TORONTO

STAFF REPORT
ACTION REQUIRED

Supplementary Report - Fees Charged for Toronto Fire's Attendance at Nuisance False Alarms

Date:	March 15, 2011
To:	Licensing and Standards Committee
From:	Fire Chief and General Manager, Toronto Fire Services
Wards:	All
Reference Number:	p:\2011\ClusterB\FIR\ls1110.doc

SUMMARY

This report responds to direction from the Licensing and Standards Committee of January 21, 2011 with respect to the feasibility and financial implications of various options relating to the fee charged for the City's response to Nuisance False Alarms. The Committee also directed that the Fire Chief and General Manager, Toronto Fire Services (TFS), report on the percentage of multiple false alarms per year at any particular property including multi-residential buildings.

Nuisance False Alarms are largely a result of improper maintenance and inspection of fire alarm systems. The objective of the fees charged is to recover TFS' costs in attending Nuisance or Malicious False Alarms, ensuring that TFS resources are used effectively and efficiently. The City provides a reimbursement program which is intended to ensure that property owners maintain their fire alarm systems in good working order and take corrective actions as necessary.

The current policy of charging fees for TFS' response to Nuisance and Malicious False Alarms is key in maintaining effective fire alarm systems, ensuring the safety of both the public and firefighters, and protecting City assets.

RECOMMENDATIONS

The Fire Chief and General Manager of Fire Services recommends that this report be received for information.

Financial Impact

There is no financial impact as a result of the recommendation in this report should the current provisions of the Municipal Code Chapter 441, Fees and Charges, and Chapter 442, Fees and Charges, Administration of, remain in place. Adjustments to Chapter 442, as a result of information contained in this report should not impact the 2011 budget approved by Council and should be submitted for the 2012 budget process.

The 2011 Approved Operating Budget for TFS includes revenues, reflecting cost recovery obtained from fees for the City's response to Malicious False Alarms and Nuisance False Alarms in the amount of $12,328,564.44 (including annualized revenue in the amount of $1,630,125.00 arising from amendments to Chapter 441 in April 2010). The 2010 amendment resulted in the City charging owners a fee for every response by TFS to a Malicious False Alarm or Nuisance False Alarm. The 2011 budgeted revenue also includes $0.791 million arising from an increase in the City's Malicious False Alarm Fee and Nuisance False Alarm Fee based on an increase from $350.00 per vehicle dispatched to $410.00 as outlined in the Fire Department, Ministry of Transportation Claims Agreement.

If Council chooses to exempt one Nuisance False Alarm at an address annually, the City would be unable to recover costs incurred through false alarm fees, resulting in a budget pressure estimated to be $6,703,500.00 (less $151,000.00 for additional staff no longer required), for a total un-recouped expense of $6,552,500.00 for 2011. The estimate is based on a $410.00 vehicle response fee rate recommended for 2011 and the 2010 experience where 3,179 first or one time nuisance calls (April to November 2010) would be exempt from a fee if Chapters 441, and 442 were amended.

Fire Services has been asked to explore options for a one-time exemption for single-family homes by Councillors who are concerned about the impact on their communities from Council's 2010 decision to eliminate the exemption for Malicious and Nuisance False Alarm fees. The main concern is the financial impact on single-family residences and charitable organizations. The fee is a per vehicle charge that is scheduled to increase from $350.00 to $410.00 in the 2011 Operating Budget, leading to an increase in total incident fee of $1,050.00 to $1,230.00 The total incident fee is based on TFS dispatching three fire vehicles per incident, in accordance with National Fire Protection Association (NFPA) 1710.

<u>Option 1 – Providing a one-time exemption for Malicious and Nuisance False Alarms for single-family homes (one exemption per year or one exemption every four years or one exemption per address)</u>

a) The impact of a one-time exemption per year is an estimated annual revenue loss resulting in un-recouped costs for the City in the amount of $1,594,080.00 consisting of $86,451.00 in forgone fees for responding to Malicious False Alarms and $1,507,629.00 in forgone fees for responding to Nuisance False Alarms at the 2011 per vehicle rate of $410.00 and estimated annual call volumes of 70 and 1,226 calls respectively.

b) The impact of one exemption every four years would be the same as above (a) for the first year of implementation. The subsequent three years would likely show some lesser revenue loss depending on how many addresses have repeat incidents that would incur a fee versus the number of new addresses that would be eligible for an exemption each year. There is not enough actual data at this time to accurately forecast revenues in subsequent years from single-family residences under such a scenario.

   The fourth year would see another round of exemptions for addresses with repeat incidents over the prior three years; however, the number of single-family residences that would continue to incur multiple false alarm fees cannot be determined at this time since there is no long term data on which to base a figure. TFS would require additional modifications to its Records Management System to ensure that a once every four year exemption could be implemented, the expense of which is not currently available.

