

**4. REGULATING HYDRONIC HEATERS / OUTDOOR WOODBURNING BOILERS**

**RÈGLEMENTATION DES APPAREILS DE CHAUFFAGE À EAU CHAUDE/CHAUDIÈRES AU BOIS EXTÉRIEURES**

**COMMITTEE RECOMMENDATION**

That Council approve an amendment to the Zoning By-law 2008-250 to include provisions for regulating hydronic heaters (outdoor woodburning boilers), as detailed in Document 4.

**RECOMMANDATION DU COMITÉ**

Que le Conseil municipal approuve une modification au Règlement de zonage visant à intégrer la réglementation des appareils de chauffage à eau chaude (chaudières au bois extérieures), comme le précise le document 4.

**DOCUMENTATION**

1. Deputy City Manager's report, Planning and Infrastructure, dated 24 August 2012 (ACS2012-PAI-PGM-0090).
2. Extract of draft Agriculture and Rural Affairs Committee minutes, dated 6 September 2012

Report to/Rapport au :

**Agriculture and Rural Affairs Committee  
Comité de l'agriculture et des affaires rurales**

**and Council / et au Conseil**

**August 24, 2012  
24 août 2012**

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Urbanisme et Infrastructure

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WARDS: WEST CARLETON-MARCH (5),  
CUMBERLAND (19), OSGOODE (20) RIDEAU-  
GOULBOURN (21)

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Ref N°: ACS2012-PAI-PGM-0090

**SUBJECT: REGULATING HYDRONIC HEATERS / OUTDOOR WOODBURNING  
BOILERS**

**OBJET : RÉGLEMENTATION DES APPAREILS DE CHAUFFAGE À EAU  
CHAUDE/CHAUDIÈRES AU BOIS EXTÉRIEURES**

**REPORT RECOMMENDATION**

That the Agriculture and Rural Affairs Committee recommend that Council approve an amendment to the Zoning By-law 2008-250 to include provisions for regulating hydronic heaters (outdoor woodburning boilers), as detailed in Document 4.

**RECOMMANDATION DU RAPPORT**

Que le Comité de l'agriculture et des affaires rurales recommande au Conseil municipal d'approuver une modification au Règlement de zonage visant à intégrer la réglementation des appareils de chauffage à eau chaude (chaudières au bois extérieures), comme le précise le document 4.

Executive Summary

Assumptions and Analysis:

As a result of a number of complaints, the Agriculture and Rural Affairs Committee requested that the Planning and Growth Management Department review the considerations involved in regulating outdoor hydronic heaters (HHs) in rural areas, specifically within villages.

HHs are outdoor appliances used to heat homes and water by burning solid fuel such as wood or coal. Concerns have been raised by neighbours regarding smoke and pollution from HHs, usually as a result of their location, age and usage. One way to mitigate these concerns is to ensure that HHs are located on large lots away from densely populated areas. It is also possible for a municipality to create regulations to control emissions and burning practices. Regulations are implemented through zoning, a by-law, permit or combination of these tools.

While the Planning and Growth Management Department recognizes that the most effective way to eliminate air pollution and the potential for nuisance disputes is to ban the use of HHs, the small number of concerns raised to date suggests that this is unnecessary in Ottawa. There is also a need to recognize a homeowner's right to heat their home as they choose. Instead, the Department recommends amending the Zoning By-law to ensure that HHs are limited to rural areas excluding villages, and, are subject to minimum lot size, setbacks and stack height requirements. Presently these appliances can be located on any property within the City without restriction. Zoning controls would not apply to existing HHs; however, new units would be subject to the provisions. Creating zoning controls is also expected to have a positive environmental impact; if approved, HHs will be permitted in fewer locations.

Consultation/Input:

Written comments were received from HH owners, industry representatives, and government agencies. As a result of consultations the Department made several changes to its original proposal including reducing the setback requirements for HH, and excluding Agriculture zones from the 8 000 square metre lot minimum. Stack requirements were also reduced, as well as the distance between neighbours that triggers the proposed height increase. As a result of consultations, automatically fed pellet boilers with controlled combustion were exempted from the zoning controls and can therefore be located throughout the city.

Résumé

Hypothèses et analyse :

Par suite d'un certain nombre de plaintes, le Comité de l'agriculture et des affaires rurales a chargé le Service de l'urbanisme et de la gestion de la croissance d'examiner les répercussions d'une réglementation sur les installations extérieures de chauffage à eau chaude dans les secteurs ruraux, et plus précisément dans les villages.

