STAFF REPORT ACTION REQUIRED

## Results of Feasibility Review - Maintaining Current Date Ranges for Provision of Heat to Residential Rental Units

| Date: | June 12, 2014 |
| :--- | :--- |
| To: | Licensing and Standards Committee |
| From: | Executive Director, Municipal Licensing and Standards |
| Wards: | All |
| Reference <br> Number: | P:\2014\Cluster B\MLS\LS14011 |

## SUMMARY

This report responds to City Council's request to study the necessity of amending City of Toronto by-laws to change the date ranges between which landlords must provide heating and air conditioning in residential rental units.

Staff were asked to review the need to change the current dates prescribed in Chapter 497, Heating, to allow landlords to turn off heat by May 15, instead of June 1. Permitting landlords to discontinue heat earlier would allow for cooling systems to be turned on in buildings that are equipped. Staff were also asked to review the need to amend Chapter 629, Property Standards, to require that all air conditioning systems in rental units, where provided, be turned on by May 16 .

Staff reviewed Environment Canada data on the temperatures experienced each May between 2000 and 2014. The data shows that, while mean temperatures do increase towards the end of the month, the majority of daily average temperatures are below $18^{\circ} \mathrm{C}$ - the outdoor temperature which Environment Canada and energy companies consider to be the barrier temperature between when indoor heating and cooling systems may be required. Moreover, the data also reveals considerable variance in temperatures throughout the month of May when, between 2000 and 2014, the average range of daily high and low temperatures was $10.7^{\circ} \mathrm{C}$. This range makes it particularly difficult to provide the right level of indoor heating and cooling at all times, as industry stakeholders indicate that the heating systems within large residential properties are complex, and cannot be turned on and off on a sporadic basis, or as the weather changes.

Based on the experience of generally low temperatures in May, and the considerable variance between the temperatures experienced, staff are not recommending changes to City by-laws at this time.

Staff propose to monitor temperature and climate changes going forward and to report back on any by-law changes that may be necessary in the future.

Toronto Public Health was consulted in the preparation of this report.

## RECOMMENDATIONS

## The Executive Director, Municipal Licensing and Standards recommends that:

1. Licensing and Standards Committee direct the Executive Director, Municipal Licensing and Standards to continue to monitor yearly average temperatures in May, to assess on an ongoing basis whether any changes may be required to allow landlords to turn heat off earlier than currently required in Chapter 497, Heating and report back at a future date.

## Financial Impact

There is no financial impact expected from this report 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 of July 11, 2012, City Council requested the City Manager to study the effectiveness of amending Municipal Code Chapter 497, Heating by setting an earlier date at which landlords may stop heating rental units. http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2012.MM25.31

At its meeting of May 7, 2013, City Council directed the Executive Director, Municipal Licensing and Standards to review Section 38 of Municipal Code Chapter 629, Property Standards, and report back to the Licensing and Standards Committee on amending it and any other relevant by-laws with the aim to require that all air conditioning systems be turned on by May 16 until September 30, so as to maintain an indoor temperature of not more than $26^{\circ} \mathrm{C}$.
http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.MM33.6

## ISSUE BACKGROUND

The Residential Tenancies Act, 2006 (RTA) and Toronto Municipal Code, Chapter 497, Heating both set minimum heating requirements for operators of residential rental properties.

The RTA regulates and sets standards for landlords, specifies the minimum room temperature for heating in rental units, defines heat as a vital service and prescribes when heat must be provided to tenants throughout Ontario. The timeframe in which the RTA deems heat a vital service is between September 1 and June 15.

Toronto Municipal Code Chapter 497, Heating, Article I applies to rented or leased accommodations and only applies to units where heat is paid by the landlord. The by-law requires temperatures in all areas of a rental dwelling unit to be maintained at a minimum temperature of $21^{\circ} \mathrm{C}$ between September 15 and June 1.

## COMMENTS

## Assessing the Need to Discontinue Heat Earlier than June 1st

The Canadian Council of Ministers of the Environment, climatologists and energy companies such as Enbridge use a measurement known as 'heating degree-days' to determine the heating requirements of residential buildings. It is held that on days with average outdoor temperatures below $18^{\circ} \mathrm{C}$, people will use at least some indoor heating. In contrast, it is held that on days when the average temperature is above $18^{\circ} \mathrm{C}$, residents will use at least some indoor cooling.