   If adopted, further reports on the management of numerous complications and issues with respect to the proposed exemption would be required. Issues which would complicate the proposed exemption would include how to address issues such as changes of ownership of properties, redevelopment of properties, changes of status of the property (i.e. commercial properties redeveloped into residential properties, etc.) in the application of the exemption.

c) The impact of granting one exemption ever per single-family address would be the same as above (a) for the first year of implementation. The subsequent years would show revenue losses for the new addresses with incident charges that are identified each year; there is insufficient data at this time to estimate the volume. Fire Services would have to modify its Record Management System to maintain such long term residential data, the additional cost of which has yet to be determined. Application of this exemption is quite problematic, and if adopted, further reports on significant issues, such as accurately verifying historical property ownership, would be required.

<u>Option 2 – Exempting single-family homes from Nuisance False Alarms when the homeowner attests through a Commissioner of Oath or sworn affidavit and with accompanying documentation, that the alarm system is in good working order</u>

Nuisance False Alarms occur through mechanical failure, equipment malfunction or improper maintenance or installation of the system. Based on this definition, it is unlikely that a system can be in “good working order” and still cause a Nuisance False Alarm.

Further, it would be unlikely that anyone other than alarm system technicians would possess the technical expertise to comment on the system's state of repair. Moreover, the homeowner would only be able to take advantage of this exemption once, since it would be unreasonable for a homeowner to attest to the good working order of the alarm system for repeat incidents.

Should this option be adopted, additional administrative efforts would be required to manage the additional processing and recordkeeping at an additional cost yet to be determined.

Option 3 – Exempting non-profit organizations from paying for the first Nuisance False Alarm

There is currently no method to identify at the time of a Nuisance False Alarm call if the alarm system owner is a non-profit organization. Moreover, the term "non-profit organization" is a broad category that would include charities, religious and public buildings. Religious and public buildings can be more readily identified; public buildings would include Toronto Community Housing Corporation (TCHC) buildings, schools, colleges, universities, hospitals and government buildings. In 2009, approximately 142 individual TCHC addresses were charged at least once for a nuisance call; the TCHC represents approximately 18 percent of all Malicious and Nuisance False Alarms in the City. Revenue related to the other aforementioned buildings cannot be accurately estimated at this time.

It is also noted that should any of the above options be implemented, there is no Corporate offset to the resulting increased Operating budget pressure.

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

DECISION HISTORY

At its meeting of January 21, 2011, the Licensing and Standards Committee directed the Fire Chief and General Manager of Fire Services to report back to the next Licensing and Standards Committee meeting on March 30, 2011. Such report to present the feasibility and financial implications of:

- providing a one-time exemption for Malicious and Nuisance False Alarms for single-family homes;
- exempting single-family homes from Nuisance False Alarms when the homeowner attests through a Commissioner of Oath or sworn affidavit and with accompanying documentation, that the alarm system is in good working order; and,
- exempting non-profit organizations from paying for the first Nuisance False Alarm.

The Committee also directed that the Fire Chief report on the percentage of multiple false alarm calls that are more than one per year at any particular property including multi-residential buildings.

Additional decision history is available at:

Licensing and Standards Committee Decision January 21, 2011
http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2011.LS1.3

Emergency and Protective Services Committee Report No. 3(6)
http://www.toronto.ca/legdocs/1998/agendas/council/cc/cc980416/bill133.htm

Community Services Committee Report No. 3, Clause No. 6, Amendments to the City of Toronto Municipal Code to Increase Fees and Charges for Services and Activities Provided by Toronto Fire Services
http://www.toronto.ca/legdocs/2001/minutes/council/cc010424.pdf

ISSUE BACKGROUND

Malicious False Alarms and Nuisance False Alarms

Chapter 442 defines a **Malicious False Alarm** as "The negligent or intentional misuse of a fire alarm system resulting in the activation of the system, but does not include the activation of a fire alarm system under circumstances that would have caused a careful or prudent person to believe that a fire-related emergency was in progress at the owner's building or in circumstances where the owner has notified the Fire Department in advance of work being done on the fire alarm system that could cause a false fire alarm."

A **Nuisance False Alarm** is defined as "The activation of a fire alarm system through a mechanical failure, equipment malfunction or improper maintenance or installation of the system, but does not include the activation of a fire alarm system where the activation occurred as a result of accidental damage to the system." The City charges fees for responding to Malicious and Nuisance False Alarms, fees are not charged for mistaken activation of fire alarms, or accidental activation of alarm systems in good working order.

