

**10.****ENVIRONMENT AND LABOUR -  
PUBLIC SAFETY****BACKGROUND**

**10.1** The Department of Environment and Labour is responsible for administering a significant number of Acts and regulations pertaining to public safety (see Exhibit 10.1 - page 173). Within the Department, the responsibility primarily rests with the Public Safety Division. In January 2001, as a result of a departmental reorganization, the Office of the Fire Marshal and all of its assigned responsibilities were combined with the Public Safety Division. As a result, the Public Safety Division is now comprised of four sections - elevators and lifts, boilers and pressure vessels, power engineers (referred to collectively as the 'technical sections'); and the Office of the Fire Marshal.

**10.2** The Acts give the Department authority to regulate safety in areas such as boilers and pressure vessels, refrigeration plants, high pressure welding procedures, cranes, elevators and lifts, amusement devices, fire safety in buildings, fire protection services, storage of flammable and combustible materials, installation and use of fuel gases, and electricity. In addition, the Department has responsibility for certifying boiler, refrigeration and compressor plants, and for licensing and/or certifying refrigeration operators, compressor operators, power engineers and crane operators, gas handlers and communication cable installers.

**10.3** The Department ensures compliance with legislation primarily through inspections of facilities and equipment, investigation of accidents, examination of plans and specifications, and setting and grading certain certification examinations. Also, the Department regulates courses offered by various training providers as a credit towards fulfilling the practical experience requirements associated with the technical trades noted in the above paragraph.

**10.4** At the time of our audit, there were 2,355 elevators, 100 escalators, 12 ski lifts and 105 amusement devices licensed to operate within the Province. There were 952 steam boilers and 8,898 pressure vessels registered. In addition, there were 1,820 crane operators, 2,978 power engineers, 1,332 refrigeration operators, 144 compressor operators, 1,000 cable specialists and 1,607 gas handlers licensed to work within the Province.

**10.5** The organization of the Public Safety Division is illustrated in Exhibit 10.3. Total expenditures for the year ending March 31, 2001 were \$2.1 million. The Division employs approximately 40 staff.

**RESULTS IN BRIEF**

**10.6** The following are our principal observations from this audit.

- The Department is involved in the development of many pieces of legislation and regulations, but there are no formal criteria or prioritization techniques used to identify where the need to develop new or amend existing legislation and regulations is most urgent. There are no milestones, time lines or responsibilities established once a decision is made to amend or develop new legislation and regulations.

- The application of public safety legislation and regulations is unclear with respect to offshore facilities and activities.
- There are numerous instances of non-compliance with public safety legislation. Observed deficiencies include unmet inspection and investigation requirements, failure to seek and obtain certain approvals and inadequate reporting by outside organizations to the Public Safety Division.
- There is no formal risk assessment process to determine inspection frequencies or select individual inspections. In many instances, the Division has not been able to comply with the frequency of inspections specified in legislation or policies.
- The documentation prepared to support an inspection varies considerably within the Division, and in many cases was inadequate or non-existent.
- Documentation submitted by companies to support their compliance with orders issued is often inadequate. There was also minimal or no documentation in many files to document that inspectors or Deputy Fire Marshals had verified compliance with orders issued.
- Annual reports lack substantive information on the performance of the Public Safety Division, and do not fulfil their potential as accountability documents. Certain statistics in the report of the Office of the Fire Marshal are untimely, incomplete and inaccurate.

## AUDIT SCOPE

**10.7** In July 2001 we completed a broadscope audit of the Public Safety Division of the Nova Scotia Department of Environment and Labour under the mandate established by Section 8 of the Auditor General Act. Our audit was conducted in accordance with auditing standards established by the Canadian Institute of Chartered Accountants, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

**10.8** The objectives of this assignment were to assess the Department's:

- process for developing and promulgating public safety standards;
- monitoring, inspection and other public safety activities as they relate to the requirements of legislation, regulations and/or policy;
- system for the enforcement of Provincial public safety legislation, regulations and policy;
- processes used to ensure the competency of personnel involved in public safety inspection, enforcement and certification activities; and
- accountability framework with respect to public safety.

**10.9** Audit criteria were developed to assist in our assessment of the systems and practices of the Department. The audit criteria were discussed with and accepted as appropriate by senior management of the Department, and are outlined in Exhibit 10.2. Our audit procedures included research into public safety legislation and regulations, interviews with management and staff, testing of inspection and investigation files, as well as examination of other documents.

## PRINCIPAL FINDINGS

### *Standards*

**10.10** *Standards development* - At the time of our audit, the governing legislation for two areas of responsibility assigned to the Public Safety Division was being revised. The Crane Operators and Power Engineers Act was to become law on September 1, 2001. On June 6, 2000, the Fire Safety Act received first reading in the Legislature.

**10.11** The development of the new Crane Operators and Power Engineers Act started in 1991 after consideration of requests from industry to have existing legislation revised. This review resulted in separate legislation for Crane Operators and Power Engineers being assented to in 1995, but Executive Council never proclaimed the Acts because regulations had not yet been developed. The delay in developing regulations was due to departmental restructuring, staff retirements, reassignment of legal resources, and additional revisions to certain sections of the new Power Engineers Act. Subsequently, the separate Acts were updated and combined into the new Crane Operators and Power Engineers Act which was to become law on September 1, 2001. At the time of our audit, regulations were being prepared to come into effect on the same date.

**10.12** The Department's review of the Fire Prevention Act began in February 1996. The Fire Prevention Advisory Council, a group comprised of Provincial officials and representatives of external stakeholder groups, provides advice on fire prevention issues to the Minister of Environment and Labour. The Council was assigned responsibility for overseeing the review of this Act.

**10.13** For both Acts, working groups, comprised of Provincial officials and representatives of external stakeholder groups affected by the legislation, were formed to review the draft legislation and recommend changes. The working groups met on a regular basis and conducted additional stakeholder and public consultation on the changes to the Acts. Other jurisdictions' legislation and 'best practices' were reviewed for applicability to the Provincial legislation being developed. Recommendations for changes to the Acts were submitted. Non-consensus items resulting from the deliberations of the working groups and/or Council were referred to the Minister for final resolution.

**10.14** In our view, the Department has good measures for obtaining stakeholder input into the development of public safety legislation and regulations, but there are inadequacies in the Department's process for controlling the development of legislation and regulations. For example, the process to develop the new Crane Operators and Power Engineers Act described above will have taken ten years. The Elevators and Lifts Act has been in place since 1958 and requires updating in several areas. However, it will not be attended to until several other pieces of legislation and regulations are first addressed. A new Steam Boiler and Pressure Vessel Act received third reading in the Legislature on November 15, 1993 but was never proclaimed because regulations important to the administration of the Act had not yet been developed. We were informed that the legal resources required to prepare the regulations were reassigned to revising the Occupational Health and Safety Act. The Department does not know when the new Steam Boiler and Pressure Vessel Act and Regulations will be finalized.

