡量減少我們在執行職務和 工作時對環境所造成的影響,並且防止污染及節省資源,包括氣體排放、產生噪音、排放污水,以及處置廢

minimize environmental impacts, prevent pollution and conserve resources arising from our operations and activities in regard to air and noise emission, effluent discharge

物;

監察及監管會對環境造成嚴重影響的工作及行動;糾正以 往損害環境的做法;

在本處的日常運作中採取物 盡其用及循環再用的原則;

提高本處員工的環保意識及 推行環保的能力;以及讓員 工、承辦商、供應商及市民了 解部門的環保政策及管理策 略;

支持公眾環保計劃及活動。

and the disposal of wastes;

monitor and control the significant environmental impacts associated with our activities and operations; correct past environmental abuses;

conduct our operation in a manner that will commit 'reducing, re-using and re-cycling' principles into our day-to-day operations;

promote staff's awareness of and competence in environmental protection; and to communicate the department's environmental policy and management strategy to staff, contractors, suppliers and general public;

support public environmental programmes and activities.

第3章 環境管理制度

Chapter 3 Environmental Management System

一九九五年,我們成立了環境審核委員會,由總部總區消防總長擔任主席,而各有關總區的區長/救護監督,以及行政科的行政主任則獲委任為委員。委員會的職權範圍如下:

糾正以往損害環境的做法,並提高本處人員的環保意識;

防止日後出現破壞環境的做法,並鼓勵屬員減少浪費,以 及循環再用資源;

進一步促進能源效益和 節約能源工作:

在本處執行及管理環保 工作,並且定期進行環境 審核;以及

協調本處環境管理制度的發展及推行。

同年,所有消防局及救護站 主管獲指派為所屬消防局及 In 1995, we set up the Environmental Auditing Committee (EAC), chaired by the Chief Fire Officer (Headquarters) with Divisional Officers/Superintendent/Executive Officer appointed from respective Commands and the Administrative Division as members. The EAC had been empowered to:

correct past environmental abuses and enhance staff's environmental awareness;

prevent future abuses of the environment and encourage members of the Department to reduce waste and to recycle resources;

further promote energy efficiency and conservation;

conduct and administer the environmental works and periodic environmental audits in the Department; and

co-ordinate the development and implementation of departmental environmental management systems.

In the same year, all fire station and ambulance depot commanders were 救護站的單位環境審核員,協助環境審核委員會發展及推行部門的環境審核及管理制度。

appointed as Unit Environmental Auditors of their fire stations/ambulance depots to assist the EAC in the development and implementation of the Department's environmental auditing management systems.

第4章 環境工作表現

Chapter 4 Environmental Performances

節約能源

消防及救護總區轄下的 77 間消防局及 36 間救護站,是行動人員為市民提供 24 小時服務的基地。部門已採取一系列措施,務求這些工作地方節約能源:

監管制度

每個總區的參事官須擔任節 約能源主任,負責監管所 轄範圍的處所的能源消耗情 況。每個行動總區的單位環 境審核員,亦須每月向所屬 總區總部提交能源消耗情況 報告,以便監察。

節約能源措施

為了節約能源及保護環境,本處所有單位,包括消防局、救護站、寫字樓及實理。 單位的冷氣系統運作 郎子 題為攝氏 25.5 度。我們 支持政府推出「輕裝上和減 更動,幫助節省能源和國 二氧化碳排放。處方鼓勵毋

Conservation of Energy

The 77 fire stations and 36 ambulance depots in the fire and ambulance Commands were the bases for the operational staff to deliver 24-hour services to the public. The Department had taken a series of initiatives to conserve energy consumption at these workplaces:

Monitoring System

The Staff Officer of each Command was appointed Energy Economy Officer to monitor the energy consumption on the premises under his purview. The Unit Environmental Auditor of each operational unit was required to submit monthly energy consumption report to the Command Headquarters for monitoring purposes.

Energy Saving Measures

To preserve energy and protect our environment, operating temperature of air conditioning systems of all units including fire stations, ambulance depots, offices and other supporting units was pre-fixed at 25.5°C. In order to save energy and reduce carbon dioxide emission, we supported the

須穿 制服的人員穿上適合 在較暖環境工作的得體便服,不用打領結。

Government's "Cool Biz" campaign. To cope with warmer working environment, staff who were not required to wear uniform were encouraged to dress in smart causal without the need of wearing a tie.

