

CITY OF VANCOUVER INTERNAL AUDIT REPORT Safety Compliance Audit

Distribution:

Audit Committee City Leadership Team KPMG Laurence Beatch, Director, Organizational Health & Safety Mark Schwark, Director, Green Operations, Engineering Services

EXECUTIVE SUMMARY

June 30, 2021

The Safety Compliance Audit was initiated to assess whether internal controls are effective and key business processes are efficient and support the City's compliance to safety regulations.

In general, the City has an established and comprehensive Corporate Safety Program with upto-date policies and procedures in place. Strengthening processes related to incident investigations and performance reporting will improve the City's compliance to safety requirements and enhance awareness regarding the importance of workplace safety.

The more significant findings and recommendations are:

E.1 Ensure timely completion of investigations in accordance with safety regulations

The completion of a full investigation within 30 days of a reported safety incident is a requirement of the Workers Compensation Act. Further communication to business units and emphasis on adherence to this requirement is needed to improve the timely completion of safety related investigations, and to prevent further incidents and injuries organizationally.

E.2 Provide safety performance metrics to business unit management

The Organizational Health & Safety department manually tracks safety performance metrics on a quarterly and annual basis. Ensuring safety performance information is made available to senior management on a timely and regular basis will improve monitoring, accountability and identify areas for improvement within the safety program.

E.3 Enhance awareness of adhering to safety protocols near utilities

Providing refresher training to ensure that safety precautions are being taken when conducting maintenance or construction work near utility lines is critical to preventing and mitigating potential exposure to hazards.

E.4 Conduct safety audits in accordance with municipal safety standards

Periodic audits can help assess the effectiveness of safety operations and emphasize the importance of safety in the workplace. Management has agreed to ensure safety audits are conducted on an ongoing basis in accordance with BC municipal safety standards.

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A. BACKGROUND

The City of Vancouver is required to comply with the Occupational Health and Safety Regulation and Workers Compensation Act administered by WorkSafeBC in order to ensure the safety of staff while carrying out their duties in the workplace.

Organizational Safety Program Roles and Responsibilities

The Organizational Safety division within the Occupational Health & Safety (OHS) department in Human Resources is responsible for the oversight and establishment of key corporate safety programs and policies for the City.

Operations are responsible for site-specific safety programs. Additionally, specialized safety groups in Engineering Services and Vancouver Fire & Rescue Services oversee safety for their operations. The City's safety teams work collaboratively on monitoring WorkSafeBC safety standard requirements and supporting compliance in their respective areas.

Business unit management and supervisors are responsible for developing and implementing departmental and site-specific safety programs. This includes ensuring staff adhere to safety requirements within their area, including completion of worksite inspections, reporting of injuries, incident investigations, and compliance with safety policies.

In 2020, the Occupational Health & Safety department and business unit safety groups had a leading role in establishing the City's COVID-19 Safety Plan as part of the pandemic response. In addition to maintaining the core ongoing safety program, the OHS group provided guidance for the development of departmental site safety plans to ensure the City's compliance with Ministry and Public Health orders and WorkSafeBC requirements.

Safety Policies, Procedures and Safety Approach

The City of Vancouver Safety Approach outlines the commitment from the City Leadership Team in prioritizing health and safety in all City operations, and setting clear safety expectations and accountability. A shared safety culture can help reduce injuries and fatalities in the workplace.

The Occupational Health & Safety Policy (ADMIN-021) establishes the City's commitment to providing a safe workplace. It outlines the responsibility of employees, supervisors, managers, Joint Occupational Health and Safety Committees, and the City Leadership Team for ensuring workplace safety and contributes to a safety culture.

The Safety Management System (SMS) Manual was updated in 2020 and provides a comprehensive overview of the safety programs in place to address general workplace hazards at the City. The SMS provides a foundation for the safety program and is supplemented by operating procedures, forms, and reports.

WorkSafeBC Insurance Premium

WorkSafeBC experience rate premiums are set annually for municipalities based on safety performance relative to peers. 2021 rates are based on the City's performance from 2017-2019. The following charts outline the City's safety performance trends in prior years (WorkSafeBC Employer Report for City of Vancouver as of June 30, 2021).



Experience Rating % Trend

-6.1 %

\$1.91

\$1.02

\$4.06

-8.4 %

\$1.75

\$0.96

\$3.82

-14.8 %

\$1.77

\$1.04

\$4.16

-9.7 %

\$1.98

\$1.10

\$4.38

0.5 %

\$2.61

\$1.30

\$5.20

ER%

Net Rate

Rate at Maximum Discount

Rate at Maximum Surcharge

-2.5 %

\$1.98

\$1.02

\$4.06

The 2021 City of Vancouver premium rate is \$2.61, compared to \$1.98 in 2020, partly due to changes in the base rate calculation for municipalities in addition to a decline in safety performance in recent years. The maximum insurable earnings threshold and wage rate used in the calculation increased to \$100,000 (from \$87,100) for 2021 which resulted in an increased rate to cover additional claim costs.