**10.15** At any single point in time, the Department is involved in the development of many pieces of legislation and regulations, but there are no formal criteria or prioritization techniques used to identify where the need to develop new or amend existing legislation and regulations is most urgent. There are no milestones, time lines or responsibilities established once a decision is made to amend or create new legislation and regulations. We were informed that a system had been in place to track legislation development, but it was abandoned due to a lack of resources needed to keep it current.

**10.16 Public education** - At the time of our audit, the regulations for the Crane Operators and Power Engineers Act were to come into effect on September 1, 2001. Once the regulations are approved by Executive Council, the Department will, as was the case for the new Act, undertake extensive public information sessions on the impact of the new regulations. Advertisements are to be placed in local newspapers throughout the Province to indicate where and when information sessions will be held. During regular workplace inspections, inspectors will provide employers with information on the new regulations. Also, information concerning the new legislation and regulations will be placed on the Department's web-site.

**10.17** The process for promulgating new legislation and regulations, as described above, is extensive. Other legislation for which the Division is responsible has been in existence for a number of years (e.g., Elevators and Lifts Act - 1958, Amusement Devices Act - 1975) and does not require as extensive a public education program. For most Acts for which the Division is responsible, education is also provided through presentations at industry seminars and day-to-day contact with industry representatives. We recommended greater use of the Department's internet web-site in providing information on public safety legislation and regulations. The web-site could contain legislative interpretations, policy directives and frequently asked questions which would aid in the understanding of public safety requirements in Nova Scotia.

### ***Compliance with Legislation***

**10.18 Inspections overview** - The Public Safety Division is comprised of four sections - elevators and lifts, boilers and pressure vessels, power engineers, and Office of the Fire Marshal (OFM). Each section is responsible for the administration and enforcement of specific assigned Acts and regulations.

**10.19 Legislative jurisdiction** - The Department has a broad mandate under various public safety legislation and associated regulations. As with any Provincial law, this legislation applies to persons and businesses within Nova Scotia. However, the application of public safety legislation is unclear with respect to offshore facilities and activities. This would include production and exploratory facilities at numerous offshore oil and gas fields, as well as equipment and work on ships in Canadian waters around the Province. Clarification of public safety responsibilities for the offshore area will likely require discussions with Federal and other provincial governments and changes to existing legislation and regulations. Considering the potential for significant growth in offshore activity during the foreseeable future, we recommended that the subject of legislative jurisdiction be given close attention as soon as possible.

**10.20 Compliance with legislation** - The Department has a broad mandate under the Acts and regulations listed in Exhibit 10.1. We determined through discussions with senior management and other audit tests that there are legislative requirements which are not being met.

**10.21** Under Section 7(1) of the Elevators and Lifts Act, the Department is responsible for inspecting annually all elevators, dumbwaiters, escalators, man lifts and incline lifts. The Public Safety Division has not been able to meet this inspection frequency. Paragraph 10.33 provides additional information.

**10.22** Under Section 4 of the Fireworks Act, approval must be obtained from a Fire Chief when fireworks are sold or given to, or set off by, a person. This approval is generally not obtained.

**10.23** We noted the following instances where there was non-compliance with provisions of the Fire Prevention Act.

- Section 9(1) - Local fire departments are responsible for investigating the cause, origin or circumstances of all fires occurring within the municipality. Division management informed us that this is not being done throughout the Province because only nine municipalities have trained fire inspectors and only one has trained fire investigators. Under the new Fire Safety Act, which was before the Legislature at the time of our audit, local fire departments will still be responsible for fire investigations, but they can request the assistance of the OFM if necessary.
- Section 11(1) - Insurance companies must submit reports to the OFM on all claims which are the result of a fire. Division management informed us that reports are not being received for every fire claim adjusted, and many of the reports received are not complete. See paragraph 10.67 for further detail.
- Sections 19(1) and (2) - Municipalities must have a system to inspect all buildings located within their area. Municipalities must inspect all hotels, theaters, cinemas, skating rinks, dance halls and places of public amusement every four months, and inspect all schools every four months during the school year. There is no requirement under the Act for municipalities to report to the OFM that these inspections have been performed. Division management believes that, if inspections are being performed at all, in most municipalities the frequency of inspections is not in accordance with the provisions of this Section of the Act. The new Fire Safety Act requires municipalities to appoint municipal fire inspectors who will be responsible for establishing a system to conduct fire inspections. However, the new Act does not specify the frequency of all inspections. If inspections are not being performed, the OFM can conduct the inspections and recover the associated costs from the municipalities.
- Section 19(4) - Every municipal council and local fire department must report any fire hazards existing in or around inspected buildings to the OFM . The OFM is receiving very few inspection reports.
- Section 28(1) - All architects, designers or owners are required to submit building plans and specifications to the OFM before construction of a building begins or an existing building is renovated. (One and two dwelling units and private automobile garages are exempted.) We were told that most building plans are not being submitted to the OFM for review and approval, and the OFM is not following up to ensure that all building plans have been submitted.

**10.24** We also observed a situation where a void in safety enforcement exists because regulations and/or codes have not been updated. According to Section 3(a) of the Amusement Devices Safety Act, amusement devices are defined as devices designed or intended to entertain or amuse people by physically moving them. The regulations to the Act specify that investigations are to be conducted in accordance with a specific Canadian Safety Association code. Based on the Department's interpretation of this code, there is no requirement for the inspection of bumper boats, go-carts and water slides. However, these appear to meet the definition of an amusement device provided in the Act. Further, there are reports of accidents and injuries attributed to these devices.

**10.25 Responsibilities** - It is important that responsibilities for complying with legislation and regulations be clearly stated and communicated. In certain Acts and regulations, responsibilities are clearly stated and in other Acts and regulations they are not. For example, Section 3 of the regulations to the Amusement Devices Safety Act clearly defines the responsibilities of companies owning and operating amusement devices, whereas responsibilities for inspecting boilers and pressure vessels are not clearly stated in the Steam Boiler and Pressure Vessel Act. However, through its various activities, the Public Safety Division informs business owners and employees of their responsibilities, and there appears to be little dispute in this regard. Although there are no

formal reporting mechanisms specified in the various Acts and regulations, the Division obtains assurance that these responsibilities are being fulfilled through inspections, review of plans and specifications, initial licensing of equipment, and investigation of complaints and accidents.

**10.26** *Policies and procedures* - The OFM has a policy and procedure manual which has been approved by senior management of the Department. There is a draft policy and procedure manual for the three technical sections of the Division which was prepared in 1996. With the exception of a few specific policies, this manual has not been approved by senior management. Although the manual is still in draft form, its policies and procedures are generally followed and some sections have been updated as required.