冷氣系統運作 鄎蛸 預設為攝氏 25.5 度

Pre-fixing air conditioning systems of all units at 25.5°C



部門在推行樓宇改善計劃時,均盡量以省能源的電器取代舊式電器。在零六/零七年度及零七/零八年度,34 間消防局/救護站的舊

Staff were regularly reminded to turn off any unnecessary electrical appliances, i.e. lights, air conditioners, computers, etc., before leaving their offices. In the Fire Services Headquarters Building, some elevators in the building were switched off during non-busy hours. We also promoted 'more exercise but less energy' by encouraging staff walking up and down one or two floors instead of using escalators. Besides, the canteen operator had been advised to reduce electricity consumption switching off unnecessary lighting during hours when patronage was low.

In implementing the building improvement programme, the Department had made every effort to replace conventional electrical appliances by energy efficient ones. In

式電磁變壓 T8 或 T12 光管,均會換上更有能源效益的電子變壓 T5 光管。此外,新建的消防處所已全部採用 T5 光管。

06/07 and 07/08, T8/T12 fluorescent tubes with conventional electromagnetic ballasts in 34 fire stations/ ambulance depots would be replaced by energy efficient T5 fluorescent tubes with electronics ballasts. Moreover, T5 fluorescent tubes were used in all newly-built FSD premises.



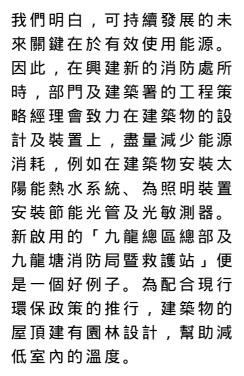
以幼身光管(T5 光管)取代粗身 光管(T10 或 T12 光管)

Replacing "fat" tubes (T12 or T10 fluorescent lamps) with "thin" tubes (T5 fluorescent lamps)

The efficiency of some existing air-cooled water chiller system on some FS premises had dropped due to wearing out and prolonged use for over 10 years. Improvement works were carried out in 2006 in 6 fire stations/ ambulance depots by replacing the chiller systems with Variable Refrigerant Volume (VRV) System which could provide the precise efficiency and independent control required. We would assess the energy saving performance of the system after the completion of installation works in April 2007.



氣冷式冷卻水系統 Existing air-cooled chilled water system





可變冷媒流量空調系統 Variable Refrigerant Volume (VRV) System

We understand that efficient use of energy is the key to developing a sustainable future. In putting up new FS premises, the Department and our Project Manager of ArchSD would endeavour to minimize the consumption of energy through design and adoption of energy saving installations such as solar water heating system, energy-saving fluorescent tubes and occupancy sensors The for lighting etc. newly commissioned "Kowloon Command Headquarters and Kowloon Tong Fire Station-cum-Ambulance Depot" is a good example. In line with the prevailing green policy, landscaped roof which could reduce room temperature had also been incorporated into the building.



九龍總區總部及九龍塘消防局暨救護站(左圖)及寶馬山消防局(右圖)之屋頂環保花園

消防處亦計劃與建築署合作,為部分消防局/救護的屋頂建造環保花園。由於屋頂受到遮光,有助改善隔熱,便可減少能源消耗,因而對市區的天氣轉變有良好的影響。

電力消耗

我的年至少6署能公二電準結開門標為七電前。在源司零力。果育工年的3%方六核防至據電在四年,前3%方六核防至據電在四年,前3%方六核防至據電在四次後方六核防至據電在四次機行,自零供署零点。機行,自零供署零点。與程項力年的標面,與程項力年的標系的減



Greenery garden on the roof-tops of Kowloon Command Headquarters and Kowloon Tong Fire Station-cum-Ambulance Depot (left) and Braemar Hill Fire Station (right)

In collaberation with ArchSD, provision of greenery garden on the roof-tops of some fire stations and ambulance depots has also been planned. The garden would bring positive effect to urban climatic change by reducing energy demand on air-conditioning through direct shading and better insulation of the roof.

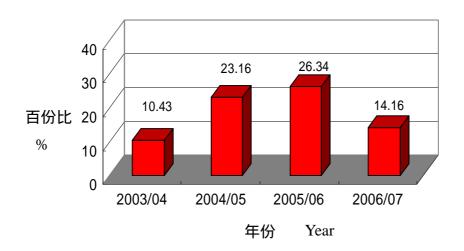
Electricity Consumption

We fully supported the Government's target to cut down the electricity consumption by 1.5%, 3%, 4.5% and 6% over the four years by 2006-07, using 2002-03 as the base year. connection, EMSD had conducted an energy consumption validation exercise 2006 in that the electricity consumption data of FS premises from the base year 2003 till 2006 were gathered from the utilities companies for comparison. According their findings, we had achieved a net decrease of 14.16% of electricity consumption in 少了 14.16%。下圖顯示過去 四年較基礎年的減少用電情 況。

2006 as compared with 2003. The diagram below shows the reduction of electricity consumption for the past 4 years as compared with the base year.