Using $18^{\circ} \mathrm{C}$ as a base, staff assessed Environment Canada data on historical temperatures in May between 2000 and 2014. Staff found that in each May during this period, there was an average of 26 days when the average temperature was below $18^{\circ} \mathrm{C}$ and an average of 5 days when the average temperature was above $18^{\circ} \mathrm{C}$. In the three warmest years during this period (2010, 2012 and 2013), the majority of days in the month still experienced temperatures below $18^{\circ} \mathrm{C}$ ( 18 days in 2010; 20 days in 2012; and 23 days in 2013).

Focusing on the period between May 16 and May 31 - the days which would be directly affected by the proposed by-law changes - staff found a similar pattern. In the second half of May between 2000 and 2014, there was an average of 12 days where the average temperature was below $18^{\circ} \mathrm{C}$ and an average of four days when the temperature was above $18^{\circ} \mathrm{C}$. In the two warmest years during this period (2010 and 2012), the majority of days in the second half of the month had temperatures above $18^{\circ} \mathrm{C}$ ( 10 days in $2010 ; 10$ days in 2012). However, in 2013, the third hottest May in the last 15 years, 9 of 16 days had average temperatures below $18^{\circ} \mathrm{C}$.

The second noticeable trend among the historical data is the considerable variance between daily high and low temperatures experienced during the month of May. Between the years 2000 and 2014, the average range between daily highs and daily lows was $10.7^{\circ} \mathrm{C}$. Also between 2000 and 2014, the average difference between the highest temperature recorded in the month, and the lowest, was $28.2^{\circ} \mathrm{C}$. In the second half of the month, between May 16 and May 31, the variance in daily high and low temperatures was also $10.7^{\circ} \mathrm{C}$.

The variances in temperatures experienced on any given day in May are important because heating and cooling industry members report that the heating and cooling systems in large residential complexes cannot be turned on and off easily. These systems require a set date at which they are changed over, and cannot easily be adjusted to suit variable weather throughout the month.

Taken together, the data indicates that, in the month of May, including in the latter half of the month, the majority of temperatures experienced are below the $18^{\circ} \mathrm{C}$ threshold at which heat may no longer be required. Moreover, there is significant fluctuation in the daily temperatures experienced throughout the month, meaning that, for every period during a day when heat may not be required, there is likely to be another when it may be.

## Next Steps

Staff acknowledge that over-heating and under-heating in residential units can impact residents' comfort level. However, provided the considerable fluctuation of temperatures in May, and the difficulty turning on and off heating and cooling units in large residential buildings, staff are not recommending amendments to Chapter 497, Heating to discontinue heating earlier than June 1.

To address this complex problem and to identify options for improving cooling in multiresidential dwellings, Municipal Licensing and Standards plans to host a Municipal Roundtable in collaboration with Toronto Public Health. Participants will include representatives from the Provincial government, City agencies and divisions, along with tenants and landlord groups. Topics to be explored include maximum heat standards, heating requirements, cooling rooms, building codes, air conditioning, subsidies and access to cool spaces.

Staff will continue monitoring yearly temperatures and recommended changes as they may be required in the future.

## CONTACT

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## SIGNATURE

Tracey Cook, Executive Director

Municipal Licensing and Standards

## ATTACHMENTS

Attachment 1: Average Monthly Temperatures in May 2000-2014
Attachment 2: Average Temperatures between May 16-31 (2000-2014)
Attachment 3: Number of Days Requiring Heating or Cooling Systems May 2000-2014
Attachment 4: Number of Days Requiring Heating or Cooling Systems May 16-31 (2000-2014)