**10.27** We examined the policies and procedures in both manuals and found they deal with either safety issues or areas where additional guidance was required for inspection staff and Deputy Fire Marshals. References are made to specific Acts and regulations as required. The OFM policy and procedure manual is reviewed and updated on a periodic basis. Changes to this manual are subject to an extensive internal review process. Changes to the technical sections' manual concerning licensing and inspection are generally reviewed by legal staff.

**10.28** However, we found the policy and procedure manuals do not address all areas where guidance is needed. We recommended that the Division develop more comprehensive policies and procedures for both manuals, especially in areas such as the selection of equipment and businesses for inspections, accident investigations, investigation of complaints, management review of inspection reports and orders issued, reinspections, and prosecutions.

**10.29** *Codes and standards* - The standards for equipment operation and maintenance and building construction are contained in various codes published by standard-setting organizations such as the Canadian Standards Association. Legislation such as the new Crane Operators and Power Engineers Act specify the codes which are to be complied with, while other legislation such as the Elevators and Lifts Act and the Fire Prevention Act do not have a complete list of applicable codes. In our opinion, the various public safety Acts and regulations should specify all applicable codes in order to provide strong legislative authority for the Department's enforcement of compliance.

**10.30** Staff are informed of changes to the various codes through correspondence, staff meetings or formal training. Staff have ready access to the most recent version of the codes.

**10.31** *Inspection policies* - The Public Safety Division cannot inspect all equipment and buildings every year because of the large number of inspections required under the various Acts. The frequency of inspection is specified in some Acts, including legislation which is administered by other government departments (e.g., legislation pertaining to hospitals, schools or beverage rooms). For example, the Elevators and Lifts Act and the Amusement Devices Safety Act require all elevators, lifts and amusement devices to be inspected annually. Some Acts do not specify the frequency of inspections, as in the case of the Fire Prevention Act. Inspection frequencies have been determined based upon past practices or information received from other jurisdictions or standard-setting organizations. In general, the most significant factor influencing the frequency of inspections is the number of inspectors and Deputy Fire Marshals available and the number of other tasks which have been assigned to these individuals.

**10.32** We observed that there is no formal risk assessment process to determine inspection frequencies or select individual inspections. We recommended that the Division develop a systematic approach to assess the risk associated with equipment and buildings, using criteria such as the size and nature of operations, inspection history, repeat violations and previous prosecutions. This may require changing legislation which specify inspection frequencies.

**10.33** In many instances, the Division has not been able to comply with the frequency of inspections specified in legislation or Department policies. Under the Elevators and Lifts Act, all

elevators and lifts are to be inspected annually. At the time of our audit, annual inspections had been performed on 436 elevators and lifts. However, 2,031 elevators and lifts had not been inspected. Many had not been inspected since 1995. However, this may not be clear to a user of an elevator or lift because no notification of inspection is posted in or on the device. There is a requirement that the annual licence to operate an elevator be posted, but this licence does not signify that an inspection has been performed during the year.

**10.34** The frequency of inspections is not specified in the Steam Boiler and Pressure Vessel Act. The policy of the Section is to perform an external inspection on each boiler every two years. At the time of our audit, external inspections on boilers were not up-to-date. Of the 262 boiler inspections which were required to be performed, 132 inspections were still outstanding. In addition, there are an undetermined number of pressure vessels that will have to be inspected once all boiler inspections have been completed. The frequency of inspections is also not specified in the Stationary Engineers Act. This Section is currently undertaking the inspection of all licensed plants because many plants had not been inspected for several years.

**10.35** The Division has not developed standard inspection procedures and forms for each of its sections. Inspection procedures are either specified in, or can be determined from, information contained in the codes and documents prepared by standard-setting organizations. For example, inspection procedures for elevators and amusement rides are contained in the CSA-B44 and CSA-Z267 codes issued by the Canadian Safety Association. Fire investigation procedures are described in Policy 921 issued by the National Fire Protection Association. However, the use of standard inspection procedures and forms would provide greater assurance individual inspections procedures are performed and are conducted in a consistent manner.

**10.36** *Performing inspections* - The Public Safety Division's inspection functions serve to monitor and enforce compliance with the various public safety Acts, regulations and codes. Each section of the Division has divided the Province into territories, with individual inspectors and Deputy Fire Marshals (DFMs) assigned to specific territories.

**10.37** For the inspection functions to operate effectively, complete and accurate listings of equipment and buildings to be inspected must be available to inspectors. The Elevators and Lifts Section and the Office of the Fire Marshal are currently updating lists of the equipment and buildings under their jurisdiction. Management of other sections of the Division believe their listings are reasonably accurate, but they will be updating equipment listings as inspections are performed.

**10.38** Inspection priorities are determined by management and communicated to the inspectors and DFMs. Some inspections are assigned to inspectors and DFMs, while others are selected by the individual inspector or DFM. However, we found that priority setting was informal and short-term in nature. Also, there is little reporting to management of inspections selected by inspectors and DFMs. We recommended that management develop a yearly inspection strategy which identifies priorities for the coming year. Inspectors and DFMs should prepare weekly inspection schedules, based upon the inspection strategy, to be reviewed and approved by management.

**10.39** The policy of the Division is that businesses should not be made aware of inspections in advance. Although this practice is followed in most cases, it is not practical in some situations because of the need to have a representative of the company present during the inspection, especially if testing of equipment is to be performed.

**10.40** We found the documentation prepared to support an inspection varies considerably within the Division, and in many cases was inadequate or non-existent. For example, there is no documentation prepared to record the procedures performed by steam boiler and pressure vessel inspectors and by DFMs. As discussed in paragraph 10.35, procedures performed during an inspection are specified in or can be determined from the various codes. The Elevators and Lifts

Section is the only section within the Division that makes extensive use of checklists. However, this is only the case for elevator, ski lift and amusement device inspections, and the Section does not use checklists for the inspection of escalators and man lifts. The checklist for examining amusement devices needs to be updated to reflect changes to the codes. We recommended that each section of the Public Safety Division develop and use checklists to document the procedures performed during inspections, and update these checklists as changes are made to the various codes.

**10.41** Inspection findings are documented in a variety of ways, including forms, reports and letters. We noted that the information provided by these documents varies and we observed inadequacies with respect to communicating the authority for an inspection, scope of an inspection, standards used to determine compliance, and an overall conclusion. Generally, some documentation is sent to companies following an inspection. However, for some inspections no documentation is prepared. We also found that many inspection reports are not signed by the inspector or a representative of the company being inspected. We recommended that the Division develop standard inspection reports and require them to be signed by the inspector or DFM who performed the inspection. A representative of the company should be required to sign and return a copy of the inspection report to indicate they have received and read it.

