

JOURNAL

Canadian Fire Alarm Association • Association Canadienne d'Alarme Incendie

Detecting fraudulent building inspections

Détecter les inspections de bâtiments frauduleuses



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Lowering the Alarm – Approaching Compliance in an Unregulated Industry

It all started in July 2018, the City of Toronto Auditor General, Beverly Romeo-Beehler, released a scathing report called "Raising the Alarm", identifying fraud, corruption, price fixing and a systemic lack of oversight by the Facilities Management Division related to a fire protection service vendor.

The story began with an anonymous report to the City of Toronto Fraud & Waste Hotline suggesting a fire and life safety vendor was providing shoddy reports and barely attending the site, putting our employees, the public and our building stock at risk.

The City's Auditor General and her team began an intensive investigation in partnership with Toronto Fire Services (TFS). TFS provided both technical expertise and conducted an independent, parallel investigation against the Ontario Fire Code requirements. York Fire Protection, and its various subsidiary shell companies, were bidding against each other to obtain City of Toronto contracts to provide Inspection, Testing and Maintenance service throughout City owned facilities ranging from critical infrastructure installations and emergency service stations to community centers and office space. Upon award of the contract, York Fire Protection submitted falsified reports based on 'drive by inspections' or in many cases, not attending the site at all. This was confirmed via building attendance logs, which confirmed their technicians (I am using this term VERY loosely in this case), did not sign in or they were signed in at a site in the west end of the City, yet reports and invoices were submitted by the same staff from multiple other sites at exactly the same time.

Staff tried, without success, to meet 'Dan Daniels', the Principal Engineer of York Fire Protection in person. 'Dan' went by multiple aliases, none of which were tied to a real person, and the photo on York Fire Protection website was a stock image found on countless other generic websites.

At the conclusion of the investigation, the Auditor General issued a comprehensive report detailing her findings, including 17 recommendations to the Head of the Facilitates Management division, the Chief of Toronto Fire and the City Manager, all of which were accepted by Council for

action. Additionally, Toronto Fire Service, through their parallel investigation, laid 58 charges under the Ontario Fire Code against York Fire Protection and its owner, Rauf Ahmad who was ultimately convicted on two sets of charges.

Following the presentation of the Auditor General's report in July 2018, the Facilities Management division created a Fire & Life Safety Task Force (the Task Force) to manage and coordinate the response to the Auditor General's recommendations. Their first task was to establish a baseline of compliance, documenting where the City stood at the time with fire protection services in all its buildings.

The City of Toronto owns approximately 2,500 buildings, which represents approximately 65 million square feet of floor space in occupancies made up of emergency service stations, critical infrastructure, long term care homes, childcare centers, shelters and recreational/community space along with residential and office spaces. With such a diverse portfolio, the City needed to know how good, bad or ugly the current state of compliance was within these sites. The Task Force retained the services of four fire protection consultants to audit all legally required Inspection, Testing & Maintenance (ITM) records in 10% of City-owned buildings (approximately 250) from across all City divisions, agencies and corporations. This review resulted in the auditing of records from over 60 fire protection companies who had provided ITM services to the City throughout 2018 and the first quarter of 2019.

How bad is it?

The results of the audit were damning. For the approximately 250 buildings audited, the City should have been in custody of 3,312 individual reports. The City and its vendors were only able to provide 1,737, or 52%, of the reports. A significant number of monthly, quarterly, semi-annual and annual reports were missing, incomplete or not conducted at all. The 1,737 reports were audited for compliance against the code requirements and only 61% of those reports were identified as compliant, meaning that

the overall state of compliance within the City buildings by mid-2019 was at approximately 32%, which was unacceptable in the City's eyes.

The audit results from the consultants were compiled, and several common trends were identified. For fire alarm annuals, detailed results are found in Table 1. Some of these issues were relatively minor (the system description was missing the manufacture's name or missing model numbers); however, the bulk of the findings identified complete sections missing (up to four sections), inconsistency between the report and the recommendations, and the system description changed year over year without any actual changes to the system - implying the report was submitted without anyone actually attending the site.