Les installations à eau chaude sont des appareils extérieurs servant à chauffer les habitations et l'eau à l'aide d'un combustible comme le bois ou le charbon. Des préoccupations ont été soulevées par des voisins au sujet de la fumée et de la pollution produites par ces appareils, habituellement en raison de leur emplacement, de leur vétusté et de leur usage. L'un des moyens de résoudre ces problèmes consiste à s'assurer que les installations à eau chaude sont situées sur de grands terrains éloignés des zones densément peuplées. Les municipalités peuvent par ailleurs créer une réglementation pour contrôler les émissions et les pratiques de combustion, qui peut être mise en place par le biais d'un zonage, d'un règlement municipal, d'un permis ou par une combinaison de ces moyens.

Bien que le Service de l'urbanisme et de la gestion de la croissance reconnaisse que le moyen le plus efficace d'éliminer la pollution de l'air et les risques de conflits de voisinage consiste à interdire les installations à eau chaude, le faible nombre de préoccupations soulevées à ce jour autour de ces installations laisse supposer qu'une telle interdiction n'est pas nécessaire à Ottawa. Il convient également de reconnaître le droit des propriétaires de chauffer leur habitation comme ils le souhaitent. Le Service recommande plutôt de modifier le Règlement de zonage pour s'assurer que a) les installations à eau chaude soient limitées aux secteurs ruraux à l'exclusion des villages et b) soient soumises à des exigences de superficie minimale de lot, de retrait et d'empilement. Actuellement, ces appareils peuvent être installés sans aucune restriction sur tout terrain de la ville. Les exigences de zonage ne s'appliqueraient pas aux installations à eau chaude existantes; toutefois, les nouvelles unités d'habitation seraient soumises aux nouvelles dispositions. La création d'exigences de zonage devrait en outre avoir des répercussions positives sur l'environnement car, si elles sont adoptées, les installations à eau chaude seront autorisées à moins d'endroits.

#### Consultation/commentaires :

Des commentaires écrits ont été transmis par des propriétaires d'installations à eau chaude, des représentants de l'industrie et des organismes gouvernementaux. Par suite de consultations menées, le Service a apporté plusieurs modifications à sa proposition originale, notamment la réduction des exigences de retrait de ces installations et l'exclusion des zones agricoles de l'exigence de surface minimale de lot fixée à 8 000 m<sup>2</sup>. Les exigences relatives à l'empilement ont également été réduites, tout comme la distance entre les habitations qui donne lieu à la proposition d'augmenter la hauteur. À la suite des consultations, il a été convenu que les chaudières à granule automatiques à combustion contrôlée ne seraient pas visées par ces exigences de zonage et pourraient par conséquent être installées partout sur le territoire de la ville.

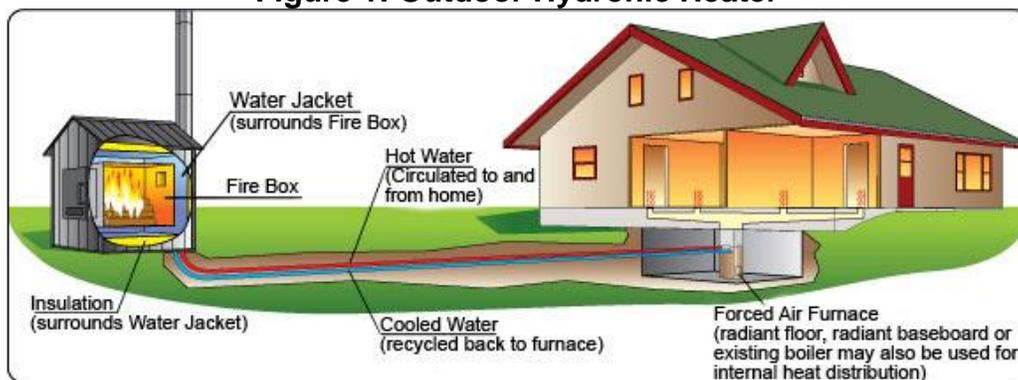
## BACKGROUND

### Hydronic Heaters

Also referred to as an outdoor wood burning boiler or solid fuel-combustion appliance, a hydronic heater (HH) is a stand-alone unit designed to burn seasoned wood or other qualified solid fuels. As shown in Figure 1, a HH is an insulated shed that contains a firebox and smoke stack. The heat generated from the device is used for domestic space and/or water heating. Heated liquid travels through underground pipes and eventually to a system where it is transferred to the home or nearby buildings.

