

CHAPTER 8

Labour Department

Work safety at construction sites
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This audit review was carried out under a set of guidelines tabled in the Provisional Legislative Council by the Chairman of the Public Accounts Committee on 11 February 1998. The guidelines were agreed between the Public Accounts Committee and the Director of Audit and accepted by the Government of the Hong Kong Special Administrative Region.

Report No. 44 of the Director of Audit contains 8 Chapters which are available on our website at <http://www.aud.gov.hk/>

Audit Commission
26th floor, Immigration Tower
7 Gloucester Road
Wan Chai
Hong Kong

Tel : (852) 2829 4210
Fax : (852) 2824 2087
E-mail : enquiry@aud.gov.hk

WORK SAFETY AT CONSTRUCTION SITES

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PART 1: INTRODUCTION

1.1 This PART describes the background to the audit and outlines its objectives and scope.

Construction industry

1.2 The construction industry is more hazardous than most other industrial sectors. Any work accident results in an all-loss situation. For the injured employees and their families, it means human sufferings, loss of earning capacity or even loss of lives. To employers, work accidents incur huge costs, both quantifiable and intangible. These include compensation payments, lower staff morale, failure to meet project deadlines and negative impact on corporate image.

Relevant legislation

1.3 The following legislation provides the legal framework within which safety and health at work is regulated:

- (a) the Factories and Industrial Undertakings Ordinance (FIUO — Cap. 59) and its subsidiary regulations prescribe detailed safety and health standards for industrial undertakings, including construction sites; and
- (b) the Occupational Safety and Health Ordinance (OSHO — Cap. 509) and its subsidiary regulations extend the protection of safety and health to employees at work in the non-industrial sector.

The Labour Department

1.4 The Labour Department (LD) is responsible for administering the FIUO and the OSHO. Its aim is to ensure that risks to people's safety and health at work are minimised by legislation, education and promotion. In 2003-04, the LD incurred an expenditure of \$329 million on its "safety and health at work" programme, which included operations relating to construction sites (Note 1).

Note 1: *The LD had no separate expenditure figure for its operations relating to construction sites.*

Accidents in the construction industry

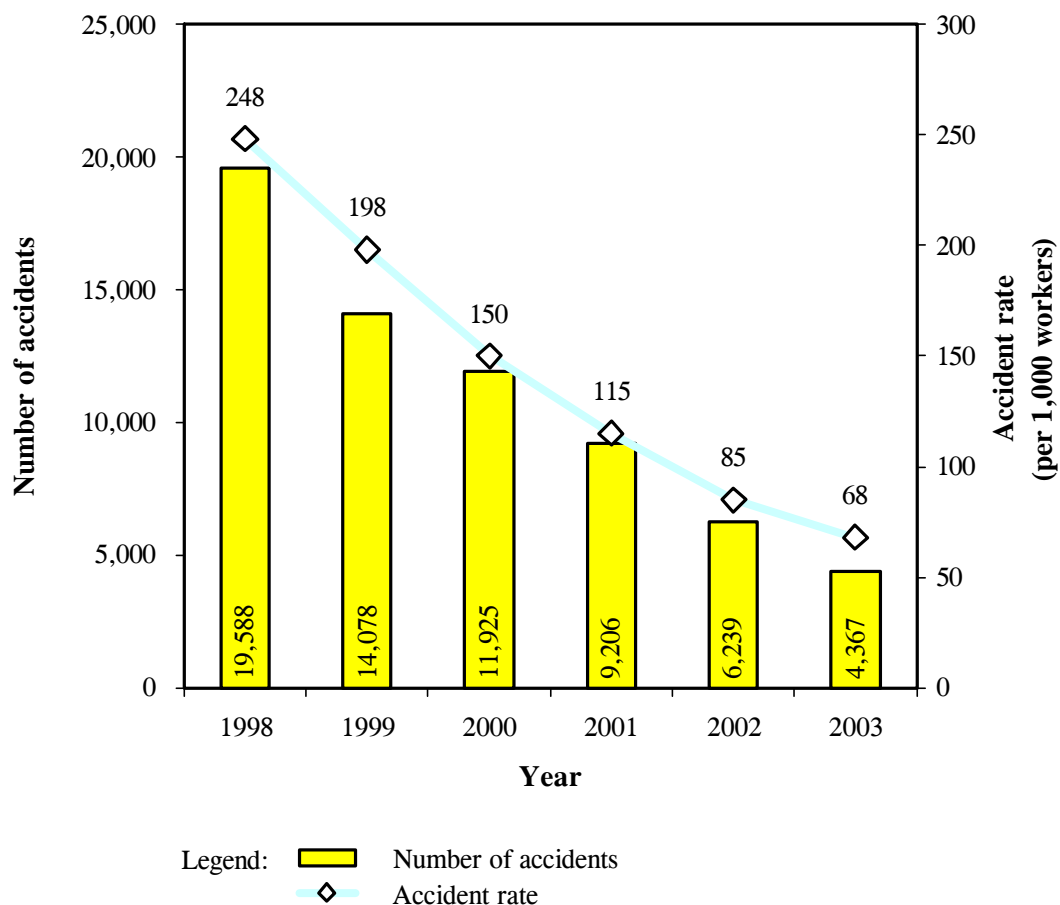
1.5 The LD regularly compiles and publishes industrial accident statistics. For this purpose, an accident is defined as death, or injury with incapacity for work of over three consecutive days, arising from industrial activities in an industrial undertaking.

1.6 The accident statistics indicate a substantial improvement since 1998 in construction site safety. This reflects the concerted efforts of all stakeholders, including the Government, contractors, employers, employees and related organisations (Note 2). Figure 1 shows the decreasing number of accidents during the period 1998 to 2003. Figure 2 shows the decline in fatalities for the same period.

Note 2: *An example is the Occupational Safety and Health Council. It promotes safety and health at work and facilitates exchanges between the Government, employers, employees, professionals and academics.*

Figure 1

Number of accidents (and accident rate per 1,000 workers)
in the construction industry from 1998 to 2003

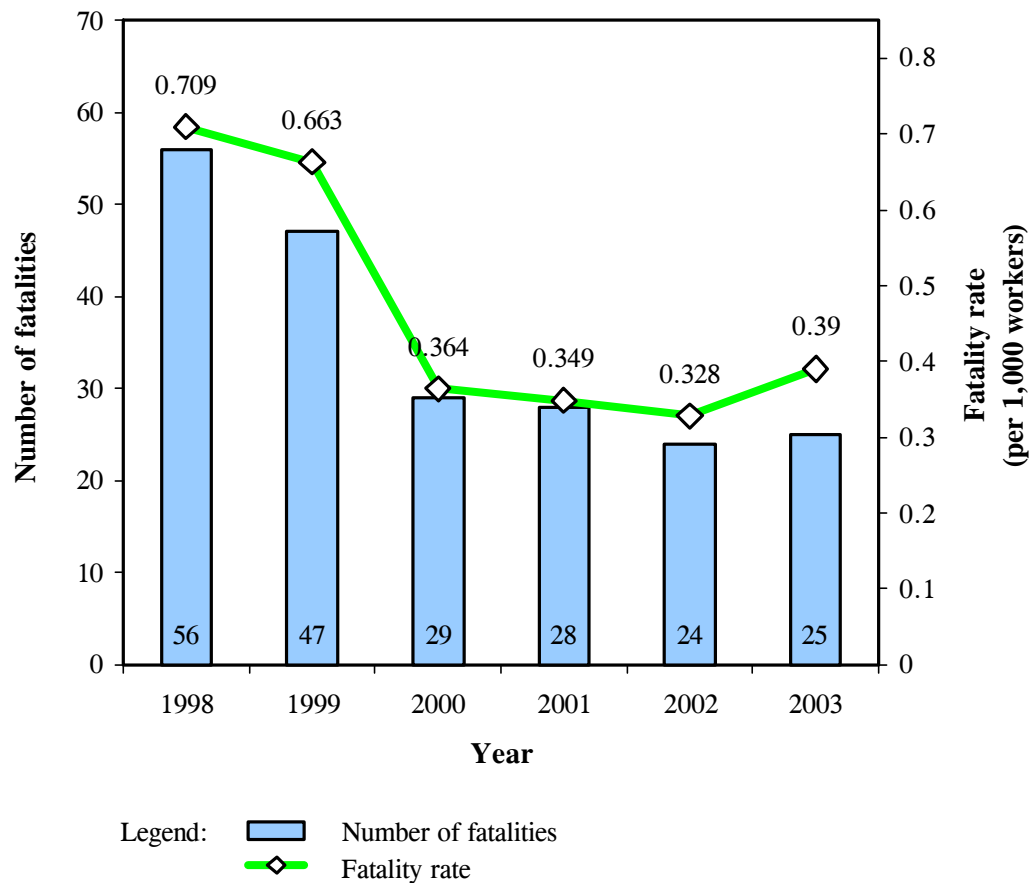


Source: LD records

Note: The full year statistics for 2004 were not available at the time of completion of this audit in January 2005. The number of accidents in the nine months up to September 2004 was 2,889 (compared with 3,338 in the same period of 2003).

Figure 2

Number of fatalities (and the fatality rate per 1,000 workers)
in the construction industry from 1998 to 2003



Source: LD records

Note: The full year statistics for 2004 were not available at the time of completion of this audit in January 2005. There were 15 fatalities in the nine months up to September 2004 (compared with 18 in the same period of 2003).

1.7 Notwithstanding the substantial improvement, the LD is committed to bringing the accident toll further down. The Commissioner for Labour has stated in a recent speech (Note 3) that:

Note 3: The speech was delivered in September 2004 at the International Conference on Safety and Health in the Construction Sector.

“We will not, and should not, be complacent for there is still much room for improvement. We are acutely aware that, because of its nature of work activities, the construction industry is inevitably more hazardous than most other economic sectors. The industry also remains a major contributor of industrial accidents, particularly for serious injuries. In 2003, for instance, construction accidents accounted for about 25% of all industrial accidents and 89% of industrial fatalities. Clearly, we must keep up our efforts to bring the accident toll further down. We should aim at a zero-tolerance approach.”

Audit review

1.8 Against the above background, the Audit Commission (Audit) has recently conducted a review of the LD’s efforts to improve the safety of construction sites. While the focus was on the LD, the audit also examined where appropriate the activities of the Environment, Transport and Works Bureau (ETWB) relating to construction safety (e.g. safety at public works sites). The audit has identified some possible areas for improvement. The audit findings and recommendations, it is hoped, will contribute to the important cause of making construction sites safer. The audit findings are reported in the following order:

- (a) inspection of construction sites (see PART 2);
- (b) minor sites (see PART 3);
- (c) Safety Management Regulation (see PART 4); and
- (d) other possible areas for improvement (see PART 5).

