



## STAFF REPORT ACTION REQUIRED

### False Fire Alarms – Rebates for Residential Properties

<b>Date:</b>	January 14, 2014
<b>To:</b>	Executive Committee
<b>From:</b>	Fire Chief and General Manager, Toronto Fire Services
<b>Wards:</b>	All
<b>Reference Number:</b>	p:\2014\ClusterB\FIR\ex140001

#### **SUMMARY**

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This report responds to City Council's request that the Fire Chief and General Manager, Toronto Fire Services report on the implementation of a rebate program concerning "first time" alarms. This report also responds to City Council's request that the Fire Chief review the City's existing "False Alarm Bylaw" (Municipal Code Chapters 433 & 442) and report back through the 2014 budget process on potential amendments which, while not affecting the overall Fire Services' Budget, may encourage property owners with significant false alarm issues rather than a "one-time" issue to take corrective actions.

The City charges fees only for the purposes of recovering the costs incurred by Toronto Fire Services ("TFS") in responding to a fire alarm caused by the negligent or intentional misuse of a fire alarm system ("Malicious False Alarm") or by the mechanical failure, equipment malfunction or improper maintenance or installation of the fire alarm system ("Nuisance False Alarm"). The City does not charge fees for "false alarms" resulting in the activation of the fire alarm under circumstances that would have caused a careful or prudent person to believe that a fire-related emergency was in progress, or where the activation occurred as a result of accidental damage to the system. The objective of the fee is to recover the costs to the public of TFS attending at a Nuisance False Alarm or a Malicious False Alarm.

Currently the City operates numerous programs to reduce the number of incidents of false alarms by encouraging property owners with false alarm issues to take corrective actions. In determining options related to an additional rebate program, TFS has reviewed the occurrence, and nature of false alarms at various types of properties. Attendances at "single family homes" to address Nuisance False Alarms represent approximately 5% of the Nuisance False Alarms on average annually.

Based on the review, the cost in equipment and staff time expended in responding to Nuisance False Alarms at "single family homes" is, on average, slightly lower than the costs incurred in responding to Nuisance False Alarms at other types of properties. Based on this review, TFS proposes amending the fees charged for responding to a Nuisance False Alarm at a "single family home" to provide an automatic reduction in, or rebate of, fees in the amount of \$410 at the time of billing for the first incident which occurs in a twelve calendar month period. All additional incidents will be invoiced according to the current process, at the current fees amounts.

## **RECOMMENDATIONS**

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

1. City Council amend Chapter 442, Fees and Charges, Administration of, and replace the fees and fee descriptions contained in Chapter 441, Fees and Charges, of the Toronto Municipal Code, with the revised fees and fee descriptions substantially in accordance with Appendix 1 of the report dated January 14, 2014 from the Fire Chief and General Manager, Toronto Fire Services; and
2. City Council direct the City Solicitor to prepare the necessary bill(s) to make the by-law amendments required to give effect to Council's decision and make the amendments come into effect on March 1, 2014.

### **Financial Impact**

In 2013, annual funding of \$0.200 million was approved by City Council to fund the costs of the rebate program for homeowners for first time alarms. The proposed rebate program included in this report is recommended for implementation by March 1, 2014.

The average number of incidents of potential nuisance false alarms based on a review of actual nuisance false alarm incidents between 2010 and 2012 is 832 incidents of which only 511 incidents were billed. However, of the 511 incidents, 185 were cancelled resulting in an average 326 incidents that may be eligible for a rebate of \$410.00 under the proposed rebate program for first time alarm.

For 2014, costs associated with rebates for incidents of Nuisance False Alarms at residential properties are projected to be in the range of \$0.134 million (326 incidents) - \$0.210 million (511 incidents) which will be absorbed within Fire Services' 2014 Recommended Operating Budget.

For future years, costs based on actual experience will be included in the Fire Services' 2015 and future year operating budget submissions.