**10.42** Compliance orders are issued for violations of the Acts, regulations and codes. We observed that most orders are not referenced to the applicable sections of the Acts, regulations and codes. We recommended that all orders be appropriately referenced so the authority for making the order is clearly identified. We recommended that the Division develop standard wording for orders so deficiencies and actions required to achieve compliance are clearly and consistently stated.

**10.43** A compliance date is established for all orders issued. Inspectors and DFMs are responsible for ensuring the orders they issue are complied with by the specified date. Inspectors or DFMs can do this by requiring companies to submit documentation describing how they have complied or by performing a reinspection. During our testing of a sample of inspection files, we found that the documentation submitted by companies to support compliance with orders issued is often minimal or non-existent. There was also minimal or no documentation in many files to document that inspectors and DFMs had verified compliance with the orders issued. We also noted that no letters or forms are provided to companies which correct identified problems to inform them that they are now in compliance with the orders issued.

**10.44** Because the follow-up of compliance orders was not timely in some of the files we tested, we recommended that Division management monitor the status of outstanding orders more closely.

**10.45** *Monitoring of inspection activity* - The work of inspectors and DFMs is monitored through regular management contact, periodic staff meetings, and monthly reviews of activity and expense reports. The Office of the Fire Marshal and the three technical sections of the Division each have different requirements for activity or time reporting by inspectors, and reports are generally not summarized to provide monthly performance or statistical reports for the whole Division. In our view, the processes used to monitor the activities of Division staff are inconsistent and uncoordinated. We recommended that the Division implement a standard time reporting system capable of generating statistical reports which can be used to monitor the activities and performance of all inspectors and DFMs.

**10.46** Public Safety Division management is responsible for reviewing a sample of inspection files and reports to ensure inspections are properly documented, proper orders have been issued, and all orders have been complied with. We found no evidence of this review in the files we examined. We recommended that guidelines be developed for the documentation, frequency and scope of these reviews.

**10.47** As described above, the Division is not meeting inspection frequencies specified in legislation and policies. We believe there is a need for management of the Division to monitor the status of inspection activity very closely. However, only the Elevators and Lifts and Power Engineers Sections maintain a master list of inspections required and the date inspections were last performed. We recommended that Division management ensure the new computer systems being implemented are capable of recording needed data and producing appropriate reports so the status of inspection activities can be better monitored.

**10.48** Performance standards can be used to monitor the work of inspectors and DFMs, and to identify trends and issues affecting performance. The Division has not established specific performance standards for inspectors and DFMs. Consideration should be given to developing standards for the time required to perform inspections, investigations and other activities, as well as the number of inspections which should be completed by the inspectors or DFMs on a monthly or yearly basis.

**10.49** *Management information system* - The Public Safety Division uses several computerized systems. A customized licensing and inspection computer system was developed for the three technical sections of the Division. Because of numerous problems with the system, the Elevators and Lifts Section is not able to use this system and must use two older systems to record the issue of licences and the results of inspection activities. The Steam Boiler and Pressure Vessel Section is currently using the system, but there is a need for programming changes so the Section can fully utilize it, especially in the area of follow-up inspections and reporting. The Power Engineers Section is using this system for licensing and will begin to fully utilize the system once the new Crane Operators and Power Engineers Act becomes law. The Office of the Fire Marshal is in the process of implementing a computerized licensing system which is used by various fire departments and agencies throughout the country.

**10.50** Paper inspection files include inspection reports and other documentation. Inspection information is also contained in the computerized systems. Some inspections are recorded in the systems individually, while others are combined and summarized before being recorded. The results of meetings and phone calls are not recorded in the systems. We recommended the Division record all activities in the computerized systems.

### ***Enforcement of the Acts and Regulations***

**10.51** *Enforcement methodology* - The Public Safety Division generally has little problem in enforcing its compliance orders. In cases where compliance is not forthcoming, the Division prefers to use persuasion to enforce legislation, without resorting to the courts. Techniques include educating the business on safety threats, reinspection after an order is issued, and possibly shutting down the equipment or building being inspected. However, the various Acts contain provisions which enable prosecutions to be brought by government and penalties to be imposed by the courts. Penalties vary for each Act and range from \$50 to \$10,000.

**10.52** The policy and procedure manual for the technical sections of the Division lists procedures to be followed when prosecution is being considered. However, the manuals were prepared in 1996 and are still in draft form, not up-to-date and have never been approved. There are no policies on prosecution in the Office of the Fire Marshal policy and procedure manual. As prosecution is uncommon, it is generally dealt with on an individual basis after discussion with Department legal staff, rather than following an established format.

**10.53** *Appeal of compliance orders* - The Steam Boiler and Pressure Vessel Act, Elevators and Lifts Act, and Electrical Installations Act do not contain provisions allowing affected parties to appeal a compliance order. Every other piece of legislation administered by the Public Safety Division which involves inspections has an appeal provision. Nonetheless, the Division does accept and consider appeals from affected parties concerning orders issued under any of these Acts.

However, there does not appear to be any formal requirement to communicate the right to appeal when a compliance order is issued to an individual or business.

**10.54** Appeals, depending on the Act, are initially reviewed by a Chief Inspector, Appeal Board or the Fire Marshal. After reviewing the appeal they can confirm, vary, revoke, or suspend the order(s) being appealed. Their decision is final and cannot be further appealed, except for appeal decisions under the Fuel Safety Regulations which can be appealed to the Fuel Safety Board, whose decision is final.

**10.55** There is no requirement for use of a standard format for filing appeals or documenting decisions. In Sections 21 and 22 of the Fire Prevention Act and Section 51 of the Fuel Safety Regulations, specific time frames are provided for filing appeals. There are no time limits established in legislation for rendering of decisions.

### **Competency**

**10.56** *Qualifications and training* - All staff of the technical sections of the Public Safety Division have qualifications relating to the industry for which they are responsible. Staff who inspect elevators, boilers and pressure vessels, or license power engineers and crane operators have various qualifications such as Certified Engineering Technologist or Technician, Canadian Elevator Mechanics License or Professional Engineer. Staff are also required to obtain other certifications and commissions from industry or professional organizations based on their individual job responsibilities.

**10.57** A record of training is maintained for inspectors employed in the technical sections of the Public Safety Division. Training involves courses related to Occupational Health and Safety, technical courses related to specific job requirements, as well as the Department's Commitment to Quality courses. All annual performance evaluations for inspectors are current, except inspectors involved with elevators. Until recently, there were only two inspectors employed in this Section and the person responsible for completing the evaluations had not received the training necessary to conduct performance evaluations. This training will be provided during the upcoming year and evaluations will be brought up to date. Training courses taken and recommended training for the next evaluation period are reviewed as part of the annual evaluation process.