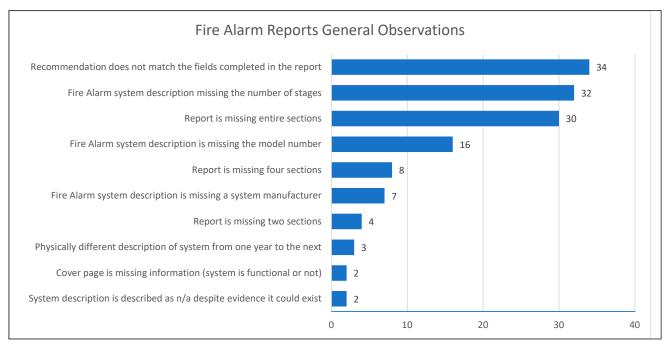


Table 1 – Fire Alarm Audit Findings

On the sprinkler annuals, detailed results are found in Table 2. The most serious issue identified the same recommendations year over year when documentation proves deficiencies were completed following year one, indicating the next year's reports were submitted fraudulently.

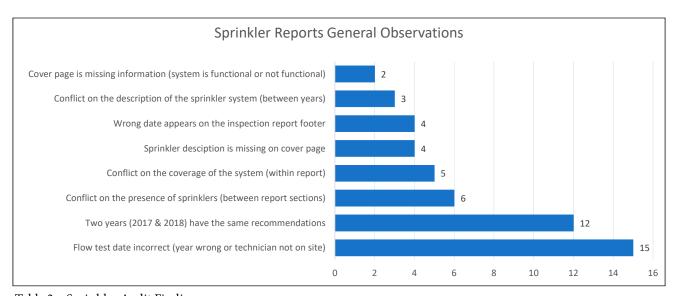


Table 2 – Sprinkler Audit Findings

Bumps along the road:

Since 2019, four additional fire and life safety vendors have been terminated by the City. Upon determining a vendor was non-compliant, our first responsibility is to inform the Senior Leadership Team of the investigation followed by notification to the Auditor General and the Fire Chief. Either the Auditor General or the Fire Chief can launch an independent investigation which may result in criminal fraud charges and/or charges under the Ontario Fire Code. For any fire and life safety vendor currently working for the City of Toronto or one who may participate in the future RFP when it is in the market, know that the City has a team of fire safety professionals and an armada of fire protection industry titans reviewing vendor's reports and work practices. We want compliance and safety for our employees, tenants and the public who occupy our buildings.

It's disheartening since the "Raising the Alarm" report was released in July 2018, the City terminated two vendors in 2019 and two in 2020, who were identified during site inspections related to the Covid-19 emergency.

In March the City began to convert community centres, arenas and other spaces into temporary respite/shelter sites to support the Covid-19 emergency response. As part of the site preparation process, the FLS Program Office conducted pre-occupancy inspections to ensure all FLS systems were compliant, which included reviewing the annual inspection records before walking the site. At one particular site, the emergency lighting system had been inspected only two weeks prior with the report identifying a fully operational and compliant system with no deficiencies. The FLS site inspection identified a completely non-functional emergency lighting system, with an example in Photo 1. The system had broken

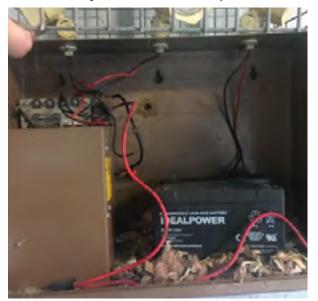


Photo 1 - Damaged Emergency Light

lights, disconnected batteries and more than five units with squirrel nests, chewed off wires and in one case, the remains of an electrocuted squirrel that had been there for many years. The emergency lights were installed at 20' A.F.F. yet the technician, who signed the inspection report attended the site with only a 4' step ladder. This system had not been properly inspected or maintained in many years.

The following week, during a pre-occupancy inspection of a City operated childcare centre that was poised to be reopened as a 24-hour emergency worker childcare centre, a problem with the sprinkler system was discovered. The gauges showed static pressure of approximately 75 PSI, but as soon as the 2" drain was cracked open, the residual dropped to 0 PSI. Upon closing the 2" drain, the pressure slowly rebounded. Upon opening the inspector test valve (ITV), there was not sufficient pressure to trip the sprinkler valve. The explanation seemed straight forward - a partially closed valve upstream. The system control valve was wide open and functional therefore it must be outside. There was significant construction in the neighbourhood therefore an underground valve must be partially closed. With support from Toronto Water, they exercised all valves on our service line and on the main without any change to the system. In the end, Toronto water conducted an emergency excavation of the sidewalk and roadway, which had been installed three years ago and discovered an old, abandoned valve (Photo 2) which was more than 95% closed. While this was a good news story of inter-divisional cooperation to rectify a major system impairment, the bad news was



Photo 2 - Abandon underground valve >95% closed

the annual sprinkler inspections for the past three years identify a fully functional system with no mention of low pressure. Either the technicians completing the work are unqualified, incompetent or they did not actually complete the work and provided fraudulent reports and invoices.