General response from the Administration

1.9 The **Commissioner for Labour** has found the audit report constructive. He has agreed with the broad thrust of the audit report and has accepted the audit recommendations.

Acknowledgement

1.10 Audit would like to acknowledge with gratitude the full cooperation of the staff of the LD and the ETWB during the audit.

PART 2: INSPECTION OF CONSTRUCTION SITES

2.1 The inspection of construction sites is a major activity of the LD. This PART reports Audit's findings on the LD's management of this activity.

Organisation structure

2.2 In 2004, the LD conducted about 47,700 inspections of construction sites (hereinafter referred to as site inspections). Site inspections are carried out mainly by Occupational Safety Officers (OSOs) in the Building and Engineering Construction (BEC) Offices. There are 18 BEC Offices grouped under four geographical regions, namely the Hong Kong and Islands Region, the Kowloon Region, the New Territories East and Kwun Tong Region and the New Territories West Region. In addition, construction sites relating to the airport and railways projects are inspected by the OSOs of four Airport and Railways (AR) Offices of the Integrated Services Region. The five regions form part of the Operations Division of the LD's Occupational Safety and Health Branch (see organisation chart at Appendix A). As at November 2004, there were 124 OSOs with site inspection duties in the BEC/AR Offices.

Purpose of site inspection

2.3 The LD regards site inspections as a process to assess independently the adequacy or otherwise of control on work risks, within a legal framework of duties, standards and sanctions. Site inspections serve to impress upon employers, employees and the public at large that the LD takes the maintenance of basic standards of safety, health and welfare at work seriously by showing enforcement presence. Through site inspections, the LD persuades, and if necessary compels, duty holders (Note 4) to achieve compliance with the minimum legal standards. The action should commensurate with the risk.

Enforcement strategy

2.4 The OSOs are required to exercise good judgement and common sense in performing site inspections and assessing the nature and seriousness of offences. They may take one or a combination of the following enforcement actions on any irregularity spotted:

Note 4: *The term "duty holders" refers to persons with duties under the relevant legislation (i.e. the FIUO and the OSHO). These include contractors, employers and employees.*

- (a) **Prosecution.** This is for offences that pose risks of serious bodily injury or considerable fire hazards to workers;
- (b) **Suspension notice.** This is for the immediate suspension of any hazardous work or process, or the use of any dangerous equipment, which may cause an imminent risk of serious bodily injury to workers;
- (c) **Improvement notice.** This is for breaches of safety and health regulations that relate to risks less serious in nature, or where some actions have been taken to reduce the risk substantially, despite the fact that the relevant regulations have not been fully complied with. The contractor is required to rectify any breach of the legislation within a specified period. For prosecution cases, an improvement notice will also be issued if the offence is likely to be repeated or continued; and
- (d) **Verbal or written warning.** This is for breaches of safety and health regulations that do not normally give rise to imminent or serious risks of bodily injury.

2.5 In performing inspection duties, the OSOs are guided by a set of principles (see Appendix B). For example, they should:

- (a) strive for a consistent and demonstrably fair approach, demanding similar action for similar circumstances; and
- (b) balance the need to be consistent against the need to take account of particular local problems and constraints.

Audit case study

2.6 As no two sites are exactly the same, in practice, the application of the principle stated in paragraph 2.5(b) means that the same offence found at different sites may lead to different enforcement actions, depending on the assessment of the circumstances on the spot by the OSOs performing the inspections. Audit's case study below serves as an illustrative example.

**Audit case study of the enforcement actions taken
on the same offence found at three different construction sites**

Case particulars

Section 48(1)(b) of the Construction Sites (Safety) Regulations requires that *reasonable steps shall be taken to ensure that no workman remains on a site unless he is wearing a suitable safety helmet*. This provision was found to have been breached during the inspections of three different sites. The inspections were carried out by different OSOs.

	Site A	Site B	Site C
Inspection date	31.7.2003	25.11.2003	7.11.2003
No. of workers found not wearing a safety helmet	2	1	2
Prosecution	Yes	No	No
Fine	\$6,000	–	–
Improvement notice issued	Yes	Yes	No
Warning letter issued	Yes	Yes	Yes
Observations made by the OSOs concerned, as reported in the case files	<ul style="list-style-type: none"> ♦ There was no site foreman or responsible person at the workplace to ensure that the workmen wore safety helmets. ♦ No posters or warning notices were displayed to remind workers to wear safety helmets. ♦ One safety helmet was found in an excavator nearby. Some safety helmets were found in the site office. ♦ As the offence was found in a complaint investigation, prosecution was recommended. 	<ul style="list-style-type: none"> ♦ Warning notices regarding the wearing of safety helmets were posted at conspicuous places. ♦ A safety helmet was found next to the worker not wearing one. The worker put on his safety helmet immediately. ♦ The offence was noted in the absence of any site management staff during inspection. No similar offence was subsequently noted in the presence of the site foreman. ♦ The above revealed that the management had taken reasonable steps to ensure that workers on the site wore safety helmets. Prosecution was not recommended because the evidence would be too marginal for securing conviction. 	<ul style="list-style-type: none"> ♦ The two workmen immediately put on the safety helmets available nearby before the OSOs asked them to do so. ♦ There was no working-at-height operation in the room where the two workmen were working. The imminent risk of head injury by falling objects to the two workmen was not very high. ♦ Other workers at the site were wearing safety helmets. ♦ In view of the above, prosecution and issuance of improvement notice were not recommended.

Audit findings

The same offence was found at three different sites, but different enforcement actions were taken. For Site A, the contractor was prosecuted, and issued with an improvement notice as well as a warning letter. For Site B, a warning letter and an improvement notice were issued. For Site C, only a warning letter was issued. **The purpose of this case study is to illustrate that the assessment of the circumstances on the spot by individual OSOs may lead to different enforcement actions for the same offence found at different sites. It is not Audit's intention to challenge the results of these cases.**

In response to Audit's enquiry, the LD has reviewed the three cases. The LD has assured Audit that, in all these cases, the inspecting OSOs followed strictly the LD's enforcement procedures. The LD considered that, given the different circumstances and merits of the cases, the courses of action were appropriate and consistent with its policy.

Quality control by line management

2.7 The responsibility for quality control lies with the line supervisors. To ensure fairness of site inspection results, the line supervisors are required to conduct case file reviews and supervisory visits.

2.8 *Case file reviews.* The LD's procedures require that, after a site inspection, the OSO reports to his immediate supervisor (i.e. Divisional Occupational Safety Officer — DSO) in a case file his observations arising from the inspection, together with the evidence collected (e.g. photographs). He is also required to make recommendations for the enforcement action to be taken. If the issue of warning letter or improvement notice is recommended, the immediate supervisor will be the approving authority. For stronger enforcement actions (i.e. prosecution or issue of suspension notice), the approval of the regional head is required.

2.9 *Supervisory visits.* The LD's procedures also require immediate supervisors to conduct the following supervisory visits "as and when necessary":

- (a) *Re-inspection of sites.* Immediate supervisors are required to randomly re-inspect sites that have been inspected by their subordinates. The purpose of the re-inspection is to check and verify physically the reliability of the documented events in the case files; and

- (b) **Joint visits.** Immediate supervisors are required to regularly carry out joint inspections with their subordinates to appraise their performance and to give them coaching.

Audit testing and enquiries on quality control procedures

2.10 **Case file reviews.** In view of the importance of quality control, Audit sample checked the LD's case files and made enquiries with LD officers to ascertain the extent of compliance with the above quality control procedures. Audit's sample checking revealed no instances of non-compliance with the procedures mentioned in paragraph 2.8.

2.11 **Supervisory visits.** On the requirements mentioned in paragraph 2.9, Audit made enquiries with the respective heads of four BEC Offices, who were required to perform the supervisory visits. They informed Audit that:

- (a) they only conducted joint visits; and
- (b) they did not conduct random re-inspection of sites that had been inspected by their subordinates. They believed that the circumstances of a site would change subsequent to their subordinates' inspection. It would thus be difficult for them to verify physically the reliability of the documented events in the case files.

2.12 Audit also notes that the LD's senior management may not have sufficient information to assess the adequacy of supervisory visits in achieving their purposes (Note 5). Although the LD's procedures require the immediate supervisors to conduct supervisory visits "as and when necessary" (see para. 2.9 above), there are no further guidelines to guide the supervisory officers as to how frequently such visits should be made.

Audit observations

2.13 **Consistency and fairness.** Audit supports the guiding principles on consistency and fairness mentioned in paragraph 2.5. Observance of these principles is, in Audit's view, of utmost importance. Any shortfalls in this respect may damage the LD's credibility in the eyes of the public and the duty holders. **Ensuring the observance of these principles calls for a strong quality control function within the LD.** In response to this

Note 5: *Each month, the BEC/AR Offices submit operational returns to their respective regional heads. The returns contain various operational data, including the number of supervisory visits made by the heads of the BEC/AR Offices. The existing procedure does not require further analyses, or consolidation, of the information on the supervisory visits and their results for monitoring by the senior management (i.e. those directorate officers with a corporate responsibility for the overall operation of the BEC/AR Offices).*

audit observation, LD senior officers have assured Audit that the LD places great importance on its quality control function and seeks improvements wherever possible. The LD has developed a full set of enforcement instruments comprising standing orders, enforcement guidelines, legal advice, compliance standards, codes of practice and guidance notes for providing practical guide to an inspecting officer (see also Appendix C).

2.14 ***Possible area for improvement.*** The audit findings in paragraphs 2.11 and 2.12 suggest a possible area for improvement in the supervisory visit procedures. Sufficient management information may need to be compiled to facilitate a review of the procedures. Supervisory officers may need to be given clearer guidelines to help them meet the requirement on supervisory visits in terms of, say, the frequency of such visits and how the results should be documented and reported to the senior management. The audit findings about random re-inspections not being performed should also be addressed, because re-inspections serve a specific (i.e. verification) purpose that cannot be met by conducting joint visits only.

