



P.O. Box 1749
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Item No. 2
Halifax and West Community Council
March 25, 2014

TO: Chair and Members of Halifax and West Community Council

Original Signed

SUBMITTED BY: Brad Anguish, Director, Community & Recreation Services

DATE: February 24, 2014

SUBJECT: Inclusion of Heat Pump Noise in By-Law N-200, Respecting Noise

INFORMATION REPORT

ORIGIN

January 7, 2013 motion of West Community Council:

“MOVED by Councillor Walker, seconded by Councillor Mason that West Community Council direct staff to investigate including heat pumps in the schedule attached to the Noise By-law. MOTION PUT AND PASSED.”

LEGISLATIVE AUTHORITY

Halifax Regional Municipality Charter; Part VII, Sect. 188 (1) (d) and By-law N-200, Respecting Noise.

BACKGROUND

At the April 16, 2012 Peninsula Community Council meeting, staff submitted an Information Report under item 4.2.1, Information Report: Land Use By-law Regulation of Heat Pumps (attached as Appendix A). The report concluded that, “Should Council choose to regulate the siting of heat pumps through the Land Use By-law, any such amendment would only address new heat pump installations. Existing heat pumps would be non-conforming and, as such, be permitted to remain in their current locations.”

As a result, it was staff’s suggestion that, “investigation and enforcement of individual complaints through the Noise By-law is the most appropriate means by which to address noise concerns. Should Council wish to amend the Noise By-law so that it may be administered on a more objective basis through some quantitative means, the matter would require approval of Regional Council.”

The item was deferred during the April 16, 2012 meeting to the May 14, 2012 meeting of Peninsula Community Council.

At the May 14, 2012 meeting, the following motion was passed:

“MOVED by Councillor Uteck, seconded by Councillor Sloane that, as presented in the March 12, 2012 Information Report, staff begin the formal process of incorporating heat pumps into the Land Use Bylaw and Noise Bylaw and report back to Community Council.”

It was noted that when staff returned to Peninsula Community Council with a report, Community Council would forward it to the Environment and Sustainability Standing Committee for review.

DISCUSSION

Councillor Walker requested the April 16, 2012 Information Report: Land Use By-law Regulation of Heat Pumps, be an added item at the January 7, 2013 meeting of West Community Council.

At the January 7, 2013 meeting, staff was asked to provide an overview of how noise resulting from heat pumps is currently being addressed. Staff advised that the process for investigating heat pump noise complaints falls under By-law N-200 Respecting Noise. The investigation takes place under, Part 3 General Prohibition:

3. (1) *No person shall engage in any activity that unreasonably disturbs or tends to disturb the peace and tranquillity of a neighbourhood.*
- (2) *Without limiting the generality of subsection (1), the activities listed in Schedule “A” during the prohibited times and places as set out therein are deemed to be activities that unreasonably disturb the peace and tranquillity of a neighbourhood.*
- (3) *For the purpose of a prosecution pursuant to subsections (1) or (2), evidence that one neighbour is unreasonably disturbed by a noise is prima facie evidence that the neighbourhood is unreasonably disturbed by the noise.*

Research was conducted with other Canadian cities including, Charlottetown, Moncton, Ottawa, Kingston, Toronto, Central Kootenay, Saanich, and Port Coquitlam (attached as appendix B). Most cities regulate heat pump noise through a noise by-law and the majority of cities stated they have not laid charges. Compliance has been achieved through property owners installing noise barriers to reduce the noise, or service providers attending to the heat pump to conduct a maintenance check.

HRM has received 10 complaints related to heat pumps since January 2012. Property owners responded by scheduling service calls to ensure heat pumps were in good working condition and installed noise barriers where possible.

Councillor Walker expressed a desire to specifically identify heat pumps as a potential violation of the noise by-law and have heat pumps included in Schedule A of the by-law.

A by-law amendment would require the approval of Regional Council. Wording could be included in Schedule A, Part 2 of the Noise By-law to create a section specifically dedicated to noise resulting from heat pumps. Therefore, Halifax and West Community Council could recommend that Regional Council direct staff to amend the Noise By-law to specifically address noise from heat pumps. However, given that the complaints received to date have been successfully concluded, staff believe the current HRM Noise By-law addresses noise resulting from heat pumps adequately and that an amendment is not required.