**10.58** The Deputy Fire Marshals received training from the National Fire Protection Association in the National Fire Protection Standards, but have not yet written the exams in order to be certified. It is our understanding that they will be required to write the exams. These standards are the minimum qualifications required to be a fire inspector or fire investigator. New staff hired into a DFM position will be required to have the certification at the time of employment. Each DFM, when initially hired, is assigned a mentor for a two-month period to assist in obtaining necessary experience in fire investigations and inspections. A record of courses taken is maintained for each DFM. These include Occupational Health and Safety courses, as well as the Department's Commitment to Quality courses. Annual performance evaluations are current. The courses taken throughout the evaluation period by each DFM and recommended training for the next evaluation period are reviewed as part of the annual evaluation process.

**10.59** *Objectivity* - All employees of the Division are required to follow the government's Code of Conduct for Civil Servants to avoid conflict of interest in their daily activities. In addition, Section 4(2) of the Elevators and Lifts Act states "*no person shall be appointed or act as an inspector who has any direct or indirect interest in the manufacture, sale, installation or maintenance of elevators, dumbwaiters, escalators, man lifts or incline lifts.*" Section 78 of the Steam Boiler and Pressure Vessel regulations states "*No inspector shall issue a certificate if he is interested directly or indirectly in the manufacture, erection or sale of steam boilers, refrigeration plants or pressure vessels.*"

**10.60** The Province is divided into territories with individual inspectors and Deputy Fire Marshals assigned to each. However, there is no policy on rotating inspectors or DFMs among the territories to help maintain the objectivity of personnel, provide opportunities for experience, and allow for different perspectives to be applied to individual inspections. The Department attempts to assign staff to territories closest to the place of residence to avoid excessive travel time and costs. We recommended that the Department more closely examine the costs and benefits of implementing a system of staff rotation, especially for areas where staff and inspection activity are more concentrated.

**10.61** *External certification* - To work as a power engineer or crane operator within the Province, a certificate must be obtained from the Department. To obtain the certificate, applicants must be successful in examinations developed by the Department and have a certain number of years of practical experience which varies with the classification and type of certificate. To assist applicants in preparation for examinations, courses have been developed by the Nova Scotia Community College and the private sector.

**10.62** In accordance with the Stationary Engineers Act and Regulations, the Stationary Engineers Board reviews and approves the subject matter of the course for relevance and authorizes a credit toward the practical experience requirements. Similarly, an examination committee reviews and approves the subject matter of courses for relevance to obtaining a crane operators certificate and authorizes a credit toward practical experience requirements.

### ***Accountability***

**10.63** *Accountability information* - An integral part of the accountability process is providing sufficient, appropriate, understandable and timely information on areas of assigned responsibilities. Within the Public Safety Division, staff is held accountable through a formal reporting of daily activities and annual performance appraisals. However, for one section, we observed that performance appraisals are not up to date, as discussed above (paragraph 10.57).

**10.64** Managers report on Section activities through frequent meetings and regular contact with senior management. Additionally, each manager holds quarterly meetings with staff, attended by senior management to discuss various issues. However, since the Division underwent a reorganization in January 2001, meetings of the whole Division have not been as regular. Senior management has informed us that the Division will meet as a group at least once a year to discuss items related to Divisional responsibilities.

**10.65** The Department of Environment and Labour prepares an annual report. The most recent annual report was for the year ended March 31, 1999 and tabled with the House of Assembly on April 5, 2000. Additionally, the Office of the Fire Marshal is required to submit to the Minister, on or before April 30 of each year, a report on its activities. The OFM follows the practice of not releasing its report until it is tabled in the House of Assembly. The report for the year ended March 31, 1999 was not finalized before the spring 2000 session adjourned. The report was sent to the Minister in late October 2000, and he tabled it on November 28, 2000. We believe 12 and 19 months respectively is too long a delay for reporting on the performance of the Department and the OFM. We recommended that annual reports be prepared and tabled on a more timely basis.

**10.66** Also, we observed that both annual reports lack substantive information on the performance of the Public Safety Division, and do not fulfil their potential as accountability documents. The Departmental report does contain Divisional objectives, commentary on significant events which have affected the Division, and general information on Divisional activities. The Office of the Fire Marshal's report did not contain information on its objectives. Neither report contains information on performance against stated objectives.

**10.67** Further, our review of the OFM's annual report revealed certain statistics in the report are untimely, incomplete and inaccurate. The report contains statistics on insured and uninsured fire-related losses. However, certain information on fire-related losses is not being reported for certain areas of the Province on a timely basis (e.g., three-year period for 1997 to 1999 was reported at one time). Some information is being withheld by insurance companies until claims investigations are complete, and these sometimes take several years to finalize. Some information submitted by certain fire departments is incomplete. Also, information on uninsured monetary losses is sometimes obtained from persons who do not have the expertise to accurately calculate it.

**10.68** These statistics and reports are considered valuable to the OFM because they provide evidence of fire trends, risk areas for inspections, and areas where education safety programs may need to be developed. We recommended that the OFM implement a quality control system to ensure that complete and accurate information is received and reported on a timely basis.

**10.69** The Department's business plan is a key document used to convey its goals and strategies for the current and future years. It contains information on budget allocations, goals, core business functions, priorities for the current year, as well as outcomes and outcome measures. However, information used by the Department to measure performance is qualitative in nature. Our review of the Department's 2000-01 business plan showed no performance measures relating to public safety responsibilities or success in achieving goals of the previous year. We recommended that the Public Safety Division develop and report on performance measures and on success in meeting goals. Where possible, performance reporting should include quantitative measures compared to predetermined targets, with explanations for significant variances.

## CONCLUDING REMARKS

**10.70** We concluded that the Division has good procedures for communicating legislative changes and additions to those who will be affected by them. However, its process for developing new legislation and regulations should be strengthened.

**10.71** There are a number of provisions of public safety legislation that are not being complied with, and there is uncertainty surrounding the jurisdiction of some legislation to offshore equipment and activities. The Division cannot always perform inspections in the time frames specified by legislation and policy. Inspections are not adequately documented in some sections of the Division.

**10.72** The system for monitoring and enforcing compliance with legislation and regulations requires improvement. Documentation submitted by companies to support compliance with orders issued is often inadequate, and follow-up inspections by the Department are not timely or well documented.

**10.73** The Division has the necessary processes to ensure the competence of personnel involved in public safety inspection, enforcement and certification activities.

**10.74** The Division performs its internal accountability responsibilities reasonably well. There is a need to improve the accountability process as it relates to the development and reporting of performance information within the Public Safety Division, and in the Department's reporting to the House of Assembly.