2.15 ***Independent quality assurance.*** Audit's research indicates that, apart from the quality control exercised by the line management, some government departments have set up independent quality assurance units to strengthen their quality control functions. The Civil Service Bureau (CSB) also advocates independent quality assurance (Note 6). At a meeting with Audit in February 2005, LD senior officers expressed reservations about setting up such a unit in the LD's unique circumstances (Note 7). **However, the LD would not rule out the possibility of revisiting the matter in future.**

Note 6: *In a circular of October 1999 on the supervision of outdoor duties, the CSB states that government departments with a sizeable portion of their staff engaged in outdoor work should devise their own mechanisms to monitor their outdoor duties to suit their circumstances. A series of recommended measures are set out in the circular, including the setting up of quality assurance/audit units to conduct inspections for quality assurance.*

Note 7: *The LD considers that, given the limited pool of existing OSOs, it would be difficult to redeploy sufficient and appropriate manpower resources for setting up an independent quality assurance unit, without affecting frontline operations. Frontline operations should be accorded high priority. Furthermore, there would be practical difficulties for an independent quality assurance unit to function effectively. For instance, the circumstances of a site might change subsequent to an inspection by an OSO. It would thus be difficult for an independent quality assurance unit to check the quality of the OSO's inspection after the event.*

Audit recommendations

2.16 **Building on the strengths of the LD's existing quality control function, Audit has *recommended* that the Commissioner for Labour should take action to further enhance quality control. In particular, the Commissioner should:**

- (a) **critically review the LD's supervisory visit procedures, in the light of the audit observations in paragraph 2.14; and**
- (b) **in the longer term and resources permitting, explore the possibility and desirability of setting up an independent quality assurance unit as a management tool to provide added assurance on the quality of site inspections.**

Response from the Administration

2.17 The Commissioner for Labour agrees with the audit recommendations. He has said that:

Supervisory visits

- (a) the LD wishes to thank Audit for its advice on improving the existing quality control procedures. The LD notes the relatively fewer re-inspections and would encourage the DSOs to conduct more re-inspections. However, it must be stressed that work activities, site conditions and uses of plant and machinery change rapidly on a construction site. It may not be meaningful for a DSO to conduct a re-inspection to check and verify physically the reliability of the documented events in the case file some time after the inspection;

Independent quality assurance

- (b) in response to the CSB circular on the supervision of outdoor duties (see Note 6 to para. 2.15), the LD has issued a Branch Order setting out guidelines for officers who are required to perform outdoor work regularly. The Order has covered practically every control measure recommended by the CSB, such as attendance records, reporting of work done, detection measures, document checks, physical checks and review mechanism; and
- (c) while the CSB also advises departments to monitor service standards, it leaves them to devise their own mechanisms for monitoring outdoor duties to suit their circumstances. The setting up of quality assurance/audit units is just one of the possible measures. The LD considers that an OSO who enforces safety and health legislation should not be taken as providing "service" to the duty holders of the legislation. Government departments practising ISO 9000 set up their

quality assurance/audit units to ensure the quality of their product delivery. “Product” for these departments refers to services, processed material, hardware and software intended for, or required by, a client. In the LD’s case, an OSO is a law enforcement officer responsible for, among other things, inspecting construction sites and investigating accidents which are different from the work nature of these departments. Nevertheless, the LD agrees that in the longer term and resources permitting, it should explore the possibility and desirability of setting up an independent quality assurance unit as a management tool to provide added assurance on the quality of site inspections.

Other possible areas for improvement

2.18 Apart from quality control, Audit has identified other possible areas for improvement in the LD’s management of site inspections. A summary of the audit findings is as follows:

- (a) ***Notification requirement.*** The law requires a contractor who undertakes construction work to notify the LD, within seven days after the commencement of work, of the particulars relating to the site. (The exceptions are work that is expected to be completed in less than six weeks or work for which no more than 10 workmen will be employed at any one time.) The requirement enables the LD to become aware of the existence of the site and to conduct timely site inspections. **From a sample check of 45 case files, however, Audit found instances of non-compliance with this notification requirement (see Appendix D);**
- (b) ***First site inspection.*** Upon receipt of a notification of site particulars from the contractor, the LD will plan for the first inspection of the site. **From a sample check of 32 case files, Audit found that the time intervals between the receipt of the notification and the first inspection could range from 8 days to five months, with an average of 48 days.** Audit also found that the LD had not set a time limit for the first inspection to be conducted; and
- (c) ***Site inspection backlog.*** **In one of the four BEC Offices visited by Audit, there was a significant backlog of site inspections.** As at December 2004, this Office had 461 outstanding inspections which were originally scheduled to be conducted between June and November 2004 (see Appendix E).

Audit observations

2.19 The audit findings in paragraph 2.18 above require the attention of the LD. They present improvement opportunities to enhance the LD’s management of site inspections.

Audit recommendations

2.20 **Audit has *recommended* that the Commissioner for Labour should follow up the audit findings with a view to enhancing the management of site inspections. In particular, the Commissioner should:**

Notification requirement

- (a) **ascertain the extent of non-compliance with the notification requirement;**
- (b) **consider taking more stringent enforcement action against those contractors, in particular the recalcitrant ones, who do not comply with the notification requirement;**
- (c) **require the compilation and regular reporting of appropriate management information to facilitate monitoring by the LD's senior management;**

First site inspection

- (d) **ascertain why such a large disparity existed in the timing of the first site inspections and, in particular, why some inspections were only conducted months after the receipt of the notifications but not earlier;**
- (e) **consider setting a time limit within which the first site inspection should be conducted to ensure an early assessment of the safety performance of a new site; and**

Site inspection backlog

- (f) **require regular reporting of the backlog position to the LD's senior management to enable them to take timely remedial action.**

Response from the Administration

2.21 **The Commissioner for Labour agrees with the audit recommendations. He has said that:**

Notification requirement

- (a) **in the past, the LD seldom took prosecution action against failure by a contractor to notify it of the commencement of construction work because it was difficult to secure evidence. Furthermore, even if the contractor is prosecuted (one case was fined \$3,000 in 2003), the amount of effort spent in securing conviction**

under this type of technical offence is, in the LD's view, not cost effective. The LD accepts, however, that more stringent enforcement action should be taken against recalcitrant offenders;

First site inspection

- (b) the LD accepts Audit's observation that a first site inspection should be made as soon as possible. The delay in the first visit was primarily because the field offices had been heavily engaged in investigating fatal/serious accidents, following up suspension/improvement notices and inspections of active sites which were required to be inspected at intervals of one to three months;
- (c) the LD will issue guidelines requiring timely first visit upon receipt of the notification;

Site inspection backlog

- (d) files are brought up for follow-up enforcement inspections under two "Bring Up" (B/U) cycles. Active sites are put under the "Must-B/U cycle" and inspected at intervals of one to three months. Less active sites (such as sites under defect liability period and term contracts, and vacant sites) are put under the "Normal-B/U cycle" and inspected at intervals of three to twelve months. On top of those under the B/U system, investigation of complaints or serious/fatal accidents and enforcement action of suspension/improvement notices are accorded higher priority for immediate attention; and
- (e) the LD has conducted a survey of the backlog situation in BEC/AR Offices for the year 2004. The results indicated that most BEC/AR Offices had backlogs in the "Normal-B/U cycle". Without additional resources, there will be no ready means to clear the backlogs. Nevertheless, the LD will take positive measures to even out the backlogs among offices.

PART 3: MINOR SITES

3.1 Construction work, as defined under the FIUO, includes minor maintenance, repair and alteration works. Works sites where such minor works are undertaken are hereinafter referred to as “minor sites”. This PART examines the LD’s efforts to improve the safety of minor sites.

Characteristics of minor sites

3.2 Works at minor sites are often completed within a short period of time, involving a few people with a high turnover rate. As such, the contractors undertaking works at these sites are not required to notify the LD of the site particulars (para. 2.18(a) refers). It is difficult for the LD to locate these sites and take enforcement action.

Poor safety of minor sites an increasing concern

3.3 According to the LD, contractors of large construction projects have made sustained improvement in site safety and the number of work injuries has decreased recently. However, accidents at minor sites have become increasingly a matter of concern. The LD’s statistics show that:

- (a) in 2003, 1,485 industrial accidents were related to minor maintenance, repair and alteration works. These constituted 34% of the number of accidents in the construction industry. In the first half of 2004, the figure stood at 638, i.e. about 36% of the construction accidents; and
- (b) in the first eleven months of 2004, 11 fatal accidents involving small and medium-sized renovation and maintenance projects were recorded.

The Labour Department’s initiatives

3.4 The LD has been concerned about the poor safety of minor sites. To address the problem, it has taken the following initiatives:

- (a) ***Enforcement and promotional activities.*** The LD has drawn up an action plan which includes law enforcement campaigns targeting at specific activities (e.g. truss-out bamboo scaffolding) at minor sites, as well as seminars and promotional visits. The plan also requires OSOs to carry out periodical surveys of shopping malls and area patrols to identify active minor sites;

- (b) ***Voluntary referral system.*** The LD has established a voluntary referral system with the Hong Kong Association of Property Management Companies. Under the system, property management companies are encouraged to keep the LD informed of unsafe working conditions for timely intervention. Up to November 2004, 55 referrals, 18 complaints and 22 enquiries were received from property management companies; and
- (c) ***Occupational safety guide.*** An occupational safety guide on managing building renovation/maintenance works for property management companies was released in December 2004. The purpose of the guide is to assist them in managing renovation/maintenance works with due regard to industrial safety, and to spell out their responsibilities as property management agents.

Mode of operations

3.5 Given the characteristics of minor sites (see para. 3.2), the LD's mode of operations has to be very different from that for other construction sites. In fact, the Commissioner for Labour described it as "guerrilla warfare" in a speech made in December 2004 to members of the Hong Kong Association of Property Management Companies. He said that:

- (a) the battle against breaches of occupational safety and health law had shifted from a "positional warfare" targeting big contractors to a more difficult "guerrilla warfare" targeting small contractors; and
- (b) this "guerrilla warfare" demanded high mobility, vigilance and flexibility. Hence, the LD not only stepped up inspections on normal working days, but also at night and during holidays to clamp down on offending contractors.

Site inspections and enforcement actions

3.6 The LD has compiled separate statistics on enforcement actions involving minor sites since July 2004. As shown in Table 1, such actions accounted for a significant proportion of the LD's actions on construction sites.

Table 1
Enforcement actions on minor sites
vis-à-vis other construction sites (July - December 2004)

	Minor sites		Other construction sites		Total
Number of inspections	11,014	(46%)	12,696	(54%)	23,710
Number of prosecutions	213	(38%)	353	(62%)	566
Number of suspension notices	23	(41%)	33	(59%)	56
Number of improvement notices	122	(43%)	159	(57%)	281
Number of written warnings	2,549	(38%)	4,161	(62%)	6,710

Source: LD records

Resources deployment

3.7 Minor site operations are the responsibilities of the BEC/AR Offices, as are the operations on other construction sites. The two types of operation, therefore, draw resources from the same pool of OSOs. There is no readily available management information showing the amount of resources (say, number of manhours) deployed to minor site operations vis-à-vis other construction sites. Judging from the enforcement statistics in Table 1, the resources deployed to minor site operations are likely to be substantial.