FINANCIAL IMPLICATIONS

There are no financial implications.

COMMUNITY ENGAGEMENT

This item was discussed during a public meeting of the Halifax and West Community Council. Consultation has taken place with local businesses and industry representatives who install and are familiar with heat pumps to understand current maintenance and sound abatement practices.

ATTACHMENTS

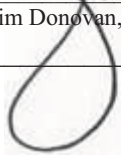
Appendix A: Information Report: Land Use By-law Regulation of Heat Pumps dated March 12, 2012

Appendix B: Heat Pump Research from other Canadian Cities

A copy of this report can be obtained online at <http://www.halifax.ca/commcoun/cc.html> then choose the appropriate Community Council and meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by: Tanya Phillips, Manager, By-law Standards, 490-4491
Original Signed

Report Approved by: Jim Donovan, Manager, Municipal Compliance, 490-6224



APPENDIX A



P.O. Box 1749
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Peninsula Community Council
April 16, 2012

TO: Chair and Members of Peninsula Community Council

Original Signed

SUBMITTED BY: _____
Brad Anguish, Director, Community and Recreation Services

DATE: March 12, 2012

SUBJECT: Land Use By-law Regulation of Heat Pumps

INFORMATION REPORT

ORIGIN

October 3, 2011 motion of Peninsula Community Council:

“MOVED by Councillor Uteck, seconded by Councillor Sloane that Peninsula Community Council request a staff report to review the issue of regulating heat pumps in the Land Use By-Law. MOTION PUT AND PASSED.”

BACKGROUND

Rising energy costs have led to an increase in the installation of heat pumps for residential properties. A heat pump is usually located outside a dwelling where its connection to heating and ventilation systems is most direct.

Heat pumps can generate noise and a 2007 Canadian Mortgage and Housing Corporation (CMHC) publication, “Study of the Noise Generated by Heat Pumps in Residential Areas” outlines that municipalities in Quebec were receiving an increasing number of noise complaints, particularly during the summer months. The report outlined that most heat pumps can be considered to be noisy with the exception of higher end and newer models. The noise levels produced vary depending on the power of the pumps, their technology, when they were manufactured, their degree of wear and tear, and how they are situated on a property.

This report concluded that placing the equipment near neighbouring windows or reflecting surfaces such as a wall or hard-packed soil, which can aggravate the noise situation, should be avoided. It also stated that, regardless of the particular situation, it is always possible to install a noise attenuation device, such as a muffling device, around the pump.

DISCUSSION

The Halifax Peninsula Land Use By-Law, similar to HRM's other land use by-laws, does not specifically address heat pumps relative to their situation on residential properties. They are not captured by the definition of "accessory structure" and, therefore, on their own, are not regulated by the document. If the Municipality intends to regulate the placement of heat pumps, specific regulations pertaining to them would need to be identified in the Land Use By-law.

A cursory review of Canadian cities identified that some jurisdictions regulate heat pumps through a noise by-law. The standard, acceptable noise range appears to be under 45 to 50 decibels from the point of reception. The City of Nanaimo, BC, however, regulates heat pumps and central air conditioning units in their Land Use By-Law. These units must be located to the rear of a principal building and not be closer than 4.5m from the side lot lines or closer than 3m from the rear property line.

Whether heat pumps are regulated through a land use by-law or a noise by-law, each has its own merits. A land use by-law controls land use and building setbacks from property lines. An amendment to the Peninsula Land Use By-law would be required to regulate the location of new heat pump installations. To provide some mitigation against potential noise effects, the Land Use By-law could stipulate that heat pumps be located in rear yards. Such a requirement, however, may interfere with best installation practices to ensure the proper functioning of the unit and such a regulation could not provide certainty as to sound dampening. This may also prove to be counter to community objectives which aim to see buildings become more energy efficient.