---

*Exhibit 10.1***DEPARTMENT OF ENVIRONMENT AND LABOUR  
PUBLIC SAFETY DIVISION****LEGISLATION ADMINISTERED**

Amusement Devices Safety Act and Regulations

Crane Operators and Power Engineers Act and related Regulations

Electrical Installation and Inspection Act and Electrical Code Regulations

Elevators and Lifts Act and Regulations

Fire Prevention Act and applicable Regulations:

- Automatic Sprinkler Systems Maintenance Regulations
- Class 1 Flammable Liquid Portable Containers Regulations
- Egress from Buildings Regulations
- Fees Payable by Companies Transacting Fire Insurance Business Regulations
- Property Insurance Fire Prevention Tax Regulations
- Fire Prevention Advisory Council Regulations
- Fuel Safety Regulations
- Portable Fire Extinguisher Control Regulations

Fireworks Act and Designation of Fireworks Regulations

Lightning Rod Act and Standardization of Equipment and Methods of Installation Regulations

Standard Hose Coupling Act (There are no regulations for this Act.)

Steam Boiler and Pressure Vessel Act and Regulations

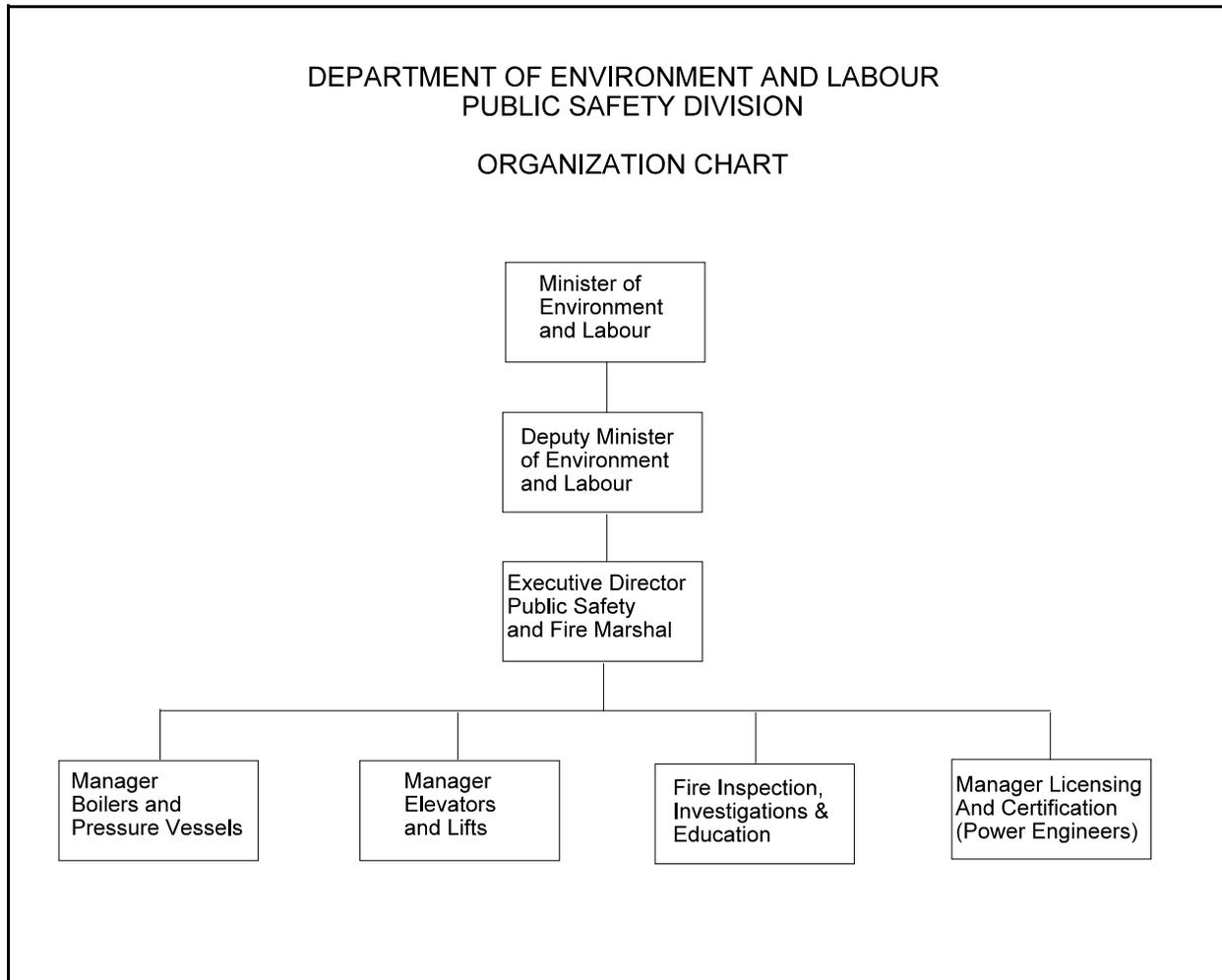
Volunteer Services Act (There are no regulations for this Act.)

**Exhibit 10.2****AUDIT CRITERIA**

Audit criteria are reasonable and attainable standards of performance and control, against which the adequacy of systems and practices can be assessed. They relate to the audit objectives developed for an assignment and are used to design the detailed audit tests and procedures.

The following criteria were used in our audit of the Public Safety Division of the Department of Environment and Labour.