Audit observations

3.8 *Constraints and difficulties.* In view of the high accident risks of the minor sites, the LD's recent initiatives are a step in the right direction. However, Audit notes that the LD faces many constraints and difficulties. For example, it does not have sufficient information to enable it to plan and carry out timely inspections. The referral system set up recently (para. 3.4(b) refers) is only a voluntary one. There is little assurance that staff of property management companies will report unsafe working conditions to the LD. Furthermore, many old buildings, which are most in need of repairs and maintenance, are not covered by the referral system because they are not managed by property management companies. Other methods, such as surveys of shopping malls and area patrols

(para. 3.4(a) refers), are labour-intensive. **These highlight the need for regular reviews of the minor site operations in the light of experience.**

3.9 ***Possible sources of information.*** Other government departments, in conducting their business, may get hold of information on minor sites or minor works contractors. For example, the works departments know where and when minor works under their portfolios will be performed. Another example is the statutory minor works control scheme now being proposed under the Buildings Ordinance (Cap. 123). While the Buildings Department (BD)'s main concern is structural safety, the information it collects under that scheme may help the LD address industrial safety issues at minor sites. **These opportunities for information sharing are worth exploring. At the meeting with Audit in February 2005, LD senior officers indicated that the LD had regular meetings with various government departments with a view to examining the feasibility of information sharing with them.**

3.10 ***Effect on other operations.*** The recent initiatives on minor sites have drawn substantial resources from the LD's other operations, in particular the inspections of other construction sites. **This gives rise to a question: how has this shift of resources affected the LD's other operations?** The LD needs to collect sufficient information to address this important question, paying particular attention to the need to maintain an adequate enforcement presence at other construction sites (see para. 2.3).

Audit recommendations

3.11 **Audit has recommended that the Commissioner for Labour should:**

- (a) **conduct regular reviews of the minor site operations to identify room for further improvement in the light of experience;**
- (b) **make the best use of information sharing with other government departments that possess information on minor sites; and**
- (c) **assess how the shift of resources towards minor site operations has affected the LD's other operations, paying particular attention to the need to maintain an adequate enforcement presence at other construction sites.**

Response from the Administration

3.12 The **Commissioner for Labour** welcomes Audit's observation that the LD's recent initiatives in reducing accidents in minor sites are steps in the right direction. He has said that:

- (a) the LD accepts Audit's recommendation that regular reviews should be conducted on minor site operations to identify room for further improvement;
- (b) the LD is fully aware that the impact of its enforcement action on minor sites could be improved if there is more and better intelligence on minor sites. Over the years, the LD has successfully secured such information by seeking cooperation from other government departments (e.g. BD), public corporations (e.g. Mass Transit Railway Corporation and Kowloon-Canton Railway Corporation) and property management companies. The LD will continue to explore and make the best use of other sources of information on minor sites to assist its enforcement planning and targeting (see also para. 3.13); and
- (c) the LD agrees that assessment should be made on how the shift of resources towards minor site operations has affected other operations, paying particular attention to the need to maintain an adequate enforcement presence on other construction sites. Indeed, these are its ongoing efforts.

3.13 Regarding the proposed minor works control scheme (see para. 3.9), the **Director of Buildings** has said that:

- (a) the Administration plans to submit the proposed legislation to the Legislative Council in late 2005; and
- (b) under the proposed scheme, minor works will be classified into Category I, II and III. Notification to the BD of the commencement of works will be required for Category I and II only. The BD can provide details of such notifications to the LD when the scheme is implemented.

PART 4: SAFETY MANAGEMENT REGULATION

4.1 This PART examines the LD's administration of the Factories and Industrial Undertakings (Safety Management) Regulation (hereinafter referred to as SMR).

Legislative framework

4.2 A consultation paper on the review of industrial safety in Hong Kong, published in 1995, recommended that the Government should change its strategy on industrial safety from focusing on enforcement to promoting safety management. The ultimate goal is to achieve self-regulation, which is best achieved by the Government providing a legislative framework requiring proprietors to adopt a safety management system at the workplace.


4.3 The SMR was enacted in November 1999 and came into effect on 1 April 2002. It provides for the introduction of a safety management system in relevant industrial undertakings, including construction sites (Note 8). According to the SMR, a safety management system should contain 14 process elements. Table 2 provides a brief description of these elements.


Note 8: *Other industrial undertakings governed by the SMR include, for example, shipyards and factories.*

Table 2

The 14 process elements in a safety management system

Process element	Brief description
1. Safety policy	A safety policy which states the commitment of the proprietor or contractor to safety and health at work.
2. Organisational structure	A structure to assure implementation of the commitment to safety and health at work.
3. Safety training	Training to equip personnel with knowledge to work safely and without risk to health.
4. In-house safety rules	In-house safety rules to provide instruction for achieving safety management objectives.
5. Inspection programme	A programme of inspection to identify hazardous conditions and for the rectification of any such conditions at regular intervals or as appropriate.
6. Hazard control programme	A programme to identify hazardous exposure or the risk of such exposure to the workers and to provide suitable personal protective equipment as a last resort where engineering control methods are not feasible.
7. Accident/incident investigation	Investigation of accidents or incidents to find out the cause of any accident or incident and to develop prompt arrangements to prevent recurrence.
8. Emergency preparedness	Emergency preparedness to develop, communicate and execute plans prescribing the effective management of emergency situations.
9. Evaluation, selection and control of sub-contractor	Evaluation, selection and control of sub-contractors to ensure that sub-contractors are fully aware of their safety obligations and are in fact meeting them.
10. Safety committees	Safety committees to identify, recommend and keep under review measures to improve the safety and health at work.
11. Job-hazard analysis	Evaluation of job related hazards or potential hazards and development of safety procedures.
12. Safety and health awareness	Promotion, development and maintenance of safety and health awareness in a workplace.
13. Accident control and hazard elimination	A programme for accident control and elimination of hazards before exposing workers to any adverse work environment.
14. Occupational health assurance programme	A programme to protect workers from occupational health hazards.

Legend:  Ten process elements required to be implemented by industrial undertakings employing 100 or more workers or contractors handling projects with contract value of \$100 million or more (para. 4.4(a) refers).

 Eight process elements required to be implemented by industrial undertakings employing 50-99 workers (para. 4.4(b) refers).

Source: LD records

Phased implementation

4.4 Under the SMR:

- (a) industrial undertakings employing **100 or more workers** (or contractors handling projects with contract value of **\$100 million or more**) are required to adopt, by phases, all the 14 process elements of the safety management system. With effect from 1 April 2002, they are required to adopt **10 of the 14 process elements** (i.e. items 1 to 10 in Table 2). The remaining four process elements (i.e. items 11 to 14 in Table 2) will be brought into operation in a later phase. The industrial undertakings are also required to carry out safety audits of their safety management systems; and
- (b) industrial undertakings employing **50 to 99 workers** are only required to adopt **8 of the 14 process elements** of the safety management system (i.e. items 1 to 8 in Table 2). They are also required to carry out safety reviews, which are less stringent than safety audits, of their safety management systems.

4.5 Industrial undertakings employing less than 50 workers are not covered by the SMR.

The Labour Department's strategy

4.6 The LD administers the SMR by way of enforcement, education and promotion. SMR operations concerning construction sites are carried out by OSOs of the BEC/AR Offices. The LD's strategy is as follows:

- (a) ***Encouragement and persuasion.*** At the early stage of implementation of the SMR, OSOs should seek to encourage the development, implementation and maintenance of a safety management system by way of involvement and guidance. OSOs should educate the duty holders of the concept of self-regulation and persuade them to integrate safety management systems into their overall management strategy. Punitive action will not be taken unless the contractor has deliberately shown indifference in complying with the SMR; and
- (b) ***Focus on process elements.*** When conducting inspections under the SMR, OSOs will meet the contractors' top management. The inspection will focus on the process elements and will be quite different from the routine inspections on physical conditions. Effectiveness of the process elements will be assessed independent of and separate from the routine inspections on physical conditions. Information gathered during the routine inspections could be used as a reference. Based on their professional judgement, OSOs will decide on the quantity of documents to be examined, the scope of on-site observations and the extent of

interview. After the inspection, they will send advisory letters to the contractors outlining the observations on management deficiencies in complying with the SMR.

Compliance status as at September 2004

4.7 As at September 2004, there were 337 contractors required by the SMR to implement safety management systems. The LD conducted SMR inspections on all of them and sent advisory letters to inform them of the OSOs' observations. Table 3 shows the status of compliance as at September 2004.

Table 3

Compliance rate of SMR requirement as at September 2004

No. of workers employed	No. of contractors	No. of process elements required	No. of process elements implemented	Compliance rate
	(a)	(b)	(c)	(d) = $\frac{(c)}{(b)} \times 100\%$
100 or more (para. 4.4(a) refers)	212	2,120	2,041	96%
50 to 99 (para. 4.4(b) refers)	125	1,000	910	91%
Total	<u>337</u>	<u>3,120</u>	<u>2,951</u>	95%

Source: LD records

4.8 The LD will continue to carry out SMR inspections as follows:

- (a) for contractors without any process elements in place, inspections will be conducted at a frequency of once every 3 to 6 months;
- (b) for contractors with the required process elements not fully in place, inspections will be conducted at a frequency of once every 6 to 12 months; and
- (c) for contractors with all the required process elements in place and the results of the safety audit/review in order, inspections will normally not be conducted.

Audit observations

4.9 ***Compliance rate.*** Overall, a compliance rate of 95% was achieved, thirty months after the SMR came into effect. Contractors in the “50 to 99 workers” category were found to have performed less satisfactorily than those in the “100 or more workers” category, apparently because smaller contractors had fewer resources to meet the requirement. **A higher compliance rate will lead to safer sites.** Continued efforts are needed to achieve full compliance as soon as possible.

4.10 ***Integral strategic plan.*** SMR inspections and site inspections (referred to in PARTs 2 and 3) draw resources from the same pool of OSOs in the BEC/AR Offices. Allocating more resources for one activity will mean less resources available for the other. **Given their complementary roles and that they compete for limited resources, the LD may need to draw up an integral strategic plan covering these two activities, and regularly update it in the light of experience.** In Audit’s view, such a plan will help the LD determine an optimal mix of activities and better assess manpower needs. It will also provide better guidance to the BEC/AR Offices in planning their operations and allocating resources.