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

## DECISION HISTORY

At its meeting on January 15 and 16, 2013, City Council approved the 2013 Capital and Operating Budgets. City Council also requested the Fire Chief and General Manager, Toronto Fire Services to establish a rebate program for homeowners for first time alarms, and requested the Fire Chief to review the current False Alarm Bylaw and report back through the 2014 budget process on potential amendments that may be possible to ensure that fees are geared to encourage property owners with significant false alarm issues to take action, rather than one-time issues, without affecting the overall Fire Services' Budget.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.EX27.1>

## ISSUE BACKGROUND

The City charges fees only for the purposes of recovering the costs incurred by Toronto Fire Services responding to a fire alarm that are caused by the negligent or intentional misuse of a fire alarm system ("Malicious False Alarm") or by the mechanical failure, equipment malfunction or improper maintenance or installation of the fire alarm system ("Nuisance False Alarm"). The City does not charge fees for "false alarms" resulting in the activation of the fire alarm under circumstances that would have caused a careful or prudent person to believe that a fire-related emergency was in progress, or where the activation occurred as a result of accidental damage to the system.

Fees are not charged for the mistaken activation of fire alarms, or accidental activation of alarm systems in good working order. Therefore no fee is charged by the City in responding to a false alarm brought about through: activations due to "accidental damage" to the fire alarm system; a fire alarm system activation resulting from lightning strikes or power outages; alarms triggered by activation of a Carbon Monoxide Detector; alarms triggered where the owner has notified TFS in advance of work being done on the fire alarm system that could cause a false fire alarm; activations of an alarm system due to steam or smoke; any other response to a false alarm where the fire alarm is activated under circumstances that would have caused a careful or prudent person to believe that a fire related emergency was in progress.

During the 2010 Operating Budget process, City Council approved changes to the fee structure in order to charge owners a fee for all responses by TFS to a malicious false alarm or a nuisance false alarm. Previous to the 2010 amendment, all properties were exempt from fees for the first nuisance false alarm during set time periods. The "first call exemption" had a significant financial impact on TFS operations. Currently the fee for the service of responding to a Nuisance False Alarms is set at \$410 per vehicle dispatched, for all types of buildings. In keeping with TFS' standard protocol, in most cases, three vehicles are dispatched to a fire alarm. Prior to arriving on scene, TFS is unable to confirm whether the incident is a Malicious False Alarm, a Nuisance False Alarm or a *bona fide* request for emergency assistance. As such, all incidents are responded to with a standard number of personnel and fire vehicles.

## COMMENTS

The City charges fees for responding to False Fire Alarms under very limited conditions. Therefore, no fee is charged by the City in responding to a false alarm where it is a *bona fide* request for emergency assistance, or accidental activations resulting from "accidental damage" to the fire alarm system. The City charges fees only for the purposes of recovering costs incurred by TFS response to Malicious False Alarms or Nuisance False Alarms. The objective of the fee is to recover TFS' costs in attending to Nuisance or Malicious False Alarms directly from the party responsible for the fire alarm system. The City does not charge service fees in circumstances where it cannot be established that a Nuisance False Alarm or Malicious False Alarm occurred.

There has been a steady decline in the number of Nuisance False Alarms since 2007 as outlined in Table 1: Toronto Fire Services Response Data 2007 to 2012. Nuisance False Alarms decreased by 43% from 11,161 in 2007 to 6,356 in 2012. Based on available data, TFS is projecting a total of 7,300 Nuisance False Alarms in 2013, an increase of approximately 15% from 2012.

Table 1: Toronto Fire Services - Response Data 2007 to 2012

	2007	2008	2009	2010	2011	2012
<b>Number of Nuisance False Alarms*</b>	<b>11,161</b>	<b>10,998</b>	<b>9,861</b>	<b>8,813</b>	<b>7,138</b>	<b>6,356</b>
Number of Malicious False Alarms	4,002	3,926	3,511	3,108	2,901	2,523
Total Malicious/Nuisance False Alarms	15,163	14,924	13,372	11,921	10,039	8,879
% of Malicious/Nuisance False Alarms over Total Incident Responses	11%	11%	9%	8%	7%	7%
Average Malicious/Nuisance Calls per Day	42	41	37	33	28	24
Total Incident Responses	142,342	141,944	142,014	144,407	145,334	120,512
Total Vehicle Responses	297,287	289,460	278,281	276,729	276,261	264,703
Total Number of False Alarms	33,447	33,029	28,151	30,143	25,044	24,015

\*The total number of Nuisance False Alarms for 2013 is estimated at 7,300. Final statistics will be available in early 2014.

