Amendment to Chapter 387, Carbon Monoxide Detectors, Concerning Dwelling Units Located Below Fuel-Burning Appliances In Multiple Occupancy Buildings

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<td>Community Development and Recreation</td>
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<td>Fire Chief and General Manager</td>
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SUMMARY

Currently, Chapter 387, Carbon Monoxide Detectors, of the City of Toronto Municipal Code requires carbon monoxide detectors to be installed in units which are either on the same floor or two floors above fuel-burning appliances where a building contains multiple occupancies. Chapter 387 also requires a carbon monoxide detector to be installed in all dwelling units which contain a fuel-burning appliance. Typically, although not exclusively, fuel-burning appliances in multiple occupancy buildings are located in the basement. However, some multiple occupancy buildings may contain fuel-burning appliances in roof-top boiler rooms or mechanical penthouses.

It is proposed that Chapter 387 be amended to require carbon monoxide detectors be installed in all dwelling units in a multiple occupancy building which are on the same floor, or within two floors above or below a fuel-burning appliance. The proposed change would provide additional safeguards to residents in multiple occupancy buildings with a fuel-burning appliance located on the roof or in a mechanical penthouse. The change would ensure that residents who live on the two storeys immediately below a fuel-burning appliance located on a rooftop or within a mechanical penthouse have the required carbon monoxide detection. Elevated carbon monoxide levels within a building pose a health risk to residents and a potential for devastating consequences if not detected.
RECOMMENDATIONS

The Fire Chief and General Manager, Toronto Fire Services recommends that:

1. Council adopt the proposed by-law amendments to Toronto Municipal Code Chapter 387, Carbon Monoxide Detectors substantially in the form set out in Appendix A, such amendment to come into effect on October 1, 2010;

2. The City Solicitor be directed to prepare the necessary bill to give effect to the proposed amendment.

FINANCIAL IMPACT

There are no financial implications for the City associated with this report. The funding for the cost of public communication for this initiative is included in the 2010 Operating Budget for Fire Services. Acquisition and installation of carbon monoxide detectors is the responsibility of the owner of the affected dwelling unit.

The Deputy City Manager and Chief Financial Officer has reviewed this report and agrees with the financial impact statement.

DECISION HISTORY

The original Carbon Monoxide By-law was adopted by Urban Environment and Development Committee Report No. 2(1) and adopted by Council at its meeting held on March 4, 5 and 6, 1998.


COMMENTS

The City of Toronto enacted Chapter 387, Carbon Monoxide Detectors, to ensure occupants of a building receive a timely warning if there is an unacceptable level of carbon monoxide present. Carbon Monoxide is a potential health risk to residents, which if not detected, may lead to potentially fatal outcomes. Currently, the requirement for carbon monoxide detectors to be installed in dwelling units which are either on the same floor, or two floors above fuel-burning appliances addresses the safety concerns of many of the buildings in the City.

**Incident indicating potential carbon monoxide concerns in multiple occupancies with fuel-burning appliance located on the roof:**

However, concerns about the carbon monoxide arising from a fuel-burning appliance located on the roof or in a mechanical penthouse of a multiple residence building became
evident as a result of a recent incident. Apparently due to adverse weather conditions, a fuel-burning appliance located on a the rooftop of a multi-storey residential building, suffered damage to the appliance's exhaust vent which resulted in exhaust, including carbon monoxide, being directed towards the floors below the appliance. This resulted in elevated carbon monoxide levels within the building.

Toronto Fire Services responded to the incident after receiving notification of elevated carbon monoxide levels from a resident who, although it was not required by the provisions of Chapter 387, chose to install a carbon monoxide detector, in the dwelling unit. There existed the potential for this incident to have resulted in very serious risks to the safety of the residents. Toronto Fire Services evacuated all of the affected residents and ventilated the building.

For buildings containing multiple occupancies, a carbon monoxide detector is only required to be installed in each dwelling unit located on the same floor level as a fuel-burning appliance and on the first and second floor levels above a floor containing a fuel-burning appliance. Without a change to Chapter 387, where a fuel-burning appliance is located on the roof or in a mechanical penthouse, there is no requirement for such a building to have carbon monoxide detectors in dwelling units directly below the fuel-burning appliances.

For purposes of Chapter 387, a fuel-burning appliance would include, but not limited to, furnaces, refrigerators, clothes dryers, water heaters, boilers, fireplaces, wood stoves, charcoal grills, gas ranges and space heaters, which are fired by flammable fuels such as, but not limited to, natural gas, propane, heating oil, kerosene, coal, gasoline, wood and charcoal.

**Proposed By-law amendment:**

Toronto Fire Services proposes that Council amend the existing carbon monoxide detector by-law to ensure buildings containing multiple occupancies with fuel-burning appliances located on a rooftop or within a mechanical penthouse install carbon monoxide detectors in each dwelling unit located in the two levels below the fuel-burning appliance. The proposed change would ensure that residents who live on the two storeys immediately below a fuel-burning appliance located on a rooftop or within a mechanical penthouse have the required carbon monoxide detection.

Carbon Monoxide Detectors are devices that are designed to sound an audible alarm upon detection of excessive concentrations of carbon monoxide. These units are widely available throughout the city starting at approximately $30.00 to $40.00 and increase in costs with added features. These units simply plug into an electrical outlet close enough to the bedroom for the alarm to be audible when intervening doors are closed.

**Enforcement and Communication of new requirement:**

If there is non-compliance with the requirements of Chapter 387, Fire Services will issue orders to comply with the requirements of the Chapter. Where an individual does not
comply with the issued orders, a prosecution for non-compliance with the order may be commenced. With a prosecution for non-compliance with an order issued maximum penalties can be up to $50,000 for an individual and $100,000 for a corporate offender, with higher penalties for subsequent offences.

Toronto Fire Services will conduct media releases to the public and owners twice a month in August and September before the new requirements comes into place October 1, 2010.

CONTACT

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William A. Stewart
Fire Chief
Appendix A

Proposed By-law Amendments to Municipal Code, Chapter 387, **Carbon Monoxide Detectors**.

1. Amend § 387-4. by deleting Subsection C and substituting the following:

   C. For a building containing multiple occupancies, each dwelling unit located on the first and second floor levels of the building above or below a floor level, roof or mechanical penthouse containing a fuel-burning appliance.