Reduction of electricity consumption as compared with the base year 2002-03

過去四年較2002-03基礎年的減少用電情



節約用紙

紙張是珍貴資源,因此我們 在使用紙張時,會盡量採取 物盡其用及循環再用的原 則。為配合電子政府的策 略,我們已使用一些電腦輔 助系統及資訊科技程式,從 而減少以紙張用作記錄及處 理事務,例如電子文書系統 及資訊科技設施普及計劃。 我們全體配合節約用紙,減 低紙張的耗用量,從二零零 二/零三年度的 36,670 令 減至二零零六/零七年度的 26,699 令 , 即 大 幅 減 少 了 27%,遠超政府所訂目標, 即在二零零二/零三年度至

Economy in the Use of Paper

Paper is a valuable resource. We would strive our best to keep on the principles of Avoid, Reduce and Reuse/Recycle in the use of paper. To keep in pace with the E-Government strategy, we had implemented some computer-aided system and IT Programme such as the Electronic Submission of Administrative Correspondence System Accessibility Programme to reduce paper records and transactions. Through our concerted efforts, we had reduced our paper consumption from 36,670 reams in FY2002/03 26,699 reams FY2006/07, representing a significant reduction of 27% which had greatly 二零零六/零七年度之間,每年減少 2.5%(即四年減少 10%)。我們節約用紙的詳細措施現臚列如下:

消六普化政電事式加認員用仍訊防月及的府子務處強識在資向科處完計環發式且務對、工訊他於資希蘭,理處促的資即未放門不說電數,理進文訊使必,共設健軍。 大設電電及內子以技些要部的年施子子以部形及的人專門資

部門於二零零六年透過資訊科技設施普及計劃,成功全面推行由庫務署發展的電子工資單應用程序。電子工資單應用

exceeded the Government's paper reduction target of 2.5% each year between FY2002/03 and FY2006/07 (i.e. 10% reduction over 4 years). Details of our measures to economize the use of paper are listed below:

to reduce office paper waste, FSD had adopted a "Double-sided" policy by taking advantage of duplex printers to automatically print a series of pages on both sides of a sheet. Besides, we had conducted regular review to scale down hardcopy distributions of Departmental Orders/Instructions, FS Manuals and other publications.

the FSD Accessibility Programme, aimed at promoting e-culture by improving the IT literacy through an e-enabling environment to accelerate the development of e-government and facilitate the growth of internal electronic businesses, was completed in June 2006. For those members who did not have the operational need for dedicated IT facilities, we also provided them with e-mail and shared IT facilities.

through the Programme, implementation of E-payslip application developed by the Treasury was fully launched in 2006. This E-payslip application not only

程序不但可以減少印製、運送及分發工資單所涉及的費用,而且亦對環境更加有利,包括減少使用信封,以及盡量節省印刷工資單所耗用的紙張。

reduced the cost in the production, transportation and distribution of payslip, but also contributed to environmental protection through saving paper.

commonly used forms had been converted into soft copy and could be downloaded from the server onto individual workstations SO printing of forms had no longer been The necessary. Electronic **Submission** of Administrative Correspondence System (ESAC) Programme had enhanced electronic information transfer so that data input from different stations could be consolidated, viewed and retrieved instantly via the intranet by users at various stations. It certainly helped save a lot of hard copies by changing the traditional paper submission to electronic submission.

Phase 1 of the Electronic Submission of Administrative Correspondence System (ESAC) Programme was rolled out in 2005. Under Phase 2 of the Programme, 5 more types of electronic administrative record were developed in 2006 which covered the Foam (Quarterly) Return, Fuel Fire (Monthly) Return, Safety Ambassador Return, Fire Safety Ambassador Award Scheme Return and Sick Leave Records Return. As for Phase 3, good progress had been 修證明書的巡查記錄及 消防安全大使資料庫)的 第三階段發展進度良好。 made, in that 3 more administrative records, namely Medical Ledger Return, Inspection to Certificate of Maintenance of Fire Service Installations and Equipment and Fire Safety Ambassador Databank had been developed.

燃料消耗

消防處工程部及機電工程署 汽車維修部人員,定期檢查 及維修所有消防車及救護 車,確保車輛機件性能良 好,避免消耗過量燃料。

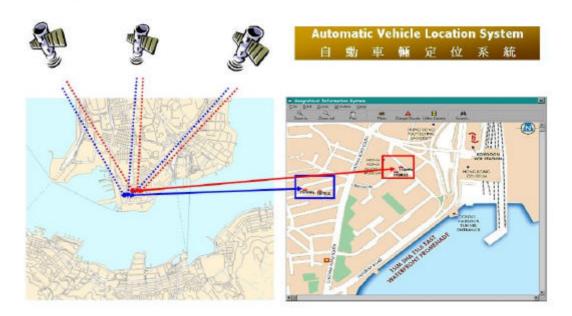
Consumption of Fuel

To ensure that our fire appliances and ambulances were maintained at the optimum mechanical efficiency in regard to fuel consumption, all fire appliances and ambulances were inspected and serviced periodically by staff of the Fire Services Workshops and the Electrical & Mechanical Services Department Workshops respectively.