The future looks bright:

As a result of these findings, the City took decisive action to permanently create the Fire & Life Safety Program Office in May 2019 to establish a path forward to bring the City into compliance with the applicable code requirements.

The first order of business was to develop a strategy on how we can conduct ITM throughout the 2,500 buildings while ensuring compliance with the codes. Conducting code compliant ITM in 2,500 buildings is a monumental task as this represents a book of work larger than most FLS vendors currently hold and few, if any, have the capacity to service 2,500 additional properties. A hybrid approach was chosen where City staff would conduct the monthly and quarterly ITM on all FLS systems and external vendors will conduct the annual and above ITM. This model provides a level of quality assurance and oversight as two independent groups will review and maintain each system.

The second priority was to develop a Master Fire Program that identified the roles and responsibility for fire safety within City Management and to centralize the ITM responsibility to the FLS Program Office. This program provides authority from the City Manager to centralize and consolidate all FLS responsibilities to the FLS Program Office, including conducting ITM, centralizing the FLS budget from City divisions, agencies and corporations, and centralizes FLS contract management and fire safety training for building staff and occupants.

The third priority was to develop a staffing plan, budget and a master specification and RFP. The FLS Program Office has an annual operating budget over \$12 million and a dedicated capital budget of \$4 million to clear the backlog of deficiencies and manage end of life replacements.

When fully staffed, the FLS team will have a staffing compliment of 45 full-time, permanent employees with the addition of six fire protection co-op students each summer. The major shift will involve going to the market with an RFP for Annual+ Inspection, Testing and Maintenance service. Going forward with this RFP, the City will mandate all ITM vendors to use Building Reports Canada to tag all FLS assets and components and file all reports.

The next priority was to ensure our current vendors are compliant with both the code and contract requirements. Following the termination of York Fire Protection, new vendors were retained to provide ITM service at properties within the control of Facilitates Management. Existing ITM contracts with other Divisions, Agencies and Corporations remained in place. The FLS Program Office conducted audits of the submitted reports for all of the FLS vendors performing work for the City.

To ensure on-going compliance by our vendors and our internal fire technicians, the staffing plan includes two Quality Assurance & Risk Management Assessor (QARMA) positions. These industry experts will conduct comprehensive document reviews in addition to field validating the work through pre and post inspections and validating device activation by reviewing addressable panel history/ event logs in addition to other investigative techniques.

For the back of house operations, in addition to the QAR-MA positions, there will be dedicated vendor managers who will work with our external FLS service companies to manage the day to day business, work orders and payment processes. We will have a business analyst who will lead the reporting and tracking metrics, a dedicated FLS maintenance planner & scheduler who will develop, schedule and manage all the preventive maintenance work throughout the 2,500 properties and a research analyst who will lead special projects. We are changing the way we do business.

No longer will the City utilize a low-bid procurement process for FLS work and take 100+ days to pay invoices. The City is adopting a new, modern approach and dedicated staff to manage invoicing and scheduling. A new master specification will form the base of the pending RFP, which will subdivide the City into zones. The City will require its FLS vendors to take a holistic approach to service all the FLS equipment in each building as opposed to having one vendor for fire alarm, one for sprinklers, one for fire extinguishers and one for kitchen suppression and clean agent systems, etc. There will be an option to subcontract out some of the work such as extinguishers of kitchen suppression systems, but primary vendors will be responsible for the work of the subcontractor and could be terminated and suspended from bidding on City contracts for up to five years in the event of non-compliant work they or their subcontractors conduct.

The front of house operations also include the fire technicians who will conduct the monthly and quarterly ITM throughout our properties. There will also be a team of Fire Safety Officers who will be the technical code experts to assist on special projects, manage major deficiency work and conduct site inspections on a risk-based schedule for compliance against all OFC requirements.

Support for our employees and tenants in the buildings will come from our Training & Education section that will manage all FLS training requirements and lead the fire drill program throughout all our occupancies.

We have reserved a place for six fire protection co-op students who will have an opportunity to work within all three sections of the FLS Program Office, including the business operations in the quality assurance team, the frontline operations conducting ITM and assist with scheduling and conducting fire drills and delivering training. The City is proud to provide the next generation of fire protection professionals a co-op opportunity where they can apply their education in a real-world environment.