Audit recommendations

4.11 **Audit has recommended that the Commissioner for Labour should:**

- (a) **make continued efforts to ensure full compliance with the SMR requirement as soon as possible; and**
- (b) **consider drawing up an integral strategic plan covering SMR inspections and site inspections to help determine an optimal mix of activities, and to guide the BEC/AR Offices in planning their operations and allocating resources.**

Response from the Administration

4.12 The **Commissioner for Labour** agrees with Audit’s recommendations. He has said that:

- (a) the LD has been closely monitoring the implementation of the SMR since it came into operation on 1 April 2002. Enforcement guidelines were issued, and a Working Group was formed to evaluate the effectiveness of the enforcement strategy. In May 2004, on the recommendation of the Working Group, the enforcement guidelines were revised to strengthen enforcement by taking legal action against those not complying with the SMR. Continued efforts will be

made through promotion, persuasion and as a last resort prosecution, to secure full compliance; and

- (b) the LD has drawn up an integral strategic plan covering SMR inspections and site inspections. Internal consultation is currently underway.

Post-implementation reviews of the Safety Management Regulation

4.13 At present, the SMR does not apply to industrial undertakings employing less than 50 workers (see para. 4.5). For those employing 50 workers or more, they are required to implement 8 or 10 process elements (out of a total 14), depending on the number of workers they employ (see para. 4.4).

4.14 In January 2004, the LD completed a post-implementation review of the SMR. The purpose of the review was to decide on the appropriate time:

- (a) to bring the remaining four process elements into operation for industrial undertakings employing 100 or more workers (para. 4.4(a) refers); and
- (b) to extend the SMR requirement to industrial undertakings employing less than 50 workers (para. 4.5 refers).

4.15 The results of the review were as follows:

- (a) industrial undertakings with 100 or more workers were not yet fully accustomed to the new safety management system. The prevailing economic climate and political environment were not favourable for bringing the remaining four process elements into operation; and
- (b) industrial undertakings with less than 50 workers did not have sufficient knowledge, resources and suitable personnel to develop their safety management systems. The prevailing economic climate and political environment were not favourable for extending the SMR requirement to these industrial undertakings.

In March 2004, the LD decided to review the situation again in 12 months' time. In response to Audit's enquiry, the LD informed Audit that the LD had in December 2004 started preparation work (e.g. designing survey forms and preparing working plan) on the second review, and that a survey to collect the views of industrial undertakings would commence in March 2005.

Audit observations

4.16 Audit notes the LD's progress in conducting the second post-implementation review. **Audit supports the conduct of post-implementation reviews by the LD on a regular basis because such reviews are essential for determining the most appropriate way and timing to take forward the SMR.**

Audit recommendations

4.17 **For the purpose of determining the most appropriate way and timing to take forward the SMR, Audit has *recommended* that the Commissioner for Labour should:**

- (a) **press ahead with the second post-implementation review and complete it as soon as possible; and**
- (b) **conduct further post-implementation reviews as appropriate at regular intervals to take into account experience gained and changing circumstances.**

Response from the Administration

4.18 The **Commissioner for Labour** agrees with Audit's recommendations. He has said that:

- (a) the LD is pleased to note that Audit supports the conduct of post-implementation reviews by the LD on a regular basis;
- (b) the LD has carefully planned and conducted the reviews. The first review was launched in March 2003. After months of field surveys, research, information collection and analysis, a discussion paper was drawn up in January 2004 for internal consultation. After careful deliberation, the LD concluded in March 2004 that it was still not the appropriate time to bring the remaining four process elements into force or to extend the SMR requirement to industrial undertakings employing less than 50 workers. However, the LD decided that the situation should be reviewed in 12 months' time, i.e. in March 2005;
- (c) the LD launched the second review as scheduled on 1 March 2005 after months of planning and preparation. The review will also involve extensive field surveys, research, information collection and analysis, and internal consultation. It is estimated that the second review will take 12 months to complete; and
- (d) where necessary, the LD will conduct further post-implementation reviews at regular intervals, taking into account experience gained and changing circumstances.

Safety audits

4.19 As mentioned in paragraph 4.8(c), the LD will not conduct SMR inspections on contractors who have all the required process elements in place, if the results of the safety audits on them are in order. This suggests that the LD places heavy reliance on the work of the safety auditors. Audit has identified the following areas on safety audits for the LD's attention:

- (a) ***Independence of safety auditors.*** Independence is a key factor for audit effectiveness. The SMR requires that, if a contractor has appointed his employee as safety auditor, he should ensure that the auditor is not required to carry out work that would prevent the efficacious conduct of the audit. **The LD may need to review regularly the independence of safety auditors (see Appendix F); and**
- (b) ***Extension of safety audit requirement.*** At present, safety audits are only required for industrial undertakings with 100 or more workers. A factor to be considered for extending the requirement to industrial undertakings with 50 or more workers is whether there are sufficient registered safety auditors (Note 9). Audit notes that there were about 700 registered safety auditors (Note 10) in late 2004, compared with 30 persons qualified to register in 1995. **As safety auditors may no longer be in short supply, it is now opportune for the LD to consider an extension of the safety audit requirement.**

Audit observations

4.20 The audit findings in paragraph 4.19 suggest possible improvement opportunities for the safety audits of industrial undertakings.

Note 9: *Under the SMR, the LD is empowered to register a safety auditor if he meets the qualification and experience requirements under the Regulation.*

Note 10: *The figure includes 13 former staff and 152 serving officers of the LD.*

Audit recommendations

- 4.21 **Audit has *recommended* that the Commissioner for Labour should:**
- (a) **consider putting in place an appropriate arrangement to regularly review the independence of safety auditors; and**
 - (b) **review regularly the need to extend the safety audit requirement to industrial undertakings with 50 to 99 workers, having regard to the increased availability of registered safety auditors and the importance of having safety audits for such undertakings.**

Response from the Administration

- 4.22 The **Commissioner for Labour** agrees with Audit's recommendations in general. He has said that:

Independence of safety auditors

- (a) the policy intent of the Administration is to allow in-house safety auditors to conduct safety audits for their own companies. As long as the in-house auditor is not required to carry out other work of a nature or to the extent that would prevent the efficacious conduct of the audit, he should be suitable to conduct an independent audit. There are appropriate provisions in the SMR for sanctioning proprietors, contractors or safety auditors who are found to have prevented the efficacious conduct of the audit;
- (b) the verification of the independence of a safety auditor has been, and will continue to be, part of the SMR inspection. Nevertheless, the LD agrees with Audit's recommendation to review regularly the independence of safety auditors;

Extension of safety audit requirement

- (c) the number of registered safety auditors is not the only consideration for extending the safety audit requirement to workplaces with 50 to 99 workers. In any event, it would be a major policy change to extend such a requirement to smaller workplaces. This calls for careful handling and should only be initiated when the industry is ready and the socio-economic and political climate is favourable; and
- (d) as things stand, the LD does not consider it appropriate to make the change in the foreseeable future. Nevertheless, the LD will bear Audit's recommendation in mind and would not rule out the possibility of revisiting the feasibility of requiring safety audits for such workplaces in future when the conditions are right.

PART 5: OTHER POSSIBLE AREAS FOR IMPROVEMENT

5.1 This PART examines other possible areas for improvement relating to the work safety of construction sites. Some of them fall within the LD's purview. Others are the responsibilities of the ETWB.

Audit observations on areas within the Labour Department's purview

5.2 A summary of the audit observations on the areas within the LD's purview is as follows:

- (a) ***Accident investigations.*** Under the Employees' Compensation Ordinance (ECO — Cap. 282), the LD receives from the employers statutory forms showing particulars of the industrial accidents causing injuries to their employees. These statutory forms are an important source of information for the LD to determine whether or not to conduct accident investigations. **From a sample check of the LD's records, Audit found that some employers took more than the statutorily allowed time to submit the required forms. Audit also found that the LD's internal procedures were such that it took a long time for the forms to reach the officers responsible for assessing the need for investigations (see Appendix G);**
- (b) ***Performance measures.*** The LD's key performance measures for work safety include the number of accidents, and the number of inspections and enforcement actions taken. The LD has not analysed and reported, as a performance measure, the violations of safety regulations found during site inspections. **In Audit's view, this is a valid measure of how hazardous (or safe) the construction sites are. The LD may need to consider adopting such a measure to enhance its performance measurement; and**
- (c) ***Training of OSOs.*** The LD attaches importance to staff training and has set training targets (in terms of number of training days per year) for its inspecting officers. **However, Audit found that some officers did not meet the training targets. The LD may need to ascertain the reasons and take appropriate measures to address them (see Appendix H).**

Audit recommendations

5.3 Audit has *recommended* that the Commissioner for Labour should:

Accident investigations

- (a) **take action to ensure that employers comply with the reporting requirements under the ECO;**
- (b) **streamline the LD's procedures to ensure that the statutory forms submitted by employers reach the relevant BEC/AR Offices as soon as possible, for assessing the need for accident investigations;**

Performance measures

- (c) **consider adopting, as an additional performance measure, the number and nature of the violations of safety regulations found during site inspections;**

Training of OSOs

- (d) **ascertain why some LD officers did not meet the training target; and**
- (e) **take necessary action to ensure that their training needs are met, paying particular attention to those who did not meet the target in two or more consecutive years and those whose training days fell significantly short of the target.**

Response from the Administration

5.4 The **Commissioner for Labour** agrees with Audit's recommendations. He has said that:

Accident investigations

- (a) the time limit for accident notification prescribed in the ECO can vary with circumstances (see para. 6 of Appendix G);
- (b) the LD has strengthened publicity on employers' duty to report work accidents within the prescribed time limit and will continue to do so through various channels including guidebooks, leaflets, posters, seminars and the LD's website. For cases where the employers have, without reasonable excuse, failed to submit the statutory forms within the prescribed time limit, the LD will consider prosecution action where appropriate;
- (c) the LD will consider allocating additional manpower resources to streamline its operational procedures to ensure that the statutory forms submitted by employers can reach the relevant offices within a reasonable time;

Performance measures

- (d) the LD accepts Audit's recommendation to enhance its performance measurement. It has already maintained statistics on all prosecutions concerning construction sites;

Training of OSOs

- (e) the training target is an average target for planning and monitoring purposes. It is not intended that each officer must meet the average target because individual officers have different training needs. Some could not achieve the average target when they were posted to offices with special functions or heavy workload (see para. 4 of Appendix H); and
- (f) the training of individual officers is closely monitored by their supervisors. When training needs are identified, the supervisors would take appropriate action to address such needs.

