

# STAFF REPORT INFORMATION ONLY

# **City Vehicles Required to Idle for Operations**

Date:	June 1, 2010
То:	City Council
From:	Chief Corporate Officer
Wards:	All
Reference Number:	P:\2010\Internal Services\Fleet\Cc10002Fleet - (AFS 12251)

## SUMMARY

At its meeting May 3<sup>rd</sup>, 2010, the Board of Health requested an estimate of the percentage of City vehicles that are required to "idle", or run their engines while stationary, to perform their operations. This information report responds to that request.

Approximately 50 per cent of the City's vehicles are potentially required at some time to run their engines while stationary in order to perform part of their function.

#### **Financial Impact**

This report will have no financial impact beyond what has already been approved in the current year's budget.

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

## **DECISION HISTORY**

At its meeting May 3<sup>rd</sup>, 2010, the Board of Health considered a report (HL30.2) on amending Toronto's Idling Control Bylaw, http://www.toronto.ca/legdocs/mmis/2010/hl/bgrd/backgroundfile-29606.pdf.

At that meeting, the Board forwarded its recommendations to the June 8, 2010 meeting of City Council, and, "2. requested the Chief Corporate Officer and the Director of Fleet Services, in consultation with the Medical Officer of Health, to determine the percentage of City of Toronto vehicles which are required to idle when performing their operations". This report responds to that request. It was prepared in consultation with the Medical Officer of Health.

# **ISSUE BACKGROUND**

Vehicles emit pollutants that cause climate change, create smog and contribute to adverse health effects. Idling vehicles unnecessarily also causes these emissions.

The City of Toronto is reducing emissions from the City's fleet vehicles through the comprehensive Green Fleet Plan 2008-2011. A previous report to the Board of Health described Fleet Services' anti-idling efforts for light-, medium- and heavy-duty City vehicles. <u>http://www.toronto.ca/legdocs/mmis/2010/hl/bgrd/backgroundfile-29606.pdf</u>

In addition, since 2007 the City of Toronto's Idle-Free Policy has required staff to shut their vehicle off if idling more than ten seconds. <u>http://www.toronto.ca/fleet/idle-free.htm</u>

# COMMENTS

In many City vehicles, there is no reason to run the engine while the vehicle is stationary. To do so would be unnecessarily idling the vehicle, wasting fuel and emitting preventable greenhouse gases and smog pollutants. Other City vehicles are occasionally required to run their engines while stationary to perform their operations. While it appears they are idling unnecessarily, they are actually performing a necessary function and not "idle".

Fleet Services analysed the City's on-road vehicles to determine if they are required to idle in order to perform their operations. The analysis considered the following factors: Division using the vehicle, type of vehicle, vehicle application, model year, advanced emission-control equipment and idle-free technology that has been purchased. Fleet Services estimates that approximately 50 per cent of the City's on-road vehicles are potentially required to run their engine while stationary to perform a necessary function (Attachment 1). This number increases to 55% if EMS and Fire vehicles are included.

For instance, garbage and recycling trucks must run the engine while stationary to pack the waste. All light- and heavy-duty diesel trucks purchased since 2007 are required to have additional pollution-control equipment called a diesel particulate filter (DPF). These vehicles are occasionally required to perform a DPF "burn" while stationary to regenerate the device. While it appears they are idling, they are performing the necessary job of regenerating the pollution-control equipment so that it functions properly.

Where possible, the City is reducing the need to run the engine on stationary vehicles. Aerial tower trucks must run the engine to allow staff to move the bucket and complete their work. In 2009, the City addressed this issue by starting to purchase hybrid aerial tower trucks that can move the bucket without running the engine. In 2009, the City started to purchase pickup trucks for Transportation Services and other Divisions that can operate safety lights without running the engine to ensure the safety of staff working near the road and to reduce idling. There are many examples of vehicles that must run their engines at some time while stationary. However, even these vehicles are capable of unnecessary idling at other times, and should be shut down by staff when possible, in accordance with the City's ten-second Idle-Free Policy.

# CONTACT

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## SIGNATURE

Bruce Bowes, P.Eng. Chief Corporate Officer

## ATTACHMENTS

Attachment 1 - On-road vehicles that must idle to perform operations.

Attachment 1. On-road vehicles that must idle to perform operations.	Attachment 1.	<b>On-road</b>	vehicles that	t must idle	to p	oerform o	operations.
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Vehicle weight class	Total number of vehicles	Number of vehicles that must idle to perform operations	Percentage of vehicles that must idle to perform operations	Details
Light duty	2151	901	42%	Operations requiring idling: - See below for all weight classes Technology used to eliminate idling: - Cars, SUVs and pick-ups – hybrid vehicles that shut down when stopped
Medium duty	375	166	44%	<ul> <li>Operations requiring idling: <ul> <li>Garbage and recycling trucks require power to pack the waste</li> </ul> </li> <li>Technology used to eliminate idling: <ul> <li>Cube vans – hybrid vehicles that shut down when stopped</li> </ul> </li> </ul>
Heavy duty	883	640	72%	<ul> <li>Operations requiring idling:         <ul> <li>Garbage and recycling trucks require power to pack the waste</li> </ul> </li> <li>Technology used to eliminate idling:         <ul> <li>Garbage trucks – Saving fuel by using alternative technologies</li> </ul> </li> </ul>
Total	3409	1707	50%	<ul> <li>Operations requiring idling in all weight classes:         <ul> <li>Trucks working on roads require safety lighting</li> <li>Aerial towers and trucks with cranes must be on to operate</li> <li>Diesel trucks purchased since 2007 by law require emission-control equipment that must be regenerated to continue operating</li> </ul> </li> <li>Technology used to eliminate idling:         <ul> <li>Trucks working on roads - LED safety lights that draw little power and idle-stop devices that protect the battery</li> <li>Aerial tower trucks – hybrid vehicles that allow the engine to be off</li> </ul> </li> </ul>