The Third Generation Mobilizing System (TGMS), which was put in commission in 2006, had enabled us to achieve efficient management of our vehicles. Through the TGMS. locations of all fire were monitored and recorded, so that the nearest vehicles identified could be tasked to respond to emergency calls, which in turn helped reduce fuel consumption.



Third Generation Mobilization System 第 三 代 調 派 系 統



減少噪音影響

當消防或救護車被緊急召喚時,消防局/救護站內內,為廣播系統、自動摺門號站內內,號車的與語外方。 均會產生不同程度的噪音影響,消會產生不會影響,消除音號, 為了減低中幾項消減中 施:

消 防 局 及 救 護 站 的 緊 急 廣 播系 統

本處已向所有行動單位發出書面指示,在夜間把緊急廣播系統的音量調低,盡量減少對附近居民的噪音滋擾。

Reduction of Noise Impact

In responding to emergency calls, noise would inevitably be generated by the emergency broadcasting systems and the automatic folding-doors at fire stations/ambulance depots as well as the sirens of the fire appliances/ ambulances. We have implemented the following mitigating measures to reduce the noise levels:

Emergency Broadcasting System in Fire Stations and Ambulance Depots

written instructions had been issued to all operational units to tune down the volume of the emergency broadcasting systems during night time to minimize noise nuisance to nearby residents.

消防車及救護及車警號的 使用

警號可幫助消防車或救 護車快速抵達緊急事故 現場,而警號所發出的聲 響,更可以舒緩等待救援 及協助的人士的疑慮。不 過,警號所產生的噪音, 難免對公眾造成滋擾。為 了在這兩方面取得平 衡,本處在一九九九年為 所有消防車及救護車換 上可以調校音量的警號 系統。當車輛主管認為毋 須使用最大音量時,可予 以調低。本處亦向所有行 動人員發出書面指示,說 明如何妥善使用警號。在 二零零六年,消防處共收 到四宗投訴。部門已迅速 就有關投訴作出回應,並 展開詳細的調查,及提出 補救措施,以回應投訴人 的關注。

消防局 / 救護站的自動摺 門

為回應市民對操作摺門 所引致的噪音滋擾作出 的投訴,消防處已在自動 摺門安裝變速驅動裝 置,作為一種消減噪音的

Use of Siren by Fire Appliances and Ambulances

the purpose of using siren by fire appliances or ambulances on their way to the scene of emergency is to expedite their arrival. The sound of siren also gives reassurance to persons awaiting assistance However. rescue. it unavoidably cause nuisance to the public. With a view to striking a balance, the Department replaced the sirens on all fire appliances and ambulances by volume-adjustable ones in 1999 to enable officers-in-charge to tune down the sound level when full volume was Written instructions not required. on the proper use of siren had also been issued to all operational staff. In 2006, four complaints were received and dealt with expeditiously. Investigations had been conducted and recommendations on remedial measures had also been made to address the ofconcerns the complainants.

Automatic Folding Doors of Fire Stations and Ambulance Depots

to address the complaints of noise originated from the operation of folding doors, variable speed drive had been installed as a mitigation measure on automatic

救護車在倒車時發出的聲響

本深急響處車置警應節已成能作方處存症。已安」裝環倒於在倒,題等分外倒有每人,置境車二所車今場居護車關有每倒現裝浪音等零救警沒好在產題輛示倒可自。九裝」到訴醫生,救警車以動本月「的有指院聲本護裝示因調處完智工關

folding doors. By the end of 2006, a total of 70 fire stations and ambulance depots, topographically close to residential area, had been installed with variable speed drive on their automatic folding Moreover, Planning Group of this Department has also included such device in the design of all new fire stations and ambulance depots. Only one public complaint against the noise caused by the automatic folding doors has been received since of implementation the improvement programme.

Noise generated from Ambulances Whilst Reversing

in response to the complaints from residents regarding the signal generated from the warning device of whilst reversing ambulances midnight, the Department had sought to resolve the problem through installing an "Intelligent Reverse Device" Warning on each ambulance. The new device could automatically adjust its volume in line with the ambient noise level. The installation work of the device had been completed in September 2006 and no such complaint has been received since then.