Mental health related claims represent 6% of claims by volume and 24% of claim costs. Emphasis on both physical, psychological wellness and safety in the workplace is important to the overall safety program.

Safety Incident Tracking System

A safety incident case management software is used for incident reporting, tracking, and investigations. Supervisors are required to report injuries or safety related incidents in the system, conduct follow up investigations and address corrective actions to prevent further injuries.

B. SCOPE

Our audit objective was to provide assurance that the existing internal controls and business processes are adequate and effective to support compliance with the Workers Compensation Act, WorkSafeBC Occupational Health and Safety requirements, and the City's Occupational Health and Safety policies. Our work included:

- Interviews with key management and staff in safety roles at the City;
- Review of regulatory requirements and City safety policies and procedures;
- Analysis of data pertaining to safety incidents reported for the period from January 1 to December 31, 2020;
- Examination of safety investigations and corrective action procedures; and
- Review of site workplace inspections documentation.

The audit is not designed to detect fraud. Accordingly, there should be no such reliance.

C. CONCLUSION

In our opinion, internal controls over safety compliance require improvement. In general, the City has an established and comprehensive Corporate Safety Program with up-to-date policies and procedures in place. Strengthening processes related to safety incident investigations, performance reporting and identified focus areas will improve the City's compliance to safety requirements and enhance awareness regarding the importance of workplace safety.

Findings and recommendations have been discussed with appropriate management and responses incorporated in this report.

D. RISK ANALYSIS

The potential significant risks considered if controls were not in place are:

- Injuries or fatalities;
- Non-compliance with regulatory requirements;
- Increased financial costs from insurance premiums or fines;
- Reduced productivity and impacts to service for the public from loss of time; and
- Loss of reputation as a healthy and safe work environment.

E. AUDIT ISSUES, RECOMMENDATIONS AND MANAGEMENT RESPONSES

E.1 Ensure timely completion of investigations in accordance with safety regulations

Incident investigations in accordance with WorkSafeBC requirements

Under the Workers Compensation Act legislation (section 72), an employer is required to complete a full investigation after the occurrence of a safety incident and submit the report within 30 days to WorkSafeBC. The purpose is to determine the cause of the incident, report any unsafe conditions and assess any corrective actions to prevent similar incidents.

Ensuring incident investigations are completed on time

Overall for 2020, 73% of reported incidents at the City had a full investigation completed within 30 days. While this is a slight improvement from the prior year, continued efforts are needed across all business units to ensure the timely completion of incident investigations.

The Organizational Health & Safety division generates a report highlighting outstanding investigations every two days, which is provided to business unit safety leads for follow-up with frontline operations supervisors. Business unit safety leads provide safety guidance and support. However, it is the responsibility of direct supervisors of the injured employee to complete the investigation.

Recommendation:

E.1.1 The Director, Organizational Health & Safety and Director, Green Operations should work with business units and branch management leads to re-communicate the requirement to complete safety incident investigations on a timely basis. General Managers or a senior management delegate should be notified of any significant delays in investigations in their department. This is recommended to be in place by October 30, 2021.

Management Response:

Please check one:	Please check one:
Agree with the findings	Agree with the recommendations
Disagree with the findings	Disagree with the recommendations
Management Action Plan:	

Director. Organizational Health & Safety:

The timely completion of the initial and 30 day incident investigations allows for early corrective action and addressing of any safety concerns. We concur that this needs to be reemphasized. As noted, Organizational Health & Safety division generates a report highlighting outstanding investigations every two days, which is provided to business unit safety leads for follow up with frontline operations supervisors. Additionally every month we review all outstanding and non-completed investigation and reach out to the appropriate business units to prompt action It is important that each business unit owns safety and is accountable for safety performance including the completing of incident investigations and any actions flowing from the same. We concur that General Managers or a senior management delegate should be notified of any significant delays in investigations in their department. We will include in our messaging the responsibility for the business unit leaders to ensure they are aware of the delays and more particularly any significant delays in those in the operations accountable for completing the investigations. Our re-messaging will completed by October 30, 2021.

E.2 Enable safety performance metrics information for business unit management

Monitoring and reporting on safety performance metrics is critical to assessing the effectiveness of a workplace safety program.

Improve safety performance reporting process

The Organizational Health & Safety department currently tracks safety performance metrics such as number of time-loss injuries, health care claims, and attendance rate. Although metrics information is presented at Joint Health & Safety Committee meetings on a quarterly basis, the effectiveness of the performance reporting process can be improved by providing department or business unit specific metrics directly to senior management on a timely and regular basis.