TFS reviewed Nuisance False Alarms and related fees over the period of 2010 to 2012. On average, there are 832 incidents of potential Nuisance False Alarms at "single family homes" per year. The City does not invoice for a response to a false alarm, unless investigations on the scene can confirm that a Nuisance False Alarm, as defined, occurred. As a result on average, only 511 incidents are initially billed, and upon further review, an average of 185 invoices are cancelled annually. As a result, the City invoices, on average, a total of 326 service fees for responding to a Nuisance False Alarm at "single family homes."

### Costs of False Alarms

On average annually, total fees associated with Nuisance False Alarms at "single family homes" can range from \$400,000 to over \$600,000 depending on the number of Nuisance False Alarms. These fees however do not recover costs for the services provided.

The cost of responding to False Alarms cannot easily be considered as arising on a property type by property type basis. The frequent dispatch of TFS apparatus for false alarms, results in additional wear and tear on vehicles, unneeded fuel usage and is a factor in the level of maintenance required to keep these vehicles in service. Contributing to the impetus to reduce unnecessary vehicle responses, TFS has an ageing fleet where the lifecycle replacement is subject to available funding. The 2013 annual budget for replacement of \$5.702 million (no change in the 2014 Recommended Operating Budget) is below the level required to eliminate the backlog of aged vehicles, estimated at \$7.200 million per year. At least 17% of the TFS fleet is in excess of 15 years old. The average annual cost for vehicle maintenance on aerials and pumpers based on internal and commercial work orders in 2012 was approximately \$19,076.85 per vehicle.

The most appropriate unit measure for responding to Alarms is the cost per vehicle response since it tracks the average cost for responding to the average call, whether a Nuisance False Alarm, or a *bona fide* request for assistance. In 2012, the average cost was \$1,334.68 for each vehicle and crew attending a call. The average costs include salaries for TFS staff assigned to Fire Suppression and Emergency Communications and dispatch functions and allocated costs of staff training and vehicle maintenance, including fleet reserve contributions, fuel, and internal and contracted vehicle maintenance. Table 2: TFS Cost of Operations provides a breakdown on the average cost per unit response.

Table 2: TFS Cost of Operations

	2009	2010	2011	2012
Total Operations Costs*	\$ 350,766,888	\$354,657,776	\$354,690,123	\$353,292,870
Total Calls	142,014	144,407	145,334	120,512
Average Cost Per Call	\$2,470	\$2,456	\$2,441	\$2,932
Total Unit Responses	278,281	276,729	276,261	264,703
Average Cost Per Unit Response	\$1,260.48	\$1,281.60	\$1,283.90	\$1,334.68

\* Costs derived from yearly budget documents.

Based on 264,703 vehicles dispatched to incidents in 2012, the allocated cost per vehicle in a Fire Suppression response would be \$1,334.68. Using this figure, the comparative allocated costs associated with TFS' response to all Malicious and Nuisance False Alarms would be approximately \$35,551,871 (total number of Malicious and Nuisance False Alarms multiplied by 3 vehicles multiplied by the average cost per unit response). The comparative cost compared with total 2012 fees charged for False Alarms of \$11,603,571 represents a cost recovery rate of 32.6%.

### Types of Properties and Required Fire Alarm Systems

In reviewing options concerning the service fee charged, it is important to note that selecting a specific group to exempt from a service fee requires that group or building type be specific, readily identifiable and clearly defined. In recent years, TFS has noted an increase in the number of "single family homes" which have "monitored" or automatic fire alarms. These are fire alarm systems which result in notice being provided automatically to TFS dispatch upon a mechanical triggering of the alarm system. Nuisance False Alarms do not generally occur at "single family homes" unless a monitored alarm system has been installed.

