
 <p>THE CITY OF <b>CALGARY</b> ENVIRONMENTAL &amp; SAFETY MANAGEMENT</p>	<b>2014 Q3 and Q4 CORPORATE ENVIRONMENT, HEALTH &amp; SAFETY MANAGEMENT SYSTEMS AND COMPLIANCE REPORT</b>
	<b>Reporting period: 2014 July 01 to 2014 December 31</b>

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## Significant Incidents


A significant incident is defined as:

- A hazardous or dangerous materials spill/release;
  - An incident or worker injury that is reportable to Alberta Occupational Health and Safety (OHS) as per the Occupational Health and Safety Act;
  - An event with the potential to compromise the integrity of environmental assets, and/or that may represent potential liability concerns or reputation risks to The City;
  - Collapse or upset of heavy equipment or building component, or regulatory infractions or incidents with likelihood of significant regulatory interaction.
- August – Supply Management, Environmental & Safety Management
    - A pressure test indicated a potential leak in the fuel dispensing equipment associated with the refuelling station located at the Manchester Operations Workplace Centre. The regulator (Alberta Environment and Sustainable Resource Development) was notified of the leak, and a subsurface investigation was completed at the fuelling station.
    - During the investigation of the underground fuel dispersing lines, a suspect above ground fitting was discovered on the diesel line just below the diesel dispensing unit, and was immediately replaced. A leak from the gasoline line was also detected and the ball valve, seal and coupler on this line were replaced in the sump.
    - Another pressure test was completed and all fuel lines have subsequently passed the pressure tests. Additional groundwater monitoring wells were installed during a subsurface drilling investigation, and groundwater testing was completed to determine the extent of the contamination.
    - Water from a sump located under the Logistics/Central Stores Building A Parkade at Manchester Centre was found to contain levels of hydrocarbons that exceeded current guidelines.
    - An on-site treatment system has been installed and is now operational. The system is treating water potentially contaminated with petroleum hydrocarbons collecting in a sump and in front of the Logistics/Central Stores building at Manchester Centre and discharging to The City's sanitary sewer system.
  - September – Water Resources & Water Services (WR&WS)
    - Alberta Environment and Sustainable Resource Development (AERSD) were notified by WR&WS that The City failed to provide a written Erosion and Sediment Control (ESC) Plan for a flood reconstruction site. A follow up letter

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was submitted within the required seven days summarizing the oversight and planned corrective actions.

- An enhanced section on environmental and safety compliance has been developed as part of the 5-day Applied Project Management course. A “Review, Learn, Improve” session outlining the regulatory process for flood recovery projects was completed with affected stakeholders, including steps to be taken to strengthen compliance.
- October – Environmental & Safety Management (ESM)
  - A power line on the closed (inaccessible) portion of Lynnview Road SE was struck by a track-hoe operated by a construction contractor. The contractor was on the site as part of a capping and drainage plan being installed at the former Imperial Oil Refinery site. The strike caused the power lines to arc however there were no injuries. The utility provider was notified of the situation and arrived at the site to splice the affected lines.
  - The contractor submitted an incident investigation report to The City and the root cause analysis indicated that the operator did not lower the boom to lowest possible position and no “overhead lines” signage was in place. Because the track-hoe was travelling eastbound at sunrise the sun being in the operators eyes was another contributing factor. Prior to leaving, the lines were flagged. The contractor also placed “overhead power line” signage on either side of the lines, and communicated the incident to minimize the risk of recurrence.
- October – Community and Neighbourhood Services (CNS)
  - An employee returning to the office took a short cut by leaving the walkway and crossing the landscaped area. He tripped on some edging material, fell to the ground on the cement and incurred an injury. The CNS supervisor completed a thorough investigation, as required by Alberta Occupational Health and Safety (OHS) and corrective actions were taken to prevent further similar incidents. These included removing the raised landscaping material and discussing the incident with staff to ensure they use the proper walkways provided to enter and leave the facility.
- December – Water Services (WS)
  - A subcontractor working on behalf of WS was hydro excavating to expose a residential service line. He slipped on a muddy retaining wall while holding a high pressure water wand. The water stream penetrated the workers arm prior to activation of the emergency-stop mechanism. An incident investigation was completed and preventive actions implemented to minimize the risk of a recurrence, including a review of operating procedures and hazard identification.