Types of key safety metrics include:

- Number of injuries by department and by division;
- Number and percentage of preliminary and full investigations completed on time;
- Number and percentage of workplace inspections completed on time; and
- Injury types by department (musculoskeletal, motor vehicle, strike/hit, and slip/fall).

The Engineering Services safety division currently reports monthly safety metrics to Engineering branch managers for review. The Organizational Safety division indicated that preliminary planning is underway to implement a business intelligence (BI) tool to assist with the safety performance metrics process.

Regular reporting of performance metrics can provide management with valuable information on how well the safety programs in their departments are operating and highlight areas for improvement and training.

Recommendation:

E.2.1 The Director, Organizational Health & Safety should enhance the performance metrics reporting process by ensuring availability of safety metrics performance information to business unit senior management on a timely and regular basis. Automation of the metrics reporting process should be enabled where feasible. This is recommended to be in place by December 31, 2021.

Management Response:

Please check one:	Please check one:
Agree with the findings	Agree with the recommendations
Disagree with the findings	Disagree with the recommendations
Management Action Plan:	

Director, Organizational Health & Safety:

Appropriately, operations are accountable to know their performance metrics and as such should access and review metrics on a regular and timely basis. We recognized the need for improved business information (BI) tools to better enable operation to access and review metrics. We have met with FP&M and they believe they can adapt the BI to better enable operations to review the identified metrics. Part of the required work to enable the tool includes updating data. Human Resources will resource this component.

Subject to FP&M being able to deliver an enhanced BI tool by year end an enhanced tool should be available for the business units to more easily access and review their data on a regular and timely basis.

E.3 Enhance awareness of adhering to safety protocols near utilities

Safe work procedures for working near utility lines

WorkSafeBC has established guidelines on safe work procedures while excavating, drilling, or digging to prevent damage to utility facilities such as gas, electrical, water or communication lines. Safety precautions recommended by WorkSafeBC include locating and marking buried utilities, using non-powered equipment when near facilities, and assessment of alternative evacuation techniques to avoid damaging existing lines.

The City also has procedures in place (Excavating and Shoring Program SMS P 006) which outline safety requirements for managing hazards associated with excavation and shoring.

2020 utility contact incidents

There were 37 utility contact incidents affecting gas, power, or water facilities in Engineering in 2020, which is a 42% increase compared to 26 reported incidents in 2019. Engineering indicated that this is partly attributed to enhanced awareness overall of the requirement to report utility strikes as a result of ongoing related project work in this area.

Excavating near utilities project

The Exposing Underground Utility Lines process improvement project was launched in 2020 to mitigate the risk and incident rate for utility strikes. Work completed in the early phases of the project include determination of root causes for incidents, with further work planned in 2021 to update Standard Operating Procedures.

Excavating Near Utilities policy

The Excavating Near Utilities policy was initiated by the Engineering Operations Support and Safety Branch (OSSB) and approved by the General Manager, Engineering in 2020. The policy defines how excavation work should be conducted near underground and overhead utilities to mitigate the risk of damage. In addition, it outlines the sections of the WorkSafeBC Occupational Health & Safety Regulations that the City must comply with. OSSB indicated that the policy was communicated through Safety Talks and there was sign off from branch divisions in acknowledgement of the new policy.

Risk of exposure to hazards

Excavation involves working in restrictive spaces which creates challenges to ensuring worksite safety. As damage to utility lines can pose a serious risk due to potential exposure to hazardous substances, it is imperative to adhere to safety precautions near utilities. Additionally, there can be significant penalties assessed by WorkSafeBC if the City is deemed to be conducting unsafe work near utilities.

Recommendation:

E.3.1 The Director, Green Operations Division should work with the Engineering Services Senior Management to provide refresher training for branches that work around utilities to

emphasize the importance of adhering to safety precautions when working near utilities. This is recommended to be completed by March 31, 2022.

Management Response:	
Please check one:	Please check one:
Agree with the findings	Agree with the recommendations
Disagree with the findings	Disagree with the recommendations
Management Action Plan:	

E.4 Conduct safety audits in accordance with municipal safety standards

Safety program assessment aligned with BC Municipal Safety Association requirements

To continuously improve the City's safety program, the Organizational Health & Safety division implemented a safety audit process (SMS P 029 Inspection Audit Review Program) that is aligned with BC Municipal Safety Association Certificate of Recognition (COR) requirements. The COR certification program is a recognized safety standard for municipalities.

Safety audits conducted by Organizational Safety

In 2019, the Safety division conducted safety audits in the following areas: Parks & Recreation (Community Centres), Evans Yard (REFM & Park Board Shops), and Mountain View Cemetery.