Most properties which are referred to as a "single family home" are established as a Group C - Residential Occupancy under the *Ontario Building Code* of three or fewer storeys in building height, and having a floor area not exceeding 600m<sup>2</sup>. Under the *Ontario Fire Code*, commercial, and many multi-residential buildings (including apartment or condominium buildings) are required to maintain "monitored" fire alarm systems. Neither a monitored or any other form of an automatic fire alarm system is required by the *Ontario Fire Code* for single or semi-detached residential dwellings. For these properties, the *Ontario Fire Code* requires a minimum of one working smoke alarm to be installed on every level of the home.

It is a personal choice for owners of these types of residences, to incur the additional responsibilities and expenses which arise from having a monitored fire alarm system put in place, rather than the minimum level of alarm required by the *Ontario Fire Code*.

By exceeding the requirements of the *Ontario Fire Code*, residents may obtain additional life safety benefits. However, such life safety benefits may be off-set by the adverse impacts of fire response caused by numerous false alarms resulting from improperly installed or maintained fire alarm systems. Owners of monitored systems could greatly reduce the incidents of Nuisance False Alarms, and as a result the cost to the public of responding to these alarms, by undertaking regular periodic cleaning of the fire alarm system and maintenance of the system on a yearly basis. Currently the City operates numerous programs to reduce the number of incidents of false alarms by encouraging property owners with false alarm issues to take corrective actions.

#### Reward for False Alarm Program

The City currently provides a reward program which is intended to prevent Malicious False Alarms. Under Chapter 433, the City will pay a reward of up to \$1000.00 to an individual who supplies information leading to the conviction of any person or persons who wilfully, without reasonable cause, make or circulate or cause to be made or circulated an alarm of fire within the City of Toronto. The payment of reward amounts is directed not from general revenues collected by the City, but rather from revenues generated from the service fees charged for the service of responding to Nuisance False Alarms, and Malicious False Alarms. As such this reward program results in a decrease in the cost recovery resulting in the service fees charged for responding to Nuisance False Alarms, and Malicious False Alarms. However TFS believes that in several years the reward program has been in place, it has resulted in a decrease in the number of false alarms occurring in the City.

#### Request for Review of Applied Fees

The City currently invoices fees for the cost of the service of responding to a Nuisance False Alarm or a Malicious False Alarm, based on the information contained in the TFS Report Management System (FireRMS). TFS currently provides a service where anyone who has been assessed with a service fee respecting a Nuisance False Alarm or Malicious False Alarm may request a review of the invoice. As noted above, the City does not charge for responding to false alarms except for the narrow circumstances of a Nuisance False Alarm or Malicious False Alarm. Therefore, upon review and confirmation that there were mitigating circumstances or that the incident was not a Nuisance False Alarm, fees may be cancelled. As noted above, property owners can request such a review by contacting Toronto Fire Services ([fireaccounting@toronto.ca](mailto:fireaccounting@toronto.ca) or 416-338-9148.)

### False Alarm Reimbursement Program

Under Chapter 442, the City currently provides a reimbursement program to encourage property owners to maintain their fire alarm systems in good working order and take corrective actions as necessary. Any owner who incurs expenses to undertake remedial efforts to prevent future false alarm incidents subsequent to incurring fees for the service of TFS responding to a Nuisance False Alarm may apply for reimbursement. TFS has operated this program for several years.

Property owners, who incur expenses to repair fire alarm system subsequent to a Nuisance False Alarm, may apply for reimbursement. The reimbursement amount is limited to the lesser of (i) 90% of the false alarm fee, or, (ii) the cost of repairs. When the application for reimbursement and original receipts confirming the work completed are received, TFS inspection staff verify the completed work prior to reimbursement. This program results in a decrease in the cost recovery through service fees for Nuisance False Alarms, and Malicious False Alarms, however TFS believes that in several years it has been in place, it has resulted in a decrease in the number of false alarms occurring in the City. TFS does not propose any amendments to this program.

