

Audit of Health and Safety Program in Laboratories (Project Number AU0705)

INTRODUCTION AND BACKGROUND

NRCan has, at any given time, approximately 5,000 employees in over ninety locations of which at least 15 are laboratories. Under the *Canada Labour Code (CLC) Part II*, the Department has an obligation to protect their health and safety (H&S). In addition, the *Criminal Code of Canada* requires every organization to prevent negligent harm to employees as well as service contract workers and the general public. This requires a complex governance, implementation, and oversight.

The *CLC Part II* allows due diligence as a legal defence. On the other hand, the *Criminal Code of Canada*, requires intent and negligence to be proven without regard to due diligence. In either case, every employee, including senior management, can be charged with an offence. If proven guilty, both legal systems include jail time as punishment in addition to financial penalties. Compliance, oversight, monitoring and reporting comprise the collective basis for due diligence and avoiding negligence.

NRCan's Corporate Management Sector (CMS) provides H&S governance and oversight through the Security, Safety and Emergency Management Division (SSEMD). H&S representatives appointed by Assistant Deputy Ministers (or equivalents) in accordance with the Accountability Framework for Security, Safety and Emergency Management implement sectoral program requirements, monitor performance, and provide feedback and information to SSEMD. Facilities in turn apply controls that comply with corporate directives. The linkage between corporate H&S governance and local implementation is important for large organizations such as NRCan.

Scope and Timing

The scope of the audit was a review of Departmental policies, procedures, and activities related to managing the H&S program applied to laboratories. Laboratories were selected because they represent the highest area of risk in the H&S program. The audit assessed corporate governance, implementation, and oversight controls in place for managing H&S programs at laboratories and pilot plants where chemical, biological, physical, or radiological hazards exist.

The audit included a review of sector practices, as well as NCR and regional practices based on selected samples where work hazards are the highest. Site visits to Halifax, N.S, Québec, QC, the Booth Street Complex, ON, and the Bells Corners Complex, ON, were done.

The audit was conducted September 2006 to March 2007 and included a review of information from 2002 to March 2007.

APPROACH AND METHODOLOGY

The audit was conducted using interviews, questionnaires, and a review of documentation based on a series of detailed audit criteria. The audit criteria were identified according to the standards and requirements set out in the *TB Policy on Internal Audit*. Interviews were conducted and data was collected from Shared Services Office (SSO), Corporate Management Sector (CMS), and all science based sectors with laboratories.

OVERALL SUMMARY

NRCan is one of the first government departments to perform a comprehensive H&S program audit. Workplace injury statistics (2002-2004) indicate that NRCan is comparable to other government organizations with similar mandates and number of employees.

This audit has identified the potential for improvements in the oversight and monitoring of the H&S program. Unclear roles and responsibilities is resulting in partial compliance, ineffective monitoring and reporting and preventing senior management from being aware of H&S issues across the country. Specific findings relate to:

- Departmental H&S Risk Profile;
- Training; and
- Monitoring and Reporting.

As stated earlier, the *CLC Part II* and *Criminal Code of Canada* require solid management of H&S issues to demonstrate due diligence and avoid negligence.

The introduction of SSO adds another Departmental group to the H&S structure. The roles and responsibilities between SSO and Sectors are not clearly understood for H&S.

We did not find any serious problems that would endanger the immediate H&S of employees at NRCan laboratories. Several administrative non-compliance situations were noted. These will be captured in a management letter to be provided to the responsible manager, as well as SSEMD.

OBSERVATIONS

Departmental H&S Risk Profile

The H&S Program planning process is not based on a Departmental level H&S risk profile. The funds to support the H&S Program are not adjusted to mitigate risk exposure. As a result, the H&S Program plans may not focus on highest H&S risk areas.

Although H&S has been identified as a significant risk, there is no Departmental H&S risk profile resulting in an inability to identify what hazards require priority mitigation at what locations. A risk profile would enable NRCan to prioritize resources and set timelines to mitigate unacceptable risk events.

Each Sector is expected to develop H&S Program plans. As a result, NRCan has several H&S Program plans (12 if each Sector and each branch reporting to the DM is counted). The lack of a common approach to developing these plans does not provide an integrated approach to mitigating risk with available resources.

H&S Training Program

Employees are not consistently completing legally required H&S training. Although some personnel have WHMIS, emergency response, and other H&S training, compliance is only partial. As a result, NRCan is not meeting legal requirements for H&S training.

The *Departmental OHS Policy* requires that ADMs “ensure that sectoral managers and employees have adequate resources and training ...”. It was observed that Departmental requirements for minimum acceptable H&S training for laboratory related workers is not defined. As a result, each Sector and each site audited was applying different H&S training requirements to employees performing similar work.

Although legal requirements have been identified, senior site personnel were not consistently aware of the associated training requirements resulting in incomplete H&S training plans. Mandatory H&S training was not completed for all interviewed employees (WHMIS, TDG, emergency measures...) at 2 of the 4 sites sampled. H&S Workplace Committees have a large influence on the H&S Program, but many committee members are untrained although required to be by *CLC Part II*.

The extent to which Sector H&S Coordinators must meet recognized credentials, such as the Canadian Registration Board of Occupational Hygienists or Canadian Registered Safety Professionals, is not defined. H&S Coordinators overseeing facilities with laboratories have varying credentials although the role is pivotal to H&S in these high risk areas.

Oversight, Monitoring and Reporting

H&S monitoring activities do not include the full range of activities required in *CLC Part II*. Minimal Departmental oversight is being exerted. As a result, senior management is receiving incomplete information for decision making raising legal and other risks related to H&S.