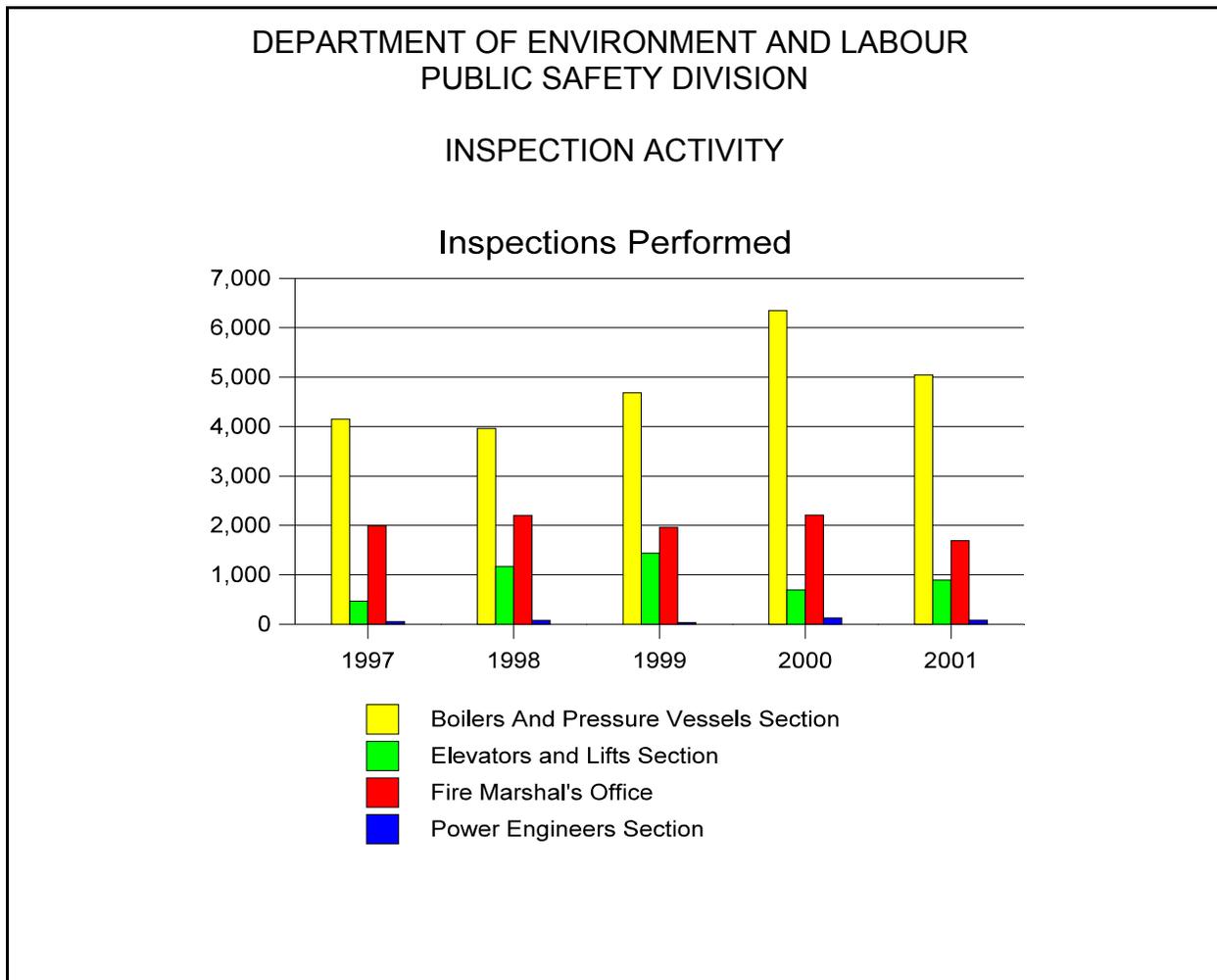
- *Standards* - There should be systems and procedures in place to develop and promote public safety standards on a timely basis. The Department should have knowledge of areas where public safety standards are required to be developed. There should be ongoing public education and promotion of public safety standards.
- *Compliance with Legislation* - The Department should ensure applicable provisions of Provincial legislation and regulations are being complied with. Department policies should be consistent with Provincial legislation and regulations. There should be a process in place to enable management to ensure that key provisions of Provincial legislation and regulations are being complied with. There should be a system in place to ensure that inspections are carried out on a regular and timely basis. There should be a system in place to follow up on implementation of inspection recommendations.
- *Enforcement of the Act and Regulations* - There should be a system to ensure Provincial legislation and regulations are appropriately enforced. Powers, roles and responsibility for enforcement of legislation and regulations should be clear.
- *Competency* - Personnel should have appropriate education and qualifications to administer the laws for which they are responsible. Department policies should reflect current legislative requirements for industry safety standards. Changes to legislation, regulations and policies should be communicated to personnel on a timely basis. There should be a process to ensure personnel receive ongoing training in industry safety standards/technologies and other relative areas. There should be a process in place to ensure that individuals responsible for trade certification and training are competent.
- *Accountability* - There should be adequate systems and controls to ensure the completeness, accuracy and timeliness of information reported. There should be adequate and timely reporting to inform the Minister and House of Assembly of the Department's compliance with applicable legislation and regulations. The Department should know whether public safety standards are being implemented and having a positive impact.

*Exhibit 10.3*

Other positions reporting to the Deputy Minister:

- Executive Director of Alcohol and Gaming
- Executive Director of Occupational Health and Safety
- Executive Director of Labour Services
- Executive Director of Environmental Monitoring and Compliance
- Executive Director of Environmental and Natural Area Management
- Director of Information and Business Services
- Superintendent of Pensions
- Director of Labour Standards
- Superintendent of Insurance
- Director of Policy
- Director of Communications

*(Note: This chart represents the organization of the Department at the time of our audit. Changes were made subsequent to the audit.)*

*Exhibit 10.4*

### **DEPARTMENT OF ENVIRONMENT AND LABOUR'S RESPONSE**

*The final report of the Auditor General's Audit of the Public Safety Division of the Department of Environment and Labour has been reviewed by the divisional management team.*

*The report in general is an accurate snap shot of the division during the period of time that the audit took place. The following is an update of information related to the recommendations and assumptions made in regards to the operation of the division.*

#### **Overview:**

*The report correctly indicates that the division was recently created by the amalgamation of the former Public Safety Division with the Office of the Fire Marshal. The creation of a single division has proven to be an opportunity for a more efficient and effective public safety system, e.g., a number of the issues raised in the audit were directly related to staffing and consolidation processes.*

#### **Legislative Review:**

*The consultation process and legislative changes required within a safety sector are lengthy because many of the proposed acts are a comprehensive change to the role of government in the public safety system. The work done by past and present safety inspectors has provided a good safety platform to build from. The changes in technology, world trade, education of professionals and trades persons and the proper placement of the responsibility for safety on the owner/operator requires a complete change in the delivery system. Policing of the safety system requires a completely different approach from that designed to deliver safety through an inspection process or risk based audit approach.*

*A safety system includes; safety assurance of building components, equipment and goods; proper installation and construction of these materials; proper operation of buildings, facilities and equipment; maintenance of buildings, facilities and equipment; training and certification of persons who are responsible for other individuals, buildings, facilities and equipment.*

*Many of the issues discussed in the audit document relate to the lack of resources available to meet legislative and best practice procedures for the development of legislation. The time lines reported are correct but do not reflect the department's desire to provide a timely updating of legislation. The number of outdated acts and regulations and process for updating legislation does prevent a short-term solution to all the acts that require changes. Legislative renewal processes are time consuming and require considerable legal, policy and administrative resources.*

#### **Standards:**

*The division is actively pursuing a review of all acts and regulations to ensure that the mandate is being met and that the most appropriate delivery system is being used.*

- 1) The Power Engineers and Crane Operators Act and regulations came into force on September 1, 2001.*