**Audit observations on areas within the
Environment, Transport and Works Bureau's purview**

5.5 The Government, as the client of public works, is determined to maintain a high standard of work safety of its contractors. The ETWB is responsible for taking regulatory action against contractors with poor safety performance (e.g. debarring them from tendering for public works contracts). It is also the lead agency within the Government to coordinate the implementation of the recommendations of the Construction Industry Review Committee (CIRC — Note 11). A summary of the audit observations on areas within the ETWB's purview is as follows:

- (a) ***Enquiry Panels.*** For public works contractors who have caused or contributed to serious incidents on construction sites, or who have been convicted of a number of site safety offences within a period of time, the ETWB should convene Enquiry Panels with a view to recommending regulatory action against the contractors. **However, Audit found that the ETWB did not convene Enquiry Panels for four such contractors (see Appendix I);**
- (b) ***Serious incidents.*** The ETWB defines a "serious incident" as an incident involving a loss of life or serious bodily injury that has ***attracted media attention***

Note 11: *The CIRC completed its review in January 2001 on the state of the construction industry. The CIRC recommended a number of measures to enhance the overall performance of the construction industry. These included nine specific recommendations to enhance its safety performance. In June 2001, the Government agreed to take forward the CIRC recommendations.*

or aroused general public concern. Given this definition, the ETWB's approach is to identify cases of serious injury at private construction sites by reading media reports (Note 12). **This approach may result in the omission of cases that are equally serious but have not attracted media attention** (see Appendix J); and

- (c) ***CIRC recommendations.*** Audit found that, as at January 2005, the implementation of three CIRC recommendations on construction site safety had yet to be completed (see Appendix K). **Continued efforts are needed to ensure full implementation.**

Audit recommendations

5.6 Audit has *recommended* that the Secretary for the Environment, Transport and Works should:

Enquiry Panels

- (a) **improve the mechanism for monitoring the conviction records of public works contractors and convene Enquiry Panels in accordance with the ETWB's requirements;**

Serious incidents

- (b) **for the purpose of convening Enquiry Panels, consider expanding the coverage to include bodily injury cases that are equally serious but have not attracted media attention;**

CIRC recommendations

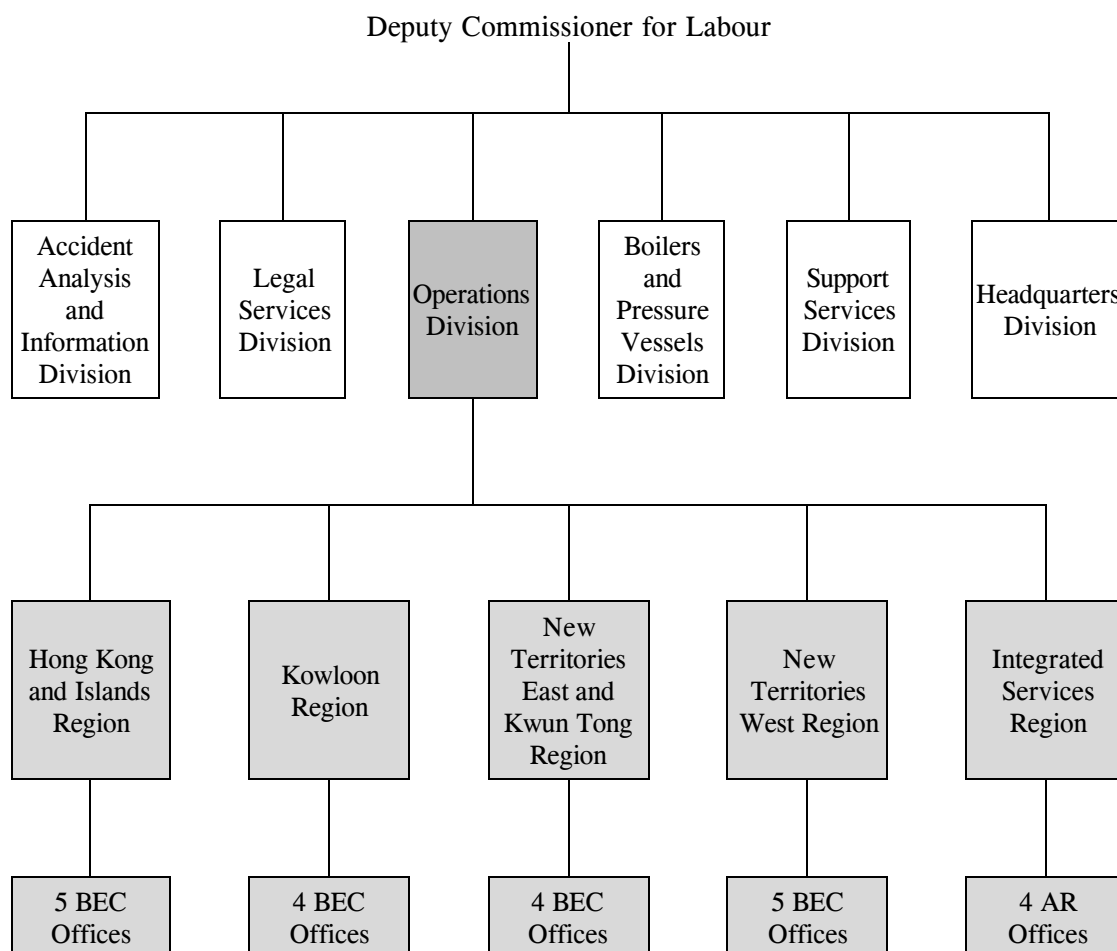
- (c) **continue to monitor closely the progress of implementing the CIRC recommendations; and**
- (d) **where necessary, make accelerated efforts to coordinate the implementation.**

Response from the Administration

5.7 The Secretary for the Environment, Transport and Works agrees with the audit recommendations.

Note 12: *For public works construction sites, the works departments will inform the ETWB of any serious bodily injury cases.*

Organisation chart of Occupational Safety and Health Branch



Source: LD records

Note 1: There are other non-BEC Offices grouped under the five regions of the Operations Division, which are responsible for providing occupational safety services for sectors other than construction industry. The non-BEC Offices are not shown in this organisation chart.

Note 2: As shown in the 2004-05 Estimates, the LD had a total of 1,785 staff. Of these, 124 staff had duties relating to construction sites in the BEC/AR Offices.

**Principles for conducting site inspections
and taking enforcement actions**

The guiding principles for conducting site inspections and taking enforcement actions are as follows:

- (a) enforcement officers will strive for a consistent and demonstrably fair approach, demanding similar action for similar circumstances;
- (b) enforcement officers have to balance the need to be consistent against the need to take account of particular local problems and constraints;
- (c) enforcement officers' judgement and the exercise of discretion are guided by the principles of risk assessment; that is, the action required is proportionate to the risks and the extent of the management's commitment to safety and health in the workplace;
- (d) enforcement officers must be equitable in the enforcement of the law and at the same time must encourage still higher standards where this is practicable because without such constructive disparity, there will be no progress;
- (e) enforcement officers' principal concern is in respect of whether there is adequate control of the risks arising from a work activity, and it is against this concern that compliance with specific legal requirement is judged;
- (f) decisions of the enforcement officers should be based on maintaining an equilibrium between the theoretical ideal and economic or technical reality, and between the interest of employers and workers;
- (g) the responsibilities of providing and maintaining a safe and healthy working environment rest with the duty-holders and not with the enforcement agency. Accordingly, the depth and breadth of an inspection is intended to support an officer's judgement, and not to merely provide reassurance to the duty-holders;
- (h) it is the role of the enforcement officers to monitor selectively, to investigate the cause of failure and above all, to stimulate and encourage new thinking and better forward planning in managing safety and health;
- (i) enforcement officers must be responsive to the concerns of employers, employees and members of the public, within their constraints and resources, in particular to assure that work risks are being properly regulated;

- (j) inspection is constrained by legal power and obligations, and takes place within a broad framework of policy, rules and guidance. However, these cannot cater for the variety of situations encountered by the enforcement officers. They are expected to make professional judgement at each stage of the inspection process relating to the risk and action required;
- (k) the framework within which field operations work must be publicly defensible, e.g. giving priority to visiting premises with low standards and a high potential risk, or providing a broadly equitable oversight of the standards and conditions in which people work; and
- (l) inspection should be carried out courteously; enforcement officers have to explain their decisions and the reasons for them to all interested parties within the legal restrictions on disclosure of such information.

Source: LD records

**Enforcement instruments developed by the LD
to ensure consistency and fairness in enforcement actions**

In response to the audit observations in paragraph 2.13, the LD has informed Audit that:

- (a) the LD is pleased to note that Audit has recognised the strengths of the LD's existing quality control function and that the LD attaches great importance to its quality control function to ensure fairness of site inspection results;
- (b) to ensure consistency and fairness in enforcement actions, the LD has developed a full set of enforcement instruments comprising standing orders, enforcement guidelines, legal advice, compliance standards, codes of practice and guidance notes for providing practical guide to an inspecting officer. These include the principles mentioned at Appendix B for conducting site inspections and taking enforcement actions;
- (c) in accordance with the current Standing Orders, an OSO should record all site irregularities, prosecutable or non-prosecutable, spotted on a site inspection. While verbal warnings will be given on the spot, a standard warning letter setting out all the site irregularities will be sent to the contractor after an inspection. The prosecutable offences are put in Part I of the warning letter, and the non-prosecutable offences in Part II of the letter;
- (d) where a prosecutable offence is detected, the OSO should report to his immediate supervisor, i.e. a DSO, on file the evidence and circumstances surrounding the case not later than the following working day, with a recommendation for or against prosecution;
- (e) the DSO weighs the adequacy of the evidence and considers carefully the recommendation of each prosecutable offence and adds his views before making a submission to his Senior Divisional Occupational Safety Officer (SSO) and the Region Head. To ensure a consistent and fair approach to deal with a prosecutable offence, the SSO and the Region Head would consider thoroughly the circumstances and merits of each case in accordance with the enforcement strategy, prosecution policy, compliance standards, established directions on interpretation and application of the specific regulation and any relevant legal advice on preceding cases; and
- (f) the decision for and against a prosecution rests with the Region Head. After a prosecution or otherwise is approved by the Region Head, another warning letter (prosecution/non-prosecution) will then be sent to the contractor as appropriate.