改善空氣質素

控制車輛的廢氣排放

由於我們經常使用車輛提供緊急服務,我們會密切監控消防車排放廢氣的水平。我們已透過改裝現有車輛、妥善維修車輛和制定適當採購政策,盡量減低車輛廢氣所造成的環境影響。

汽車排氣設備

氣體回收系統

Improving the Air Quality

Vehicle Emission Control

As our emergency services involve frequent use of vehicles, we have closely monitored the emission level of all fire appliances and ambulances through modification of our existing appliances, proper vehicle servicing and procurement policy.

Vehicle Exhaust System

All new fire stations and ambulance depots, including Mongkok Ambulance Depot, Kwai Chung Ambulance Depot Kowloon and Tong Fire Station-cum-Ambulance Depot, are equipped with fume exhaust systems at appliance rooms. The system serves to remove toxic air fumes emitted from fire appliances engines of and ambulances and thus improved air quality in the workplace.

Vapour Recovery System

In order to comply with the requirements of the Air Pollution Control (Petrol Filling Stations) (Vapour Recovery) Regulation, which was enacted in 2005, the Department has entrusted EMSD to implement a phased programme for installing Phase II Vapour Recovery Systems in all petrol filling stations in our fire stations / ambulance depots. By the end of 2006, installation works

在二零零八年三月前裝妥有關系統,此日期亦是提升有關設施的法定期限。

had been completed in 23 fire stations/ambulance depots. It is anticipated that all petrol filling stations would be installed with such system before March 2008, which is a statutory deadline for such enhancement facilities.



安裝在消防局 / 救護站的汽油 加油站之汽體回收系統

環保燃料訓練設施

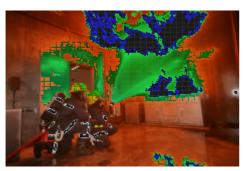
西九龍救援訓練中心於二零零六年年中啟用。中心內四種不同類型的先進實火模擬訓練室均使用清潔的燃料(石油氣)。消防人員在模擬實火環境接受訓練,從而提升整體的行動能力。



Vapour Recovery Systems installed at petrol filling station of fire station/ambulance depot

Green Fuel Training Facilities

The West Kowloon Rescue Training Centre was commissioned in mid-2006. Four different types of advanced fire rigs using clean fuel (LPG) had been provided in the Centre. Fire Services personnel would receive training in a simulated real-fire environment so as to enhance their overall operational capabilities.



在西九龍救援訓練中心進行的實 火模擬訓練均使用清潔的燃料 (石油氣)



Simulated real-fire training using clean fuel (LPG) at West Kowloon Rescue Training Centre

廢物管理

廢物分類及循環再用

本處鼓勵全體人員參與廢物 分類及循環再用計劃,並於 二零零六年收集了 17,990 公斤可循環再用的廢紙。

化學廢物

根據《廢物處置條例》(第 354章)的《廢物處置(化學 500) (一般)規例》,本學 500 (116) (個單位登記 500 (116) (個單位登 500 (116) (個單位 500 (116) (個單位 500 (116) (個單位 500 (116) (四單位 500 (116) (1

Management of Wastes

Waste Separation and Recycling

All members are encouraged to take part in the waste separation and recycling programme. In 2006, a total of 17,990kg of paper were collected for recycling.

Chemical Waste

A total of 116 units in the Department have been registered as Chemical Waste Producers under the Waste Disposal (Chemical Waste) (General) Regulation of the Waste Disposal Ordinance (Chapter 354). Arrangement has been made for registered chemical waste collecting contractors to collect the chemical waste produced in these units. In 2006, a total of 4,467 kg of solid chemical waste and 15,846 litres of liquid chemical waste were collected by

the contractors for recycling or disposal.

醫療廢物

救護人員在提供救護及輔助 醫療服務時所收集及製造的 醫療廢物,妥善放置在醫院 的醫療廢物箱。

Medical Waste

Medical waste collected and generated in the course of providing ambulance and paramedic services by the ambulance staff were properly disposed of in the infectious waste containers of hospitals.

第5章 環保採購政策

Chapter 5 Green Procurement Policy

為持續改善環境,消防處已 在投標規格要求方面採用環 保措施。在這套採購政策 下,截至二零零六年年底, 本處共有 265 輛符合歐盟 III 廢氣排放標準的車輛服役。 此外,五輛符合歐盟 IV 廢 氣排放標準的新消防車輛將 於二零零七年投入服務。本 處將會採購的 26 輛消防車 及 36 輛救護車亦均符合歐 盟IV或以上排放標準。 一方面,本處在二零零六年 以試驗性質使用兩輛環保汽 電車,目的是測試以汽電車 取代所有小型房車是否可 行。