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; or a fire alarm system activation resulting from lightning strikes or power outages; or alarms triggered by activation of a Carbon Monoxide Detector, or 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; or activations of an alarm system due to steam or smoke; or 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 at the owner’s building.

TFS has previously investigated the causes of false alarm calls and determined that thousands of calls are caused by the poor maintenance of alarm systems. Table 1 outlines TFS response to false alarm calls. In 2010, Malicious and Nuisance False Alarms resulted in approximately 8 per cent of all incidents to which TFS responded in 2010.

Table 1: Toronto Fire Services - Response Data 2007 – 2010

	2007	2008	2009	2010
Total Incident Responses	142,342	141,944	142,014	144,407
Total Vehicle Responses	297,287	289,460	278,281	276,729
Total Number of False Alarms	33,447	33,029	28,151	30,143
Number of Nuisance False Alarms	11,161	10,998	9,861	8,813
Number of Malicious False Alarms	4,002	3,926	3,511	3,108
Total Malicious/Nuisance False Alarms	15,163	14,924	13,372	11,921
Average of Malicious/Nuisance to Total Calls	11%	11%	9%	8%
Average Malicious/Nuisance Calls per Day	42	41	37	33

Total Cost of Operations

Table 2 provides an analysis of direct and support operating costs associated with TFS' Fire Suppression operations. The most appropriate unit measure is the cost per vehicle response since it tracks the average cost. In 2010, the average cost was $1,289.66 for each vehicle attending a call. The costs include salaries for TFS Staff assigned to Fire Suppression and Emergency Communications/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

	2009 Budget	2010 Budget
Total Operations Costs	350,766,888.26	354,657,776.51
Total Calls	142,014	144,111
Total Cost Per Call	$2,470	$2,461
Total Unit Responses	278,281	276,729
Total Cost Per Unit Response	$1,260.48	$1,289.66

Based on 276,729 vehicles dispatched to incidents in 2010, the allocated cost per vehicle in a Fire Suppression response would be $1,289.66. Using this figure, the comparative allocated costs associated with TFS' response to all Malicious and Nuisance False Alarms would be approximately $46,122,108.00 (total Malicious and Nuisance False Alarms multiplied by $1,289.66 cost per vehicle multiplied by three vehicles attending). Compared with total 2010 fees charged of $7,388,850.00 this represents a cost recovery rate of 16 percent.

Reimbursement Program

The City provides a reimbursement program which is intended to ensure that property owners maintain their fire alarm systems in good working order and take corrective actions as necessary. Any owner who incurs expenses to fix a problem subsequent to a Malicious or Nuisance False Alarm may apply for reimbursement of the fees charged, to a maximum amount of the lesser of the cost of the repair or 90 percent of the false alarm

fees charged. When application for reimbursement and supporting documentation is received, TFS inspection staff verify the installation prior to reimbursement.

Frequent Dispatch of TFS Apparatus for False Alarms

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 current annual budget for replacement, $5,702,500.00 is below the level required to eliminate the backlog of aged vehicles, estimated at $7,200,000.00 per year. At least 25 percent 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 2010 was approximately $35,000.00 per vehicle.

COMMENTS

Since amalgamation in 1998, there have been 255 fire fatalities in the City – 86 percent of these deaths occurred at residential properties. Properly installed and maintained fire alarm and security systems are important factors in reducing fire related deaths and minimizing nuisance alarms.

This report responds to direction from the Licensing and Standards Committee of January 21, 2011 with respect to fees charged for the City's response to Nuisance False Alarms, specifically, on the feasibility and financial implications of several options in relation to charges to building owners for incidents of false alarms. As we review these options, it is important to note that selecting a specific group or building type to exempt from a false alarm fee requires that that group or building type be readily identifiable and pre-defined. Moreover, the reason for the exclusion has to be supportable in relation to the rationale of the provisions of Chapter 442, which impose these fees.

TFS does not recommend any of the following options, but does recommend that if any amendment is made to exempt a class of organization or building, exemptions be specific and clearly defined.

Option 1 – Providing a one-time exemption for Malicious and Nuisance False Alarms for single-family homes (one exemption per year or one exemption every four years or one exemption per address)

Historically, and currently, most fees charged for Nuisance and Malicious False Alarms were incurred by larger residential complexes, some of which were subject to repeated false alarms on an annual basis. Although, the April 2010 amendment to Chapter 441, which eliminated the first call exemption, has resulted in a small increase in single family residents becoming subject to a fee, larger residential complexes continue to incur the majority of fees charged.