### Proposed Automatic Rebate Program

In order to determine options related to a rebate program for "single family homes," TFS has reviewed the occurrence and nature of False Alarms at various types of properties.

Attendances at "single family homes" (i.e. Group C-Residential Occupancies) to address Nuisance False Alarms represent approximately 5% of the Nuisance False Alarms to which the TFS responds annually. Based on TFS' review, the cost in equipment and staff time expended in responding to Nuisance False Alarms at "single family homes" is, on average, due to the particulars of the built form, slightly lower than the costs incurred in responding to Nuisance False Alarms at other types of properties. The TFS review also indicates that only approximately 58 properties have multiple Nuisance False Alarm incidents in a twelve month period.

Further, on average, responses at "single family homes" use fewer TFS resources than responses at multiple unit dwellings. For example, on average, TFS requires 35% less time to resolve issues at "single family homes" than at multiple unit dwellings. Further, approximately 18% fewer vehicles are dispatched to "single family homes" than multiple unit dwellings.

Based on this review, TFS proposes an amendment of the service fees for Nuisance False Alarms by providing an automatic \$410 reduction in the total service fee invoiced for "single family homes" for the first Nuisance False Alarm within each calendar year. The \$410 reduction in the service fee approximates the reduction in time required to resolve issues at "single family homes."



TFS will advise property owners of the \$410 reduction via the invoice. The invoice will also note that the fee has been reduced and that this reduction is only available for the first incident of a Nuisance False Alarm, which occurs in a twelve calendar month period. TFS estimates additional workload associated with processing a rebate is equivalent to 0.5 FTE which will be accommodated within TFS' current staff complement.

The current process for requesting a review of the incident and fee will remain in place. With respect to the reimbursement program for owners who incur expenses when repairs are conducted on the fire alarm system subsequent to a Nuisance False Alarm, such applications may be continue to be submitted. However, the maximum reimbursement will remain to be the lesser of the expenses incurred or 90% of the fee paid, which will reflect the fee reduction. Any additional incidents will be invoiced according to the current fees with no reduction in fees.

On average annually, total fees associated with Nuisance False Alarms at "single family homes" ranges from \$400,000 to over \$600,000 depending on the number of Nuisance False Alarms. The cost of providing the Rebate for "single family homes" would likewise range from \$134,000 to \$210,000 annually.

## **CONTACT**

Toni Vigna, Division Chief, Policy, Project and Public Information, 416-338-9550

## **SIGNATURE**

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Jim (J.W.) Sales  
Fire Chief and General Manager

Attachment 1 - Appendix 1-Proposed Amendments to Chapters 442, and 441

## Appendix 1-Proposed Amendments to Chapters 442, and 441

1. Chapter 442, Fees and Charges, Administration of, is to be amended by adding the following definition in the appropriate place to subsection 442-1: Single Family Home – For purposes of fees related to a False Alarm, as defined in this Chapter, a "single family home" is a building which is a Group C Occupancy utilized for purposes of a Residential Occupancy, as those terms are defined by O.Reg 332/12, with a floor area which does not exceed 600m<sup>2</sup>, nor a number of storeys which does not exceed 3 Storeys.
  
2. Replace the fees and fee descriptions contained in Schedule B, Table 1 of Chapter 441, Fees and Charges, by deleting line29 and adding the following:

44	Fire Rescue & Emergency Response	Nuisance False Alarms - Fee for three Operations Crews and vehicles dispatched to a specific address other than a Single Family Home in response to a nuisance false fire alarm	Per each dispatch	City Policy	\$1,230.00	No
45	Fire Rescue & Emergency Response	Nuisance False Alarms - Fee for three Operations Crews and vehicles dispatched to a specific address that is a Single Family Home, as defined in response to the first nuisance false fire alarm in a 12 month calendar year	Per each dispatch	City Policy	\$820.00	No
46	Fire Rescue & Emergency Response	Nuisance False Alarms - Fee for three Operations Crews and vehicles dispatched to a specific address that is a Single Family Home, as defined in response to any additional nuisance false fire alarm in a 12 month calendar year	Per each dispatch	City Policy	\$1,230.00	No