Workplace H&S inspections are occurring. The intent of these inspections is to flag worker concerns and report these to management. The inspections are not to be interpreted as equivalent to the depth of an inspection that an H&S expert would perform.

SSEMD has a budget of less than \$10,000 and 2.5 FTEs to provide governance, implementation, and oversight of the H&S Program. NRCan has over 15 large laboratories with biological, chemical, physical and radiological hazards. This work environment requires specialized resources for managing H&S. SSEMD lacks the capacity to perform

H&S audits and compliance monitoring at NRCan locations due to the lack of personnel and funds. As a result, items that require specialized knowledge, such as lifting devices, toxicology, and ventilation systems, are not being inspected by competent personnel. The level of expertise required is beyond what a workplace H&S Committee can be expected to have.

In order to complement workplace inspections, H&S professionals need to monitor workplaces for compliance. SSEMD is not effectively monitoring and identifying problems:

- Some laboratory employees are working without legally required records of Workplace Hazard management Information System (WHMIS) training;
- Site emergency plans are regularly tested for fire drills, but are only occasionally tested for other emergency events such as large chemical spills;
- While chemical management is excellent at 555 Booth St, the Canadian Explosives research Laboratory (CERL), and Geological Survey of Canada in Halifax, NS, the Canadian Forestry Service in Québec do not have a centralized inventory, thereby making it difficult to confirm adequate emergency response mechanisms for facility-wide emergencies; and
- Sectors and their facilities independently develop H&S procedures and guidelines. Several documents observed during the audit, such as laboratory safety guides and emergency plans, were developed by well intentioned employees with no H&S education and experience. As a result, these procedures and guidelines may not address the true H&S needs of a facility.

H&S Policy Committee

Although identified as a problem by 4 workplace H&S committees, the Departmental H&S Policy Committee has not discussed the following situations which have been occurring for some time:

- All National Capital Region (NCR) sites visited had issues related to building conditions. Although no immediate dangers were present, site managers had to make alternate arrangements for potable water, fume hood and laboratory area ventilation, and building structural integrity until they could determine what group (Sector, Real Property Management Division (RPM), or OGD site manager) was accountable for each problem. Lengthy delays (several exceeding 1 year) occurred in problem resolution.
- The NCR has a service agreement with another government department for the provision of real property management services. At the time of the audit, it was not clearly documented or understood by all site managers what H&S accountability the service provider has.
- Certain locations had undertaken building modifications without the authorization to proceed from RPM. As a result, construction hazards were not assessed as per NRCan H&S safety protocols before work proceeded.

Roles and Responsibilities

Unclear H&S service expectations have led to gaps in monitoring and reporting. The Canadian Forestry Service (CFS) and Earth Sciences Sector (ESS) each have a service agreement in place with SSO to deliver H&S services. The description of the services is “health and safety” without listing any tasks or responsibilities. This has led to a lack of clear accountability between groups in a highly regulated area that impacts the well being of employees.

One Sector was under the impression that SSO was responsible for reporting on H&S since a service agreement existed. The H&S Accountability Framework states that the H&S Coordinator is responsible for monitoring and reporting, not SSO. As a result of unclear roles and responsibilities, one Sector is not fully reporting on H&S. At the time of the audit, the SSO H&S person designated for ESS Halifax had not been on site, participated in H&S committees, nor communicated about H&S with ESS Halifax since the creation of SSO in January 2005.

RECOMMENDATIONS AND MANAGEMENT RESPONSE

Recommendation 1

The ADM of CMS, in consultation with Sector ADMs, complete an integrated Departmental risk profile for H&S and use this profile to guide Sectors in developing and maintaining their annual H&S Plans by September 2008.

Management Response 1

CMS concurs with this recommendation and will collaborate with sector ADMs and organizational equivalents to complete an all-encompassing departmental risk profile by May 2008. This comprehensive exercise will examine all issues raised in the audit including a review of roles and responsibilities to ensure compliance with the Departmental Security, Safety and Emergency Management Accountability Framework. It will also include an assessment of shortcomings relating to real property, inventories, workplace inspections and other aspects identified in the report. The overall intent of the exercise will be to provide an accurate national picture of key program areas where H&S should be enhanced, to assist and guide Sectors in the development and maintenance of their annual H&S Plans.

Recommendation 2

Sector ADMs, in consultation with the ADM of CMS, confirm mandatory H&S training requirements for all staff and managers, communicate these requirements, and report on H&S training status annually to the H&S Policy Committee by September 2008.

Management Response 2

CMS concurs with this recommendation and will communicate with sector ADMs and organizational equivalents. The Departmental risk profile will serve to identify where H&S training enhancements are required. Completion of this commitment is expected by June 2008.

Recommendation 3

The ADM of CMS, in collaboration with Sector ADMs, develop and implement H&S monitoring activities and report compliance status to the Departmental Management Committee (DMC) on a yearly basis by December 2008.

Management Response 3

CMS concurs with this recommendation and, in collaboration with sector ADMs and organizational equivalents will develop and implement H&S monitoring activities and report compliance status to DMC, on a yearly basis. Completion of this commitment is expected by June 2008.

Note about specific issues:

By December 31, 2007:

- *Roles and responsibilities between CFS, ESS an SSO will be clarified.*
- *The H&S accountability between PWGSC and NRCan will be documented.*
- *Measures will be implemented to ensure that building modifications are not undertaken without pre-authorization by RPMD.*
- *A review mechanism will be in place to ensure that the H&S Policy Committee and senior management are apprised of outstanding OHS building/facilities-related issues, to prevent lengthy delays for resolution.*

By March 31, 2008:

- *All H&S workplace committees nationally will be trained.*