Attachment 1: Average Monthly Temperatures in May 2000-2014

| Year | Average <br> Max | Average <br> Min | Average <br> Mean | Average <br> Range |
| :--- | :--- | :--- | :--- | :--- |
| 2000 | 19.3 | 9.2 | 14.3 | 10.2 |
| 2001 | 20.2 | 9.3 | 14.8 | 10.9 |
| 2002 | 16.3 | 5.4 | 10.9 | 10.9 |
| 2003 | 17.0 | 7.5 | 12.3 | 9.5 |
| 2004 | 18.4 | 7.8 | 13.2 | 10.6 |
| 2005 | 17.2 | 6.6 | 11.9 | 10.7 |
| 2006 | 19.7 | 9.1 | 14.4 | 10.6 |
| 2007 | 20.3 | 8.3 | 14.3 | 12.1 |
| 2008 | 17.2 | 6.5 | 11.8 | 10.7 |
| 2009 | 18.9 | 7.2 | 13.1 | 11.7 |
| 2010 | 21.5 | 10.5 | 16.0 | 11.0 |
| 2011 | 18.5 | 9.7 | 14.1 | 8.8 |
| 2012 | 22.1 | 11.0 | 16.6 | 11.1 |
| 2013 | 21.0 | 9.4 | 15.2 | 11.6 |
| 2014 | 19.3 | 8.9 | 14.1 | 10.5 |
| Total | $\mathbf{1 9 . 1}$ | $\mathbf{8 . 4}$ | $\mathbf{1 3 . 8}$ | $\mathbf{1 0 . 7}$ |

Attachment 2: Average Temperatures between May 16-31 (2000-2014)

| Year | Average <br> Max | Average <br> Min | Average <br> Mean | Average <br> Range |
| :--- | :--- | :--- | :--- | :--- |
| 2000 | 17.4 | 8.3 | 12.9 | 9.1 |
| 2001 | 18.5 | 9.6 | 14.1 | 9.0 |
| 2002 | 17.8 | 6.3 | 12.1 | 11.5 |
| 2003 | 17.9 | 8.4 | 13.1 | 9.5 |
| 2004 | 18.5 | 8.8 | 13.6 | 9.7 |
| 2005 | 19.1 | 8.3 | 13.7 | 10.9 |
| 2006 | 20.5 | 10.4 | 15.5 | 10.1 |
| 2007 | 21.4 | 9.5 | 15.5 | 12.0 |
| 2008 | 18.5 | 6.4 | 12.4 | 12.1 |
| 2009 | 19.6 | 8.3 | 14.0 | 11.3 |
| 2010 | 25.6 | 13.5 | 19.6 | 12.0 |
| 2011 | 20.5 | 11.9 | 16.2 | 8.6 |
| 2012 | 24.9 | 12.9 | 18.9 | 12.0 |
| 2013 | 22.2 | 10.4 | 16.3 | 11.7 |
| 2014 | 21.0 | 10.0 | 15.5 | 11.0 |
| Total | $\mathbf{2 0 . 2}$ | $\mathbf{9 . 5}$ | $\mathbf{1 4 . 9}$ | $\mathbf{1 0 . 7}$ |

Attachment 3: Number of Days Requiring Heating or Cooling Systems in May 20002014

| Years | Days Greater <br> than $\mathbf{1 8}^{\mathbf{}} \mathbf{C}$ | Days Less <br> Than $\mathbf{1 8}^{\mathbf{}} \mathbf{C}$ |
| :--- | :--- | :--- |
| 2000 | 6 | 25 |
| 2001 | 6 | 25 |
| 2002 | 3 | 28 |
| 2003 | 0 | 31 |
| 2004 | 4 | 27 |
| 2005 | 1 | 30 |
| 2006 | 5 | 26 |
| 2007 | 7 | 24 |
| 2008 | 2 | 29 |
| 2009 | 3 | 28 |
| 2010 | 13 | 18 |
| 2011 | 7 | 24 |
| 2012 | 11 | 20 |
| 2013 | 8 | 23 |
| 2014 | 4 | 27 |
| Average | $\mathbf{5 . 3}$ | $\mathbf{2 5 . 7}$ |

Attachment 4: Number of Days Requiring Heating or Cooling Systems May 16-31 (2000-2014)

| Years | Days Greater <br> than $\mathbf{1 8}^{\mathbf{}} \mathbf{C}$ | Days Less <br> Than $\mathbf{1 8}^{\mathbf{o}} \mathbf{C}$ |
| :--- | :--- | :--- |
| 2000 | 1 | 15 |
| 2001 | 0 | 16 |
| 2002 | 3 | 13 |
| 2003 | 0 | 16 |
| 2004 | 0 | 16 |
| 2005 | 1 | 15 |
| 2006 | 5 | 11 |
| 2007 | 4 | 12 |
| 2008 | 2 | 14 |
| 2009 | 2 | 14 |
| 2010 | 10 | 6 |
| 2011 | 6 | 10 |
| 2012 | 10 | 6 |
| 2013 | 7 | 9 |
| 2014 | 4 | 12 |
| Average | $\mathbf{3 . 7}$ | $\mathbf{1 2 . 3}$ |