在採購時,我們會盡量考慮環保因素,例如能源效益及循環再用問題等。此外,本處會盡量考慮依照政府物流服務署的環保產品清單,採購消耗品。

在二零零六年,承辦商收集了 3,480 個已使用的鐳射打印機碳粉盒,以及供應商收集了 323 枚電力耗盡的手提無線電通話機電池,以供循環再用。來年,我們會把這

For continual improvement, green measures procurement have been adopted in the tender specifications. Under such procurement policy, by the end of 2006, a total of 265 Fire Services vehicles were in compliance with Euro III emission standard. Five new appliances with Euro IV standard would be put into commission in 2007. Furthermore, 26 fire appliances and 36 ambulances in compliance with Euro IV or above emission standards would also be procured. On the other hand, 2 hybrid cars were put into trial use in 2006 with a view to examining the feasibility of using these vehicles to replace all small saloon cars.

In the procurement of products, we took into account environmental factors such as energy efficiency and recyclability as far as practicable. Moreover, consideration would also be given to procure consumable items from the Green Products List of the Government Logistics Department.

In 2006, 3,480 nos. of used toners of Laser Printers were collected by the contractors and 323 nos. of flatted batteries for handheld radio sets were collected by the supplier for recycling. In the coming year, we will extend this

種環保做法推廣至其他辦公 室設備及附屬設備,例如收 集傳真機的碳粉盒及傳呼機 的充電電池。

長壽 LED 警報燈已逐漸引入安裝在新救護車及消防車上,以進一步減少車上耗電及燈泡更換。截至二零零六年年底,消防處有 65 部車輛安裝了 LED 警報燈。

消防處逐漸以數碼相機取代傳統菲林相機後,已成功減少使用菲林、底片及相片的數量。在二零零六年,本處共使用了 300 卷菲林,相對於二零零五年使用的 500卷,減少了 40%。

green practice to other office equipment and accessories such as the toners of facsimile machines and rechargeable batteries for pagers.

Long-life LED warning lights have been introduced in new ambulances and fire appliances for reducing electricity consumption and bulbs replacement. By the end of 2006, 65 vehicles were equipped with LED warning lights.

With the increasing use of digital cameras to replace conventional film cameras, the Department has successfully reduced the number of films, negative and photo prints. In 2006, a total of 300 rolls of films were consumed, representing a decrease of 40% when compared with the total consumption of 500 rolls in 2005.

第6章 五常法— 給員工帶來更環保、更安全的工作 場地

Chapter 6 5-S Principle – Passage to a Greener & Safer Workplace

五常法是一種管理模式,通 過「常組織」「常整頓」「常 清潔」、「常規範」及「常自 律」五項原則,在組織內建 立及維持優良的文化,可以 結合優質管理、環境管理及 職業健康及安全管理的元 素。本處已於二零零四年十 一月在三個指定單位試行五 常法。所有參與試行計劃的 人員都十分支持這種管理模 式,而三個指定單位成功取 得香港五常法協會審核後, 本處決定把計劃推廣至另外 44 個指定單位,包括 27 間 消防局、消防訓練學校、消 防處救護總區訓練學校、12 個救護站及3個行政組別。

The '5-S' Principle i.e. to structurize, systematize, sanitize, standardize, and self-discipline, is a management tool to establish and maintain a quality culture within an organization, and to integrate the elements of quality management, environmental management, and occupational health and safety management. After the trial scheme of '5-S' Principle at 3 selected units in 2004 and subsequently the successful auditing of the units by the HK 5-S Association in 2005 together with positive response from all participants, the Department decided to further extend the scheme to another 44 units including 27 fire stations, the Fire Services Training School, Fire Services Ambulance Command **Training** School, ambulance depots and 3 Administrative Registries.



實施五常法後,辦公室及儲存倉 都并并有條。



After the implementation of "5-S" Management, office and stores are kept in neat and tidy manner

在二零零七年,我們安排分階把五常法推廣至另外 50個單位。

In 2007, we would further plan to extend the 5-S Principle by phases to another 50 units.



五常法證書頒獎典禮

Certificate Presentation Ceremony of 5-S Management Principle

To share our successful experience in the implementation of '5-S' Principle, the Civil Service Bureau arranged 2 benchmarking visits for 40 colleagues who were responsible for formulating, implementing or promoting occupational health and safety initiatives in their bureaux/departments to Ho Man Tin Ambulance Depot on 24 Oct 2006 & 9 November 2006. Besides, our members were invited to share the experience in the implementation of '5-S' Priniciple in a seminar organized by CSB on 26.11.2006.