A noise by-law controls when various types of noise may or may not be permitted and under what circumstances. The HRM Noise By-law (By-law N-200) provides that, "No person shall engage in any activity that unreasonably disturbs or tends to disturb the peace and tranquillity of a neighbourhood." By-law amendments are not necessary to investigate and enforce a noisy heat pump through the Noise By-law. As it is currently administered, the By-law responds to subjective complaints from citizens that a particular noise is offending. This does not require the use of specialized equipment to measure noise levels as there are no objective thresholds specified in the Noise By-law.

Conclusion

Should Council choose to regulate the siting of heat pumps through the Land Use By-law, any such amendment would only address new heat pump installations. Existing heat pumps would become non-conforming and, as such, be permitted to remain in their current locations.

In consideration of the effects and limitations of regulating heat pumps in the Land Use By-law, staff suggest that investigation and enforcement of individual complaints through the Noise By-law is the most appropriate means by which to address noise concerns. Should Council wish to amend the Noise By-law so that it may be administered on a more objective basis through some quantitative means, the matter would require the approval of Regional Council.

BUDGET IMPLICATIONS

None.

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Project and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Project and Operating reserves, as well as any relevant legislation.

COMMUNITY ENGAGEMENT


None.

ATTACHMENTS

None.

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Report Prepared by : Sean Audas, Development Officer, 490-4341
Tanya Phillips, Manager, By-law Services, 490-4491

Report Approved by: 
Kelly Denly, Manager, Development Approvals, 490-4800


Jim Donohue, Manager, Municipal Compliance, 490-6224

APPENDIX B

Heat Pump research from other Canadian cities

City	Do you have a by-law which addresses noise resulting from Heat Pumps	Identify the legislation	Have charges been laid or other penalties given to violators?
Charlottetown, PE	Heat pumps are not specifically mentioned. A complaint would be addressed under the Nuisance By-law.	Nuisance By-law http://www.city.charlottetown.pe.ca/pdfs/bylaws/Oct2307NuisanceBylawamended.pdf	No complaints received to date.
Moncton, NB	Heat pumps are not specifically mentioned. A complaint would be addressed under the Noise by-law.	By-law #H-102 Prevention of Excessive Noise http://www.moncton.ca/Residents/By-Laws.htm	Only a few complaints and no charges have been laid.
Ottawa, ON	Yes, there is a section within the Noise By-law to address heat pumps.	Noise By-law No 2004-253 http://ottawa.ca/en/residents/laws-licenses-and-permits/laws/noise	There have been 10 complaints investigated and no charges have been laid.
Kingston, ON	Heat pumps are not specifically mentioned. A complaint would be addressed under the Noise by-law.	Noise By-law 2004-52, Section 6 Schedule B. http://www.cityofkingston.ca/documents/10180/16904/Noise+By-law/015b9303-2db7-4e26-8b03-4c17ba1e59cb	Received a few complaints and there was voluntary compliance of noise barriers installed. No charges have been laid.

City	Do you have a by-law which addresses noise resulting from Heat Pumps	Identify the legislation	Have charges been laid or other penalties given to violators?
Toronto, ON	Heat pumps are not specifically mentioned. A complaint would be addressed under the Noise by-law.	Toronto Municipal Code on noise http://www.toronto.ca/311/knowledgebase/64/101000042164.html	There have been no charges laid.
Saanich, BC	Yes, there is a section within the Noise By-law to address heat pumps.	By-law no 7059, For Abatement and Control of Noise in the Municipality of Saanich http://www.saanich.ca/living/bylaw/index.html?ref=shortURL	The By-law Clerk advised a ticket may have been issued in the past however, they are not aware of any recent charges.
Central Kootenay, BC	Yes, there is a section within the Noise By-law to address heat pumps.	By-law No. 2061, Noise Control By-law http://www.saanich.ca/living/bylaw/index.html?ref=shortURL	There have been a number of complaints, but no charges have been laid.
Port Coquitlam, BC	Yes, there is a section within the Noise By-law to address heat pumps.	By-law No 2891, Section 5 http://www.portcoquitlam.ca/Assets/Bylaw+Amendments/2011+Bylaw+Amendments/Noise+Control+Bylaw\$!2c+1994\$!2c+No.+2891.pdf	No charges have been laid.