Notification requirement

Background

1. Under the Construction Sites (Safety) Regulations of the FIUO, a contractor who undertakes construction work should, **within seven days after the commencement of the work**, furnish in writing to the Commissioner for Labour with particulars relating to the site, unless the contractor has reasonable grounds for believing that the work will be completed in a period of less than six weeks or not more than ten workmen will be employed on the work at any one time. Any person who fails to comply with the notification requirement commits an offence and is liable to a maximum fine of \$10,000.
2. The notification requirement enables the LD to become aware of the existence of new construction sites, so that it can conduct timely site inspections to identify safety and health hazards and take necessary follow-up action.

Audit findings

3. Audit found that the LD had no readily available information about the extent of compliance with the notification requirement.
4. To assess the extent of compliance, Audit randomly selected 45 construction sites for which notification was required to be given to the LD. Audit found that, in 32 cases (71%), the contractors complied with the notification requirement. For the remaining cases, Audit found that:
 - (a) in 6 cases (14%), the contractors did not give notification to the LD until after the LD became aware of the existence of these construction sites through other means (e.g. accidents reported and complaints received). On average, it took the LD 50 days after the date of work commencement to be aware of these sites;
 - (b) in 4 cases (9%), the contractors gave the notifications to the LD after the time limit stipulated in the Construction Sites (Safety) Regulations of the FIUO. The delay ranged from 1 day to 38 days, with an average of 16 days;
 - (c) in 2 cases (4%), the notifications were dated before the commencement of work, but were not received by the LD until many days after the work had commenced. For example, in one case, the LD received the contractor's notification 147 days after the date of commencement of work. However, the notification was dated 153 days ago (i.e. six days before the commencement of work); and
 - (d) in one case (2%), the LD did not receive any notification and only became aware of the existence of the construction site through an accident investigation. However, the contractor claimed that he had already given notification to the LD.
5. Audit also found that the LD's Standing Orders only required that a letter be sent to a non-compliant contractor requesting him to complete and return the notification form. In the past three years, only one non-compliant case was prosecuted.

Site inspection backlog

Background

1. The LD employs a “Bring Up” system for regular inspections. After inspection of a construction site, a date will be fixed for bringing up the site for conducting the next inspection. According to the LD’s Standing Orders, as far as practicable, each construction site should be inspected approximately once every one to three months. Where such a frequency of inspections cannot be maintained, priority should be given to the following:

- (a) sites of civil engineering construction particularly those involving large scale site formation, underground work, use of heavy equipment or extensive use of lifting appliances or hoists;
- (b) sites where large number of workers are employed;
- (c) sites where many workers are often engaged to work at heights;
- (d) sites where the contractors or their site agents have not responded to advice given previously; and
- (e) sites where workers are likely to be exposed to risks of serious bodily injuries.

2. In the LD’s Standing Orders, it is also mentioned that sites with extremely poor safety performance may be inspected with a higher frequency until reasonable improvement is attained.

Audit findings

3. Audit reviewed the “Bring Up” arrangements in respect of four BEC Offices, one from each geographical Region. Audit found that in one BEC Office, there was a significant backlog of site inspections. As at December 2004 the Office had 461 outstanding inspections which were originally scheduled to be conducted between June and November 2004.

4. For the delayed inspections, Audit noted that there were no records documenting the reasons and the approvals for the delay. The LD’s Standing Orders also do not require regular reporting of the backlog position of the BEC/AR Offices to the LD’s senior management for follow-up action.

Independence of safety auditors

Background

1. Independence is a key factor for audit effectiveness. The SMR addresses this important issue by requiring a contractor, who has appointed a registered safety auditor who is his employee, to ensure that the auditor is not required to carry out work that would prevent the efficacious conduct of the audit. For example, if the safety auditor is an in-house safety officer or safety advisor, he should be released from the duties of a safety officer or safety advisor to avoid conflict of interest and maintain impartiality.

Audit findings

2. Audit notes that, at present, there is no readily available information on the extent of non-compliance with the independence requirement of safety auditors.

3. In this connection, Audit notes that the ETWB conducted a survey in 2003 to ascertain the independence of safety audits/reviews for public works projects. According to the survey results, 87% of the safety audits/reviews of 241 contracts met the independence requirement. The others (i.e. 13%) did not meet the independence requirement as the safety audits/reviews were conducted by staff from the same teams handling the works contracts. Following the survey, the ETWB requested the works departments to draw the attention of the contractors and the project officers to the requirement of the SMR. In Audit's view, there may be merits for the LD to take similar actions.

Accident investigations

Background

1. Under section 15 of the ECO, employers shall give notice in a prescribed form to the Commissioner for Labour of any accident that results in death or injury of his employee. The prescribed form for reporting death and injury which results in incapacity exceeding 3 days (Note), namely Form 2, has to be submitted not later than 7 days after the accident in the case of death and 14 days in the case of injury. The information reported in the Form includes a description of the accident, particulars of the employer and the employee, and the nature of the injury involved.

2. Upon receipt of a Form, the Employees' Compensation Division of the LD inputs the employer, employees and key accident data into a computer system. The Form is then passed to the Accident Analysis Office for input into the computer system for statistics compilation. After completing the input, the Form is passed to the relevant BEC/AR Office for assessing whether an investigation of the accident should be conducted. Thereafter, the Form will be returned to the Accident Analysis Office for filing.

Audit findings

3. Fatal or serious accidents (e.g. accidents resulting in admission to hospital in unconscious state) are normally reported to the LD verbally by the police immediately after the accidents. Other than fatal or serious accidents, the Form 2 is the main source of information for the LD to determine whether or not to conduct an accident investigation. Hence, the sooner the BEC/AR Offices receive the Forms, the earlier will important decisions be made on the need for accident investigations.

4. Audit randomly selected 30 Forms involving construction accidents to ascertain how long it had taken the Forms to reach the relevant BEC/AR Offices, counting from the dates of accidents. **Audit found that it had taken 73 days on average.** Audit also found that:

- (a) in 12 cases (40%), the Forms were submitted after the time limit stipulated in the ECO. The delay ranged from 5 to 57 days, with an average of 21 days;

Note: *Another form is used for reporting injury cases which result in incapacity of 3 days or less. However, the LD's published accident statistics only cover injury cases which result in incapacity exceeding 3 days. Hence, the audit review focuses on the processing of Form 2.*

Appendix G

(Cont' d)

(paras. 5.2(a) and 5.4(a) refer)

- (b) the Employees' Compensation Division took, on average, 3 days to finish its input and pass the Forms to the Accident Analysis Office for processing; and
- (c) the Accident Analysis Office took an average of 44 days (with a range between 36 and 56 days) to finish its processing, before passing the Forms to the relevant BEC/AR Offices.

5. **In Audit's view, there is room for streamlining the LD's procedures.** For example, by sending a copy of the Forms (by fax or electronic imaging) to the relevant BEC/AR Offices immediately upon receipt of the Forms from the employers, it could have shortened the time taken for the Forms to reach the Offices (see para. 4(c) above).

6. With regard to the audit findings in paragraph 4(a) above, the LD has informed Audit that:

- (a) under sections 15(1) and 15(1A) of the ECO, an employer shall notify the Commissioner for Labour, in the prescribed Form 2, of any accident causing death or injury (with over 3 days' incapacity) in 7 days and 14 days respectively. However, section 15(1B) provides that if the occurrence of the accident was not brought to the notice of the employer or did not come to his knowledge within the periods specified under sections 15(1) and 15(1A), then such notice shall be given not later than 7 or 14 days, as the case may be, after the accident was first brought to the notice of the employer or otherwise came to his knowledge. Thus the time limit for accident notification prescribed in the ECO can vary with circumstances and is not a rigid 7-day or 14-day period after the occurrence of the accident;
- (b) section 15(1BA) of the ECO also provides that where an employee only suffers a minor injury and has taken not more than 3 days' sick leave, the employer should submit a Form 2B (a simplified version of Form 2) within 14 days of the accident. Subsequently, if the employee needs to take more than 3 days' sick leave, then the employer has to submit a Form 2 not later than 14 days after the extension of sick leave beyond 3 days was first brought to the notice of the employer or otherwise came to his knowledge. The date of submission of Form 2 would thus be well beyond 14 days after the occurrence of the accident; and
- (c) on some occasions, employers may cast doubts on the genuineness of accident cases reported by their employees. They may need time to conduct investigation and seek the advice of their lawyers or insurers. Therefore, they may not be able to submit Form 2 within 14 days after the occurrence of the accident.

Training of Occupational Safety Officers

Background

1. The LD attaches importance to staff training and set a training target of eight days per year for each officer in the Operations Division. The Operations Division has prepared an annual training plan setting out the training and development programme for its officers. Training records are kept for each officer.

Audit findings

2. Audit examined the training records of three ranks of OSOs (about 330 officers), namely DSO, OSO I and OSO II for the three years from 2001-02 to 2003-04. These officers are frontline inspecting officers and supervising officers for all workplaces, including construction sites.

3. **Audit found that, over the three-year period, 59 officers did not on average achieve the training target of eight days per year.** These included 12 officers who did not achieve the training target consecutively for all the three years. These 12 officers on average achieved 4.4 training days a year. One officer achieved on average only 3 training days a year.

4. In response to Audit's enquiry, the LD has informed Audit that:

- (a) some OSOs could not achieve the average training target of 8 days per year when they have been posted to offices with special functions or heavy workload. Based on its training records for 2001-02 to 2003-04, the officers who did not meet the training target were mainly :
 - (i) those working in the Legal Services Division because the training sessions clashed with their court dates;
 - (ii) those working at the Safety Promotion Unit because their programme schedules clashed with the training sessions; and
 - (iii) those manning field offices of exceptionally heavy workload;
- (b) it should be noted that in overall terms, the average number of training days per officer per year had exceeded the target of eight days; and
- (c) though officers in the Legal Services Division had difficulties in attending training sessions, they had undergone lengthy and structured prosecution training prior to their posting to the Division. Some of the training courses could last as long as nine months.

Enquiry Panels

Background

1. According to an ETWB Technical Circular, regulatory action should be considered against a public works contractor (Note 1) who has:

- (a) caused or contributed (whether by act or omission) to the occurrence of a serious incident on a construction site (including both public and private construction site); or
- (b) been convicted of five or more site safety offences counted by the date of commission, each arising out of separate incidents in any 6-month period, committed by the contractor on a construction site or construction sites under the same contract (or sub-contract where the contractor is acting as a sub-contractor).