- 2) *The proposed Fire Safety Act has gone through a review by a select committee of the House and the Act will be reintroduced when the legislature reconvenes.*
- 3) *At present the division is reviewing the Electrical Act and Regulations, Elevator and Lifts Act and Regulations, Boiler and Pressure Vessel Act and Regulations. The division will proceed on each of these based upon an analysis of immediate needs.*

**Public Education:**

*The following is an update of our activities.*

- 1) *The education seminars and training programs for crane operators and power engineers are near completion and the legislation has been posted to the web site.*
- 2) *One Deputy Fire Marshal is specializing in public fire safety education.*

**Compliance with Legislation:**

- 1) *The Elevator and Lifts Act is under an active review to develop a reasonable and prudent delivery system. The former legislation was developed to respond to a low number of elevators and lifts. The requirement to inspect every elevator each year is both inappropriate and unnecessary. The new Fuel Safety Regulation requires an audit system of installations and operations. Ontario has developed a risk analysis process for the setting of the inspection frequency. We will use this program for the model for setting our own inspection requirements.*
- 2) *As part of the proposed Fire Safety Act, the requirement to obtain the approval of the fire chief to set off fireworks will be deleted. The fireworks regulated by the present Fireworks Act are family fireworks bought in the local stores. The federal government regulates high hazard fireworks and firecrackers. The Office of the Fire Marshall will only regulate the age of the purchaser and the storage of the family fireworks.*
- 3) *The last bullet in paragraph 10.23 states that plans are not being received as required by law. Previous to 1988 the Office of the Fire Marshal provided the only plans review program in the province outside of the former cities of Halifax and Dartmouth. With the adoption of the Nova Scotia Building Code Act every municipality is required to have a building official review plans. Therefore, although all the plans are not sent to the Office of the Fire Marshal, they are required to be reviewed by a building official. The proposed Fire Safety Act changes the plans approval system to a review of high life risk properties.*
- 4) *The review of the Elevators and Lifts Act will include the regulations for amusement devices. There is a need at some point to determine what government can regulate. At one extreme is the absence of the regulation of amusement devices which the number of deaths and injuries preclude, and at the other extreme is total regulation including play ground equipment which is neither possible nor desired. Therefore, there will be devices that will not be regulated based upon a risk/benefit analysis.*

- 5) *The inspection frequency for elevators has already been discussed. The proposed Fire Safety Act provides for a change to the Deputy Fire Marshals (DFMs) service demands. A number of inspections, including travel time, report writing and prosecutions carried out by the DFMs are in fact the responsibility of the municipalities. The failure of municipal units to provide a fire inspection service is placing pressure on DFMs to respond to complaints by citizens and fire officials. The division is unable to provide services to other provincial departments and also take action on what could be a serious fire safety issue.*

***Policies and Procedures:***

*A number of the issues raised by the auditors relate to monitoring of activities and to a sound management information system and policies and procedures.*

*A task team will be formed in early February to update and unify all the policies related to the Public Safety Division in conformance to the integrated DEL policy program. At present policies related to reporting procedures and time management are under review.*

- 1) *The Division is presently instituting a time management database program that will include a weekly reporting and proposed inspection program for the following week. The process is imperfect, as inspectors are required to respond to investigations, last minute requests for inspections by organizations that require immediate inspection or face serious financial issues.*
- 2) *The DFMs are presently developing criteria for the required input for an investigation. This will provide each individual with a guideline, based upon the severity of the incident, for the time and resources that will normally be expended.*
- 3) *Standardized forms including check sheets are presently being developed. The division, in cooperation with the department, is reviewing the possible use of hand held computers for inspection processing.*

***Note to Inspection Frequency:***

*Inspectors are responsible for large areas and travel time is a serious consideration. Buildings and equipment vary in size and complexity, the report could be one page or ten pages, and the research may require one hour or a full day or longer. Setting a balanced inspection volume criterion is not simple. On average we do expect that most inspection days will produce three separate inspections and three days of inspections require at least one day of report writing.*

***Codes and Standards:***

*Both the proposed Fire Safety Act and the review of the Elevator and Lifts Act will contain a section for the clear designation of the codes and standards that must be followed.*

***Risk Assessment and Inspection Procedures:***

*The following summarizes the work being carried out to respond to the auditors concerns.*

- 1) Risk assessment is a critical component of safety legislation and provides a mechanism for efficient utilization of resources. Both the proposed Fire Safety Act and the review of the Elevators and Lifts Act are based upon risk management principles. The Province of Ontario has undertaken a risk assessment of elevators that will assist in the development of a new act.*
- 2) There are two data systems presently being integrated by the division. Fuel and fire safety inspection and investigation activities files are based upon a civic address platform. The database for boilers and pressure vessels has been reviewed for an upgrade to improve the inspection format and should be completed by March 31. The elevators and amusements database is under development but will not be completed until a review of the legislation and the mandate of the section have been completed.*
- 3) A program is presently being implemented to provide an automatic reminder for action on orders issued, based upon time and risk. The process includes an audit procedure for the manager.*

***Competency of Personnel:***

*The training of personnel in all sections continues to meet the standard for technical inspectors. The following is an update to the Deputy Fire Marshals' certification.*

- 1) A new DFM has been hired with the qualifications indicated in the report.*
- 2) Three DFMs have written and passed the investigator's certification.*
- 3) A DFM has written and passed the inspector's certification.*
- 4) Both programs have been obtained from Manitoba and all staff will be trained and required to write the certification exams.*
- 5) One DFM is presently completing Ontario's public educator's certification for fire safety. He is also certified to counsel youth fire setters.*
- 6) All divisions are carrying out personnel performance appraisals.*

***Accountability:***

*The Annual Report of the Fire Marshal will be up to date for the spring sitting of the House.*

- 1) A staff person has been hired to maintain the report and have it published in a timely manner.*

- 2) *The Director is presently meeting with the insurance industry to attempt to obtain timely information. The industry is concerned that the government's Freedom of Information and Protection of Privacy Act will provide a vehicle for litigants against them to obtain information that would harm their position in a civil matter.*
- 3) *With the creation of the Halifax Regional and the Cape Breton Regional Fire Services information from some departments within those jurisdictions has been difficult to obtain. Staff has provided training to the Halifax Regional fire officers and is working closely to develop a reporting system. We will be approaching Cape Breton Region next for their assistance.*

**Note to Paragraph 10.60:**

*The concept of rotating inspectors is normally a good concept both for program as well as management practices. The divisional inspectors are responsible for regions and to decrease travel time and costs they live in the region. The costs and family disruption required to rotate inspectors is not in the best interests of the division. We believe that better auditing and quality control by management would be a more effective solution. There are advantages in rural Nova Scotia to familiarity with owners and operators by creating safety partnerships. There are periodic rotations created when staff fills in for each other, when required, such as during vacation periods.*

---