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## Legislation Update


- South Saskatchewan Regional Plan (Province of Alberta Land Stewardship Act)

In 2008, the Province established regional planning as a priority for Alberta through the adoption of the Alberta Land Use Framework and the Alberta Land Stewardship Act. Under the Framework, the Alberta Land Stewardship Act and the Municipal Government Act together provide the Provincial authority for the implementation of the South Saskatchewan Regional Plan (SSRP). The SSRP came into effect 2014 September 1, parts of which are binding and legally enforceable. The City must file a “compliance declaration” pursuant to the *Alberta Land Stewardship Act* (20.2) within five years of SSRP adoption, to confirm that The City’s regulatory instruments comply with the SSRP. The Calgary Metropolitan Plan (CMP) (pending provincial approval) will be required to align with the SSRP, as will the Municipal Development Plan and the Calgary Transportation Plan. The Province is authorized to monitor cumulative impacts related to air quality, surface water quality and biodiversity. The Province is able to issue orders to which local governments are bound, with no ability to appeal. Penalties for noncompliance are not yet defined.

A collaborative group has been struck and is being led by Planning, Development & Assessment (PDA) to address the compliance declaration and range of work required to implement the SSRP. Affected business units are being engaged and once the requirements and impact to The City are more clearly defined, a report will be prepared for Council.

- Workplace Hazardous Materials Information System (WHMIS) – Global Harmonization Systems (GHS)

Global Harmonization Systems will be incorporated into the existing Workplace Hazardous Materials Information Sheet (WHMIS) Regulations. The Federal Government is expected to implement the new WHMIS/GHS program effective 2015 June 1 to coincide with USA Occupational Safety & Health Administration (OSHA) regulations. This means that Safety Data Sheets (SDS) and hazard labelling will require updating. Because of changes to the SDS and the creation of new symbols, The Corporation will need to ensure updated training is delivered to City workers who work with or in near proximity to chemicals. A multi-phased transition period has been established under the federal Hazardous Products Act for all impacted parties. As of 2017 June 1, all manufacturers, importers and distributors of hazardous products must comply with the WHMIS 2015 regulations. Federally regulated employers must comply with WHMIS 2015 by 2018 December 1. The transition period for employers not regulated by the federal government (e.g. The City) is yet to be established by the province, which must change its OHS regulations to reflect WHMIS 2015.

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A gap analysis for training needs is being completed across The Corporation, and a project plan will be developed to ensure The City meets the requirements of the new legislation.

### **Regulatory Infractions**

- November – Water Resources & Water Services (WR&WS)

A potentially non-compliant situation at a construction project was reported to regulators (Environment Canada, Department of Fisheries and Oceans [DFO] and Alberta Environment and Sustainable Resource Development [AESRD]) related to the Nose Creek sanitary sewer trunk project. The project includes the construction of a steel siphon line underneath Nose Creek, in Laycock Park between 32<sup>nd</sup> Avenue NE and Stoney Trail NE.


Construction of the project began under a Code of Practice notification and the isolation method for the project was designed for a Class D water body crossing. The water body classification was changed from a Class D water body to a Class C water body between approval of the drawings and the start of construction. The water body classification system is based on the relative sensitivity of the fish habitat, with Class A being the highest sensitivity and Class D being the lowest. The change in Classification was not detected until after construction began.

The consultant determined that the isolation structure did not meet the requirements for a Class C water body under the Code of Practice. The Consultant notified AESRD, DFO and Environment Canada. A stop-work order was issued by the project manager, until a resolution to the issue could be developed. Although the City did not have the proper approvals in place to undertake the work (Water Act and Public Lands), AESRD allowed The City to remove the non-compliant isolation structures prior to the fisheries restricted activity period (April 1 to May 31 2015) and the spring freshet (higher river flow). The work was completed in March 2015. The project will be completed once the proper approvals have been obtained.

### **Audit Activity**

The City's environmental management system is based on the ISO 14001 international standard for environmental management. The City holds 11 business unit level ISO 14001 registrations. A requirement of registration is that there is both an internal and external audit program. Internal audits assess conformance to the elements of the ISO 14001 standard as well as compliance to regulatory or legal requirements. External audits assess conformance to the ISO standard including the effectiveness of the internal audit program and the process for evaluation of regulatory compliance.