推行五常法的經驗分享研討會 Experience Sharing Seminar on 5-S Management Technique

第7章 藍天行動及清新空氣約章

Chapter 7 Blue Sky Action and the Clean Air Charter

藍天行動

在等候時關掉汽車引擎;

本處鼓勵屬員以公共交通工具取代私家車上下班,尤其是在空氣質素欠佳的日子;

避免在空氣質素欠佳的日子使用以內燃機運行的設備進行訓練及演習;

利用電風扇以補充冷氣機的冷凍效果;

Blue Sky Action

The Department is in support of the 'Action Blue Sky' campaign launched by EPD. Command Environmental Auditors have been invited to review operations and daily activities conducted in respective Commands critically and put forward measures that are conducive to building up a Blue Sky in Hong Kong. Members of the Department have also been reminded to observe the following measures that would help reduce emission from our vehicles, vessels and combustion engine internal driven equipment:

switch off the vehicle engine whilst waiting;

members are encouraged to use public transport instead of private car for journey from home to office especially in days of poor air quality;

training and drills involving equipment with internal combustion engines should be avoided in days of poor air quality;

Use of electric fans to complement the cooling effect of air-conditioners; 重新編排客貨車的路線及工作時間表,避免多餘的行程;

盡量減少車輛或船隻的 測試時間或發動機慢車 的時間;及

車輛的輪胎要適當充氣

清新空氣約章

能源及排放管理小組負責安排及推行措施,減少排放及能源消耗,並且為其他人員提供訓練。他們會確定氣體的排放源頭,從而制訂減排目標,以及就達成減排目標 定出推行計劃。 routing and schedule of the Messenger Vans should be rearranged to avoid unnecessary journey;

the testing time/ engine idling time of vehicles/vessel should be minimized as far as practicable; and

the tires of vehicles should be properly inflated.

Clean Air Charter

To show Government's commitment to improve air quality, the Chief Executive signed the Clean Air Charter on behalf of the Government of the HKSAR on 27.11.2006. To implement the commitments under the Clean Air Charter, the Department will set up an Energy and Emission Management (EEM) Team with representatives from different Commands and the Workshop.

The EEM Team would be responsible for designing and implementing measures to reduce emission and minimize energy consumption, as well as providing training to our staff. An implementation programme for achieving the reduction targets would also be drawn up by the EEM Team.

第8章 加強員工環保意識的訓練

Chapter 8 Staff Awareness Training

為了在部門內培養環保管理,消防處已提名環境審核員參加簡介會及經驗分享工作坊,了解影響環境的立法

Members' willingness to participate in green initiatives is crucial to the success in building a green culture in the Department. With a view to fostering staff involvement, the Environmental Auditing Committee has compiled a Departmental Manual on Environmental Management to remind and assist members in this regard. We would ensure that all staff has the necessary skills, knowledge and understanding to support the stated objectives and targets.

Environmental Management Team of Commands/Units periodically have conducted internal auditing performance, and to make sure the targets are kept on track. The Environmental Auditing Committee would advise corrective and preventive actions if any non-conformance practice has been identified. From time to time, the Environmental Auditing Committee will issue green tips and best practices in housekeeping through e-mails to remind members to pay particular attention and continuous effort towards a greener workplace.

To foster the culture of environmental protection management in the Department, Environmental Auditors have been nominated to attend briefings

工作,以及參加由環境保護 署及機電工程署籌辦的政府 課程。

and experience sharing workshops on the relevant legislative initiatives and government programmes organized by EPD and EMSD.

第9章 目標及措施

Chapter 9 Targets and Initiatives

本處 2006 年的環保管理工作,有良好的進展,大部分目標均已達到。為保持環保管理的動力,本處已制定2007 年的工作目標,詳述如下:

成立一個環保坊

節約用電

不少政府部門的辦公大樓每年用電量超過 500,000 千瓦特,消防處總部大廈亦是其中之一。本處已採取很多節約能源措施,盡力減少大廈的耗電量,並訂下目標,計劃在來年減少用電 0.5%。

We had made satisfactory progress in meeting the environmental management targets in 2006. To keep up the momentum in this aspect, we have set for ourselves the following targets and initiatives for 2007 as detailed below:

Set up a Green Corner

We shall continue to encourage the adoption of good environmental We would set up a green practices. corner in our Intranet. Our Environmental Report, Environmental Manual. Management Green messages/tips and other useful information on environmental related issues would be uploaded for general information. Besides, members would also be provided with an e-channel to offer their suggestion on environmental protection in all areas of our work.

Saving of Electricity

The Fire Services Headquarters Building is one of the major government offices buildings with annual electricity consumption exceeding 500,000kwh. Though many energy saving measures have been taken to reduce the electricity consumption in the building, we set the target to reduce 0.5% of electricity

consumption in the coming year.