Regulation and legislation required:

The November 30th, 2020 General Government and Licensing Committee will receive a report identifying that the fire and life safety service industry is unregulated. In conjunction with gaps in legislative qualification requirements, this has resulted in an open industry that permits anyone to conduct inspection, testing and maintenance service on life safety systems. This exposes property owners to liability, tenants to unsafe buildings and firefighters to increased danger when responding to properties without functional life safety systems.

The Ontario Fire Code, enforced by Toronto Fire Service in the City of Toronto, requires personnel preforming inspection, testing and maintenance to be qualified, but does not identify the qualifications. The Canadian Fire Alarm Association provides a formal registration validating education and experience but does not licence fire alarm technicians. The Ontario College of Trades provides a Certificate of Qualification for Sprinkler & Fire Protection Installer which focuses on construction and major repair with a secondary focus on inspections of water based/pressurized fire protection systems. There is no overarching integrated regulatory or licensing body for fire protection inspection, testing and maintenance service in Ontario.

For the examples of the emergency lighting units in the arena and the impaired sprinkler system, the only remedy the City had was to terminate the contract with the vendor. There was no industry regulation or legislative recourse. The vendor is free to continue providing service to other public and private customers without oversight, exposing the building owners, the public and firefighters to an unacceptable risk.

The Fire & Life Safety Program Office will be recommending to Council to establish an interagency working group with representatives from the Ontario Fire Marshal & Emergency Management Office, Toronto Fire Service, Fire Protection Associations, industry experts and other key stakeholders to explore solutions to close this loophole and hold vendors accountable for non-compliant work.



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One solution which will be explored, is the establishment of a City of Toronto by-law, licensing fire and life Safety vendors who wish to operate within City of Toronto limits.

Why this matters:

The City of Toronto is the fourth largest City in North America and has a duty of care to protect its employees, tenants and the public who enter those buildings every day. A major fire in a public building would be a catastrophic event that not only impacts the people in the building, but the local community it serves. An example of this occurred on January 31, 2019 when a five-alarm fire devastated the Agincourt Community Centre in Toronto. People using the pool had to evacuate the building into -25°C weather and the community centre was closed for more than a year following the fire. If a fire of this scale occurs at a critical infrastructure site, such as a water treatment plant or the 911 communication centre, the impact would be felt for years. Thoroughly inspected and maintained fire protection systems and equipment reduces the risk of fire and increases firefighter safety if a fire did occur.

Unfortunately, the issues related to poorly conducted ITM are not unique to City of Toronto owned buildings, as they occur every day in other public and private buildings. Fire and life safety equipment is designed to protect a building

and its occupants when a fire occurs, but until a fire occurs, it can be seen as a maintenance liability that sits in an out-of-the way room that makes noise and costs money. When push comes to shove and there is only \$1,000 in the maintenance budget, building managers have choices to make between replacing the burned-out light bulbs in the lobby or inspecting the sprinkler system for its five-year obstruction inspection. Building owners and operators need to take a hard look at their maintenance priorities and properly fund inspection, testing and maintenance of fire and life safety equipment. The systems need to be 100% operational all the times.

If you think compliance is expensive, try having a fire. It's hard to calculate what the true cost of losing your building and the interruption to your business is; even with insurance. The time spent managing the loss has a real impact on the bottom line.

Suddenly replacing those burned-out lights in the lobby does not matter much if the branch line on your sprinkler system was plugged by debris and someone was injured, or worse, died in a fire that could have been contained to its room of origin.

Fire safety is everybody's business. Make sure you're doing your part.

This article contains a brief description of the major investigations led by Auditor General Beverly Romeo-Beehler and Deputy Fire Chief Jim Jessop. If you have an opportunity to hear the presentation from the Auditor General and Deputy Fire Chief, do it! It's an amazing story that outlines the hardship of conducting an intensive investigation which drew in resources from Toronto Police, the FBI and fire protection industry experts and associations (thanks again to the CFAA). This was coupled with the tightrope the Deputy Fire Chief had to walk to provide technical support and expertise to the Auditor General's investigation while conducting an independent investigation into an FLS contractor who was servicing City owned buildings. His first responsibility was to ensure the safety of the employees and the public using the buildings, the second was to ensure York Fire Protection was prosecuted to the fullest extent of the law with the possibility of having to formally charge the Fire Chief's bosses boss. The City is safer for the work the Auditor General and Deputy Fire Chief have done to expose and prosecute York Fire Protection.

The entire report can be found at:

https://www.toronto.ca/legdocs/mmis/2018/au/bgrd/backgroundfile-118387.pdf



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