Twelve audits were completed during the reporting period of 2014 July 01 to 2014 December 31:

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- Five internal combined ISO 14001 and regulatory compliance audits were completed by City staff:
  - Calgary Fire Department, Roads, Waste & Recycling Services, Water Resources & Water Services and Calgary Transit
- Five external surveillance audits were conducted by The City's external Registrar PricewaterhouseCoopers (PwC):
  - Recreation, Parks, Waste & Recycling Services, Transportation Infrastructure and Corporate Properties & Buildings
- Two external re-registration audits were conducted by The City's external Registrar PricewaterhouseCoopers (PwC):
  - Roads and Calgary Fire Department


There were five areas of potential concern related to regulatory compliance identified during the audits. These pertained to out of date inspections for some fire extinguishers and one alarm system, incomplete records of evacuation drills, improper waste manifest documentation and one facility was lacking smoke detection. There were no major nonconformities (major gaps in system standards) identified during the audits and all business units maintained their ISO14001 registrations.

Specific corrective and preventive action plans are being developed for each of the minor nonconformities documented in the audits. The corrective and preventive actions will be reviewed and assessed for effectiveness and implementation during the next scheduled audits throughout 2015 for the affected business units.


Positive management practices and initiatives noted during the audits include:

- Corporate Properties & Buildings (CP&B)
  - The Facilities Management division has recently developed funding decision-making criteria to assess whether or not to proceed with a project. The six point criteria include 'legislation and policy' which has environmental policy considerations embedded in it.
  - CP&B has developed an Environmental Report targeted to other business units where the continuing efforts to integrate sustainable practices into the decision-making process is highlighted. In addition to CP&B's targets and initiatives in Land Management, Air and Energy, Water and Materials, this report has a one page description of the ISO 14001 registration for CP&B and The City, and the associated requirements and benefits.
- Calgary Transit
  - Calgary Transit's environmental management system documentation is well maintained, updated in a timely manner and accessible to staff.



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- Employees continue to demonstrate a uniformly high level of environmental awareness of the potential environmental impacts of their activities and their roles in efforts to reduce and mitigate them.
- **Calgary Fire Department (CFD)**
  - A new on-line training module has been developed for workplace inspections to promote more consistent completion of this system element. A new on-line training module is in development for the operation of household hazardous chemical drop-off sites, to improve the risk management of these facilities, which is a shared program between CFD and W&RS.
  - A risk based approach to planning internal environmental management system and compliance audits has been developed. The risk levels for the various sections of the organization have been defined in order to determine the priority and frequency of the areas and associated legal and other requirements to be audited each year.
  - In partnership with Parks, CFD has identified new pump and aerial training locations. The resulting benefits include less fuel consumption and greenhouse gas emissions due to the proximity of these locations, as well as improved natural vegetation growth and reduced dryness, reducing the potential for grass fires and erosion.
- **Waste & Recycling Services**
  - The newly developed Business Continuity & Emergency Management (BCEM) plan identified essential services and resources needed during an emergency. The plan should facilitate improved control of environmental impacts in the event of an emergency.
  - An effective roll out of the updated substance release reporting process and associated training was evident.
- **Roads**
  - The EnviroSystem documentation in place is comprehensive and available electronically, improving accessibility to all Roads staff.
  - The Contractors Environmental Responsibility Package (CERP) was signed by all workers on the Palmer Bridge project, not just the manager or owner, indicating a wide circulation of this information.

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- Inspection forms used at the crusher site were customized to the site specific risks.
- The emergency response drill schedule covers all areas of the business to help ensure testing of all activities over time.
- Water Resources & Water Services
  - Water Services and Water Resources are working proactively with the provincial government to develop and align policies to protect the watershed, stream and riparian area, as legislative and policy changes are considered and implemented.
  - Targeted and effective public water conservation programs continue to be developed and implemented such as the low flow toilet rebate, fix-a-leak, yard smart and rain barrels programs.
- Transportation Infrastructure
  - Erosion and sediment controls are consistently developed, implemented and maintained during construction projects.
  - Project Environmental Construction Operations (ECO) Plans were consistently observed to be accessible and of high quality and the contractors were diligent in implementing the provisions.
  - Frequent and thorough ECO Plan/ESC inspections are conducted by Project Managers, consultants, Transportation Infrastructure, Environmental & Safety Management and contractors.