Option 2 – Exempting single-family homes from Nuisance False Alarms when the homeowner attests through a Commissioner of Oath or sworn affidavit and with accompanying documentation, that the alarm system is in good working order

The City defines Nuisance False Alarms for purposes of Chapters 441 & 442 as the activation of a fire alarm system through a mechanical failure, equipment malfunction improper maintenance of the system or the improper installation of the system. By definition, the City excludes Nuisance False Alarms which occurred as a result of accidental damage to the system. The City does not currently charge the Nuisance False Alarm fee for responding to alarms caused by the mistaken or accidental activation alarm system in "good working order." It does not appear then that an alarm system in "good working order" could result in a Nuisance False Alarm. Further, owners routinely do not possess the technical expertise required to determine if their alarm systems are in good working order.

Currently, in instances where the appropriateness of the fee for responding to a Malicious or Nuisance false alarm is called into question, TFS reviews instances concerning the suitability of the fee without the need for sworn documents from owners, and where it is confirmed that a false alarm arose from a system in "good working" order, no fee would be imposed.

Option 3 – Exempting non-profit organizations from paying for the first Nuisance False Alarm.

TFS crews attending all incidents identify the property types according to categories defined by data requirements of the Computer Aided Dispatch system and the associated Records Management System. The system readily identifies single family dwellings. However, the same cannot be said for non-profit agencies as they do not represent a defined property type and would need to identify their status upon receipt of an invoice for a false alarm fee to apply for an exemption. Management of such a program will require additional expenses to be incurred by the City.

Percentage of multiple false alarm calls that are more than one per year at any particular property including multi-residential buildings

Under Chapter 441, as amended at the time of the approval of the 2010 Operating budget, April 15, 2010, TFS charges a fee to building owners for each Malicious and Nuisance False Alarm incident that occurs at an address. While the majority of addresses will only receive one incident in a twelve month period, others are responsible for multiple incidents.

Currently, there are no exemptions to the Malicious and Nuisance False Alarm Fees and these fees are the same for all building types ($350.00 per vehicle per hour or part thereof). TFS Records Management System records details of all incidents where fire vehicles are dispatched. There were 224 different types of properties identified in 2010,

the majority being commercial establishments. Table 3 summarizes the building types charged in 2010.

Table 3: 2010 TFS False Alarm Fees by Building Type ($350 per vehicle dispatched, 8 months)

	Malicious False Alarms		Nuisance False Alarms	
	Incidents	**Fee amount**	**Incidents**	**Fee amount**
Commercial/Other	305	($320,250.00)	1,518	($1,593,900.00)
Multi-Unit Dwelling	1,269	($1,332,450.00)	2,137	($2,243,850.00)
Public	267	($280,350.00)	691	($725,550.00)
Single Residential	56	($58,800.00)	794	($833,700.00)
Total 2010 Fees charged	1,897	($1,991,850.00)	5,140	($5,397,000.00)

Table 4 identifies the fees charged for the first Malicious or Nuisance False Alarm incidents for 2010. To exempt the first call for this residential category in a twelve month period would result in a projected loss of $1,287,000.00 at the current fee of $350.00 per vehicle, and $1,507,980.00 at the proposed fee of $410.00 per vehicle. If all property classes were provided one annual exemption for the first call, the City would incur a loss of in the amount of $5,722,200.00 at the current rate and $6,703,500.00 at the proposed rate.

Table 4: First Malicious or Nuisance False Alarms

	Number of Incidents for All Addresses		Number of Incidents for Single Family Residences	
2010 All Addresses and Actual Fees Charged (prorated to 12 months)	**Total First Calls Malicious**	**Total First Calls Nuisance**	**Total First Calls Malicious**	**Total First Calls Nuisance**
One False Alarm Call Annually	1,382	3,753	58	1,114
Two	302	951	7	89
Three	111	374	2	21
Four	55	182	2	2
Five	33	50	0	0
Over Five	58	141	2	0
Total Incidents	1,941	5,450	70	1,226
Projected Total Fees - $350.00 per vehicle, 3 vehicles attending	$2,037,600	$5,722,200	$73,800	$1,287,000
Projected Total Fees - $410.00 per vehicle, 3 vehicles attending	$2,386,903	$6,703,149	$86,451	$1,507,629

Conclusion

This report responds to direction from the Licensing and Standards Committee of January 21, 2011 with respect to fees charged for the City's response to Nuisance False Alarms, specifically, on the feasibility and financial implications of options in relation to fees to building owners for incidents of false alarms. The Committee also directed that the Fire

Chief and General Manager, Toronto Fire Services, report on the percentage of multiple false alarms per year at any particular property including multi-residential buildings.

The current policy of charging fees for attending Nuisance and Malicious False Alarms is key in maintaining effective fire alarm systems, ensuring the safety of both the public and firefighters, and protecting City assets. Fire Services does not recommend a change to Chapters 441 and 442.

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