The safety audit program was on hold in 2020 as the OHS division led the establishment of the City's COVID-19 Safety Plan and setting guidelines for departmental restart safety plans.

Ensuring effectiveness of safety operations through periodic audits

In addition to being able to assess the effectiveness of safety operations, periodic audits can help to emphasize the importance of worksite safety and reduce injuries. There are also financial incentives for strengthening a safety program through lower insurance premiums and qualifying for a potential WorkSafeBC rebate of 10% of assessable payroll through the COR certification program.

A risk based audit approach allows for effective use of limited organizational safety resources. In situations where site visits are not feasible, consideration should be given to deploying alternative methods including assessment surveys, virtual audit verification, and use of data analytics.

Recommendation:

E.4.1 The Director, Organizational Health & Safety should ensure safety audits are conducted on an ongoing basis in accordance with BC municipal safety standards. This work should continue once organizational safety staff resources are available following the COVID-19 pandemic response, or by March 31, 2022.

Management Response:	
Please check one:	Please check one:
Agree with the findings	Agree with the recommendations

Disagree with the findings

Management Action Plan:

Director, Organizational Health & Safety:

Organizational Health and Safety concurs with the need for safety audits with the selection of where audits are conduced being risk based. We anticipate returning to four audits per year effective 2022.

E.5 Enhance periodic monitoring review of safety incident data

Safety incident case management system

A City-wide safety incident case management system is used for reporting and storing information of safety related incidents. When an injury occurs at a worksite, operations supervisors and managers are required to enter details in the system, such as employee name, incident date, type of injury, and date reported.

Monitoring data accuracy and completeness

Safety incident data for 2020 was reviewed and assessed for accuracy and completeness. While the safety incident information appeared to be generally accurate overall, data errors were noted for a minority of entries including duplicate items, blank or incorrect dates.

Staff cited potential reasons for data inaccuracies could be due to the learning curve associated with using the system due to infrequent injuries in some departments and files not being closed out properly.

Implement process for periodic review of safety data

As the safety incident information stored is used for compliance and performance reporting, monitoring the accuracy and completeness of data is key. Implementing a regular review process to identify and report data anomalies to responsible business unit management can be a valuable tool in improving the effectiveness of the safety program.

IT software solutions review for health and safety compliance

OHS management indicated that Supply Chain Management has been engaged to conduct a formal market scan of software solutions from a health, safety and compliance perspective. This work will align with the long-term planning for the Human Resources IT road map relating to all key HR systems.

Recommendation:

E.5.1 The Director, Organizational Health & Safety should enhance the data review process to ensure accuracy and completeness of safety incident data, such as through the use of exception reporting. Data exceptions should be provided to business unit management for follow up. This process is recommended to be in place by December 31, 2021.

Management Response:

 Please check one:
 Please check one:

 Agree with the findings
 Agree with the recommendations

Disagree with the findings

Disagree with the recommendations

Management Action Plan:

Director, Organizational Health & Safety has accepted the associated risk and outlined the following compensating controls:

As noted in E.1.1, the timely completion of the initial and 30-day incident investigations allows for early corrective action and addressing of any safety concerns. Organizational Health & Safety division generates a report highlighting outstanding investigations every two days, which is provided to business unit. Additionally, monthly we review all outstanding and non-completed investigation and again reach out to the appropriate business units to prompt action. Knowing some errors flow from lack user familiarity with occasional system users we have and continue to provide phone support and help with data entry guidance on an as needed basis.

The current system used by the City, has significantly improved our ability to manage health and safety however has a number of system limitations. This includes the ability to run automatic exception reports. Recognizing this, Organizational Health and Safety in partnership with Supply Chain is issuing a formalized Request For Information (RFI) from prospective vendors in Q4 2021. The plan is to consider available solutions and options that will enhance the City's ability to provide oversight and manage health and safety. The RFI will include the ask for solutions that include exception reporting to verify accuracy and completeness of data and enable management to identify areas to strengthen compliance and make informed decisions regarding the safety program and areas that need extra safety oversight.

Should there be available solutions that will better enable operations to verify the accuracy and completeness of their submissions and prevent / reduce errors in operational entry and completion of their tasks an RFP will be issued in 2022.

We certainly understand the ask for, and normally would support interim measures. In this case, creating additional data exception reports would require a manual process and additional staff resources that are not readily available. The additional manual reports will not result in improving compliance or safety outcomes as safety and compliance opportunities are captured by our reporting outstanding investigation every 2 days.

It is our recommendation to continue with the current practices concurrent with looking for improved automated exception reporting through the RFI and RF process.

Recognizing the above identified compensating safety controls and noting additional manual reports will not result in improving safety outcomes management accepts the risk associated with our recommendation to continue current practices concurrent with looking for improved automated exception reporting through the RFI and RFP process.

We welcome the opportunity to further engage on this.