2. The ETWB will invite the contractor concerned to submit written representation and to attend a Panel of Enquiry where oral representations can be made. The ETWB will also write to the works departments and the LD to obtain more information on the serious incident and/or comments on the site safety performance of the contractor concerned. After convening the Enquiry Panel, the Panel will advise the Secretary for the Environment, Transport and Works of the proposed regulatory action. The Secretary will then advise the contractor of her decision. The regulatory action can be one or a combination of the following:

- (a) issue a warning letter to the contractor;
- (b) require the contractor to voluntarily suspend from tendering for public works projects under a specified category or categories;
- (c) require the contractor to arrange and carry out at his own expense an independent audit on his safety management system at any or all construction sites that he is working on; and
- (d) require the contractor to submit an improvement proposal on particular aspects recommended by the Panel.

Note 1: *A public works contractor means a contractor who is on the List of Approved Contractors for Public Works and/or on the List of Approved Suppliers of Materials and Specialist Contractors for Public Works. For the purpose of considering regulatory action, the conditions mentioned in paragraph 1 apply to a public works contractor whether contracting independently or acting in joint venture, and whether acting as a main contractor or as a sub-contractor.*

Audit findings

3. The ETWB convened 94 Enquiry Panels on 102 cases from January 2000 to October 2004. However, in respect of four contractors (who had five or more site safety offences in a 6-month period), Audit's scrutiny of the ETWB records revealed that Enquiry Panels had not been held, contrary to the requirement of the ETWB Technical Circular (Note 2).

4. The ETWB has informed Audit that the omissions were due to the manual method used for counting the number of convictions. **To avoid possible human errors, in future, it will make use of computers for counting the number of convictions.**

Note 2: *The ETWB looked into these four cases after Audit drew its attention to the findings. The ETWB informed Audit that, of the four cases, two had the prosecutions quashed in court after the contractors' appeal. Enquiry Panels were held for the other two cases in January 2005.*

ETWB monitoring of public works contractors

Background

1. According to an ETWB Technical Circular, a “serious incident” means an incident involving either one or a combination of the following:

- (a) loss of life at a construction site; or
- (b) serious bodily injury at a construction site resulting in an amputation of a limb or an injury which causes or is likely to cause permanent total disablement that has *attracted media attention or aroused general public concern*.

Audit findings

2. There is a mechanism whereby the LD will advise the ETWB regularly of all fatal cases. For serious bodily injury cases at public works construction sites, the works departments will inform the ETWB of such cases. However, for serious bodily injuries at private construction sites, the ETWB identifies such cases by reading media reports. After a case has been identified from media reports, the ETWB will ask the LD to provide details of the cases. **This approach may result in the omission of cases that are equally serious but have not attracted media attention.**

3. In response to Audit’s enquiry, the ETWB has informed Audit that:

- (a) given the definition of serious bodily injury in the Technical Circular (para. 1(b) refers), ETWB staff consider that they have taken a proactive approach to cover serious incidents that happened at private construction sites in addition to public works sites;
- (b) by reading media reports to identify serious incidents at private construction sites, prompt action can be taken on contractors without waiting for the results of medical assessments, which sometimes take a long processing time;
- (c) **in the light of the audit findings, the ETWB will consider expanding the coverage to include cases that are equally serious but have not attracted media attention; and**
- (d) the ETWB will liaise with the LD to review the criteria for convening Enquiry Panels for serious incidents. However, it must be emphasised that it will take a long time for a medical assessment to establish the degree of disablement for an injury case. Furthermore, the assessment may be disputed by the employer, particularly when it is linked up with an Enquiry Panel. The ETWB will consult the industry in reviewing the criteria.

Recommendations of the CIRC to enhance safety performance of the construction industry

Background

1. In April 2000, the Chief Executive appointed the CIRC to examine the state of the construction industry and identify specific measures to improve its overall performance. The CIRC was chaired by an Executive Council Member and its members were made up of government officers, construction industry stakeholders and academics. The CIRC completed its review in January 2001 and recommended a number of measures to enhance the overall performance of the construction industry. These included nine specific recommendations to enhance its safety performance. In June 2001, the Government agreed to take forward the CIRC recommendations. The ETWB was appointed as the lead agency within the Government to coordinate the implementation of the recommendations of the CIRC.

Audit findings

2. In response to Audit's enquiry, the ETWB has informed Audit that:
- (a) a robust mechanism is in place for monitoring the implementation of the CIRC recommendations. The Industry Review Steering Committee, led by the ETWB, was formed in late 2001 to steer the taking forward of the CIRC recommendations and to keep track of the progress. Issues affecting individual recommendations are discussed and resolved through the Committee to keep the implementation process on track. Regular progress reports are submitted to the Executive Council, the Legislative Council and the Provisional Construction Industry Coordination Board (PCICB — Note 1); and
 - (b) the timeframes recommended by the CIRC should not be taken as rigid milestones. As envisaged in the CIRC Report, the PCICB and the ETWB would need to work together to further refine the implementation programme. The ETWB would review regularly the implementation timeframes, taking into account practical circumstances.
3. The ETWB also informed Audit of the implementation status (as at January 2005) of the nine CIRC recommendations to enhance safety performance of the construction industry. According to the ETWB, six of the nine recommendations had been implemented, and the status of implementation of the remaining three recommendations was as follows:

Note 1: *Established in September 2001, the PCICB has 26 members from major industry stakeholders including construction clients, professionals, academics, consultants, contractors, workers, independent persons and government representatives. Pending formation of a permanent statutory body, the PCICB serves as a focal point to coordinate efforts in taking forward the vast change programme recommended by the CIRC. It also functions as a primary channel for the Government to seek the industry's feedback on policy issues impacting on local construction.*

CIRC recommendation	Recommended timeframe for implementation (see para. 2(b) above)	Position as at January 2005
(1) Review the need for introducing legislation similar to the United Kingdom (UK)'s Construction (Design and Management) Regulations (CDM Regulations). See a description of the features of the CDM Regulations at Appendix L.	Within 5 years (i.e. by June 2006)	Some underlying principles of the UK' s CDM Regulations had been applied to a number of pilot public sector projects. The LD would keep a close watch on the outcome and gather relevant overseas experience before consulting industry stakeholders on the way forward.
(2) Industry bodies, professional institutions and the local research community to draw up a code of practice or designers' guide to assist design professionals in: <ul style="list-style-type: none"> evaluating safety risks and hazards; providing guidelines on known hazardous activities and procedures on site, safe work sequences, and precautionary measures; and determining the reasonable timeframe for the safe conduct of construction activities. 	Within 3 years (i.e. by June 2004)	At its meeting in October 2004, the PCICB endorsed a strategy to roll out selected CIRC recommendations. Under the strategy, the recommendation would be taken up by the PCICB after the adoption of the principles in the UK' s CDM Regulations in public works and public housing projects. This was to avoid duplication of efforts and enable the industry stakeholders to make reference to the experience gained in public sector projects.

CIRC recommendation	Recommended timeframe for implementation (see para. 2(b) above)	Position as at January 2005
(3) Enhanced enforcement — coordinating requirements for the Site Supervision Plan System mandated under the Buildings Ordinance and the Safety Management System under the SMR.	Within 2 years (i.e. by June 2003)	The BD and the LD formed a working group in February 2002 to consider ways of coordinating the two systems to facilitate compliance. These included requiring the Authorised Signatories of the Registered Contractors to take a more proactive role in coordinating the requirements of the two systems, through arrangements such as chairing the safety meetings and preparing method statements for some of the tasks. These measures would be finalised for industry consultation by March 2005 (Note 2).

Note 2: *In response to Audit's enquiry, the BD has informed Audit that:*

- (a) the working group first explored the option of integrating the two systems into a single safety system as a measure to better coordinate the two systems. The working group found the option infeasible because two separate sets of legislation are involved. Also, different persons are responsible for ensuring the safety of building works and the safety of workers on construction sites; and*
- (b) the working group, therefore, has considered other options. As at mid-March 2005, it had finalised its recommendations and would soon submit its report to the PCICB.*

Features of the UK's CDM Regulations

1. The CDM Regulations cover all parties who are involved in the construction process and can contribute to the avoidance, reduction and management of health and safety risks (including the client, the planning supervisor, the designer, the principal contractor and other contractors). Each duty holder has a clearly specified role as set out below:

- (a) **Client.** The client must be satisfied that only competent persons are employed as the planning supervisor, the designer(s) and the principal contractor. He must also be satisfied that sufficient resources, including time, have been or will be allocated to enable the project to be carried out in compliance with health and safety laws;
- (b) **Planning supervisor.** This is a new position required by the Regulations with an overall responsibility for coordinating the health and safety aspects of the planning and design phases. The planning supervisor ensures that a pre-tender health and safety plan is prepared, monitors the health and safety aspects of the design, advises the client on the satisfactory allocation of resources for health and safety, and prepares a health and safety file;
- (c) **Designer.** The designer is required to design in a way which forestalls, reduces, or controls risks to health and safety as far as is reasonably practicable so that the projects he designs can be constructed and maintained safely. Where risks remain, they have to be stated to the extent necessary to enable reliable performance by a competent contractor;
- (d) **Principal contractor.** The principal contractor is required to take account of the specific requirements of a project when preparing and presenting tenders, take over and develop the health and safety plan, coordinate the activities of all contractors and subcontractors and ensure that they comply with relevant health and safety legislation and with the developed health and safety plan; and
- (e) **Contractor.** Contractors and subcontractors are required to cooperate with the principal contractor and provide the latter with details on the management and prevention of health and safety risks created by their work.

2. Through teamwork, all duty holders work together to improve health, safety and welfare standards on construction sites and for maintenance and repair works which take place post-completion through systematic safety management from the project onset.

Source: CIRC Report

Acronyms and abbreviations

AR	Airport and Railways
Audit	Audit Commission
BD	Buildings Department
BEC	Building and Engineering Construction
B/U	Bring Up
CDM Regulations	Construction (Design and Management) Regulations
CIRC	Construction Industry Review Committee
CSB	Civil Service Bureau
DSO	Divisional Occupational Safety Officer
ECO	Employees' Compensation Ordinance
ETWB	Environment, Transport and Works Bureau
FIUO	Factories and Industrial Undertakings Ordinance
LD	Labour Department
OSHO	Occupational Safety and Health Ordinance
OSO	Occupational Safety Officer
PCICB	Provisional Construction Industry Coordination Board
SMR	Factories and Industrial Undertakings (Safety Management) Regulation
SSO	Senior Divisional Occupational Safety Officer
UK	United Kingdom