節約用紙

與伙伴合作

Saving of Paper

The Fire Safety (Buildings) Ordinance (Cap 572) was enacted on 1 July 2007 and subsequently a lot of paper-based fire safety directions might need to be issued to the owners and occupiers of some 9,000 old composite buildings requiring them to improve the fire safety standards of the buildings. Nonetheless, we shall endeavour to maintain the same level of paper consumption within the Department in 2007.

Work with Counterparts

We shall work closely with EMSD in implementing more energy saving measures to reduce electricity consumption such as the installation of solar energy panels at Chek Lap Kok Fire Station which will convert sunlight into alternate-current electricity and produce renewable energy for providing lighting to the station. Besides, we shall also work with EMSD to study the effectiveness and cost benefits installing the Air-con Saver in our stations/depots.

環境管理體系

改善室內空氣質素

良好的室內空氣質素,除了 可以保障在室內工作的人員 的健康,更可以讓他們在舒 適的環境工作,從而提升工 作效率。 為響應政府提倡 改善室內空氣質素的政策, 本處已研究不同的可行方 經過審慎考慮後,本 案。 處計劃在 2007 年採取措施 提升空氣質素,例如在市場 尋找合適的工具或儀器,以 減少室內空氣污染物;為本 處選定的處所清洗冷氣喉 管,改善機械通風及空調系 統;此外,本處亦會在日後 參與室內空氣質素認證計 劃,全力支持政府的改善室 內空氣質素政策。

Environmental Management Systems

With experience gained from the ISO 14001 accreditation of the Kowloon Bay Workshop environmental on management systems, the Department is preparing to implement the environmental management system in the other echelons including the Hong Kong Workshop, the Airport Fire Contingency, a fire station each in the 3 Fire Commands and an ambulance depot. It is envisaged that members' awareness on environmental protection would be greatly enhanced.

Indoor Air Quality Improvement

Good indoor air quality safeguards the health of the building occupants and contributes to their comfort which in turn improves productivity. To echo government policy on improving Indoor Air Quality Control, the Department has looked into various options to enhance the indoor quality of our office premises. In this respect, we have planned to implement a number of measures in 2007 such as exploring tools/ equipment available in the market which would reduce the level of indoor air pollutants, arranging cleansing of air ducts to improve the MVAC system and joining the IAQ Certification Scheme to support the IAQ Management Policy Programme.

第10章 索取資料的途徑

Chapter 10 Sources of More Information

如果需要更多有關資料,請 致電 2733 7820 查詢,或按 照下列地址致函消防處:

For more information, please give us a call at 2733 7820 or write to us at:

香港 九龍 尖沙咀東部 康莊道1道 消防處總部大廈 消防處 Fire Services Department
Fire Services Headquarters Building
1 Hong Chong Road
Tsim Sha Tsui East
Kowloon
Hong Kong

你亦可進入消防處網址瀏覽:

You may also visit our Web Site at:

http://www.hkfsd.gov.hk

歡迎你提出寶貴意見。你可填寫 夾附的回應表格,然後郵寄至上 述地址,亦可電郵至下列電郵地 址: http://www.hkfsd.gov.hk

Your valuable comments are most welcome. You may send them by mail using the enclosed feedback form to the above address or by email to:

hkfsdenq@hkfsd.gov.hk

hkfsdenq@hkfsd.gov.hk

我們重視你的意見

你的寶貴意見有助我們改善環保管理制度

(請填妥以下問卷,並傳真至消防處總部管理組,傳真號碼: 2739 5879)

1.	這份報告書能否提供所有你想知道的有關於香港消防事務的環保資料? □ 能 □ 否
2.	如果第1題所選的答案是"否",你希望我們在下一份環保報告書內加入什麼資料?
3.	這份報告書的整體篇幅及內容如何? □ 太短 □ 太長 □ 適中 □ 其他:
4.	其他意見:
5.	你屬於那個團體 ? □ 市民 □ 環保組織成員 □ 公務員 □ 其他:
*	如果希望我們回覆,請提供以下資料:
姓名	

Feedback Form

YOUR OPINION IS IMPORTANT TO US

We value your opinion as a way to improve our Environmental Management System

(Please complete the questionnaire and return it to Fire Services Headquarters, Management Group by Fax. No. 2739 5879)

1.	Can the report provide you with know pertaining to Fire Services Yes			n information that you want to				
2.	If your answer to question 1 is "No", what additional information will you want us to include in our next Environmental Report?							
3.	How was the overall length and o	ow was the overall length and content of the Report?						
	☐ Too short ☐ T	oo long	☐ About F	Right				
	Others:							
4.	Other comment:							
5.	What is your affiliation?							
	☐ Public Member		Environmental P	rotection Group Member				
	☐ Civil Servant		Others:					
*	If a response is required from us, ple	ease provide t	e following informat	ion:				
/N I a		(Contoot).						