While the cost of setting up a unit is high (\$8,000 or more), over time a HH may be cheaper than conventional electric, oil or natural gas heating, and therefore remains an attractive heating alternative. These units tend to be popular with farmers and rural residents who have easy access to the resources needed to operate them. These devices may run all year since a HH typically supplies all or most of a home's heat requirements, including hot water. Owners prefer HHs to indoor fire appliances; there is no need to haul or store wood inside the home, and no soot or ash to clean. Given their distance from the home, a HH is also less likely to result in a house fire or lead to carbon monoxide poisoning. Farmers have also mentioned forestry management as one of the benefits of owning a HH.

**Figure 1: Outdoor Hydronic Heater**



*Source: Environmental Protection Agency, 2011*

### Concerns

Smoke generated from wood burning contributes to air pollution and is considered harmful to human health. It is the emission of carcinogenic gases and fine particulates that is most concerning to health officials. These tiny particles remain in the air for days and travel long distances. They can penetrate deep into the lungs when inhaled. According to Washington State's Department of Ecology, breathing particulates can:

- reduce lung function
- worsen existing lung diseases
- aggravate heart disease
- irritate eyes, lungs, throat and sinuses
- trigger headaches and allergies
- increase the risk of lung disease and cancer

Smoke from HHs can be a nuisance to homeowners and surrounding residents if they are not designed and used properly, particularly older, less efficient models. Not only do older models pollute more than newer certified units, but their smokestacks are also usually low, causing pollution to accumulate near the ground instead of being dispersed in the atmosphere. The problem is amplified by improper use of the appliance, for example some owners burn materials such as garbage or green wood. Burning garbage and other household debris adds dangerous toxins to the air, while wet wood generates more smoke, and therefore more particulates.

Although HH manufacturers provide a manual describing best burning practices, it is possible to burn inappropriate materials. When burned properly, seasoned wood can be an effective fuel for residential heating. However, poor burning practices and inefficient appliances seldom allow for full combustion, resulting in the production wood smoke. In Ontario, a number of legal precedents exist where neighbours have been awarded cash settlements as a result of negligent HH practices. In some cases, owners have been required to discontinue use during warmer months.

### Regulating HHs

In January 2012, as a result of a few smoke complaints, the Agriculture and Rural Affairs Committee requested that the Planning and Growth Management Department review the considerations involved in regulating outdoor wood burning furnaces in the rural area, specifically within villages. In terms of regulation, Ontario municipalities have opted for a wide range of actions; some have completely banned the use of HHs while others have chosen to do nothing. Many municipalities are using a combination of by-laws, zoning regulations and permits to help regulate HHs. Currently, a HH can be located on any lot in Ottawa; there are no municipal regulations in place to control them. Creating zoning controls will have a positive environmental impact; if approved, fewer locations will permit HHs.

While the Planning and Growth Management Department recognizes that the most effective way to eliminate air pollution and the potential for nuisance disputes is to ban the use of HHs, it does not believe that this approach is warranted in Ottawa; few concerns have been raised to date. The Department is also mindful of a homeowner's right to choose how they heat their dwelling. Instead, the Department recommends addressing potential nuisances by amending the Zoning By-law to ensure that: a) HHs are limited to rural areas excluding villages; and, b) are subject to minimum lot size,

setbacks and stack height requirements. As per the *Ontario Planning Act*, all existing HHs can continue to operate without the need to comply with the zoning; however, new units would be subject to the proposed performance standards.

Although the Department believes that establishing zoning requirements is one way to quickly begin regulating HHs, it is important to recognize that a range of regulatory measures are available. Authority for an Ontario municipality to regulate HHs is granted through the *Municipal Act*, *Building Code Act* and *Fire Protection and Prevention Act*. Through by-laws enacted pursuant to these statutes, the municipality can control a HH's use and installation, as well as the storage of fuels. A municipality may choose to implement a permitting system and inspect properties to ensure that these devices are in conformity with the enacted by-law.

The most widely referenced Canadian guidance document for developing HH regulation is Environment Canada's (EC), *Model Municipal By-law for Regulating Woodburning Appliances* (2006). Table 1 provides a summary of popular regulatory options. These controls are typically enforced through zoning, a building permit or a property standards by-law. Some municipalities, including North Grenville use all three tools. Each control has advantages and disadvantages, with some requiring funds and expertise to administer them. To succeed, most of them also require ongoing public education and outreach to retailers and owners, as well as continual pro-active inspection and enforcement.

**Table 1: Summary of Possible HHs Regulations**

<b>Control</b>	<b>Description</b>
Outline a list of permissible and prohibited fuels.	Burning fuels other than dry seasoned wood increases air toxins.
Require all units to achieve a specified emissions rate.	Prevents the installation of high-polluting appliances.
Require alternate forms of space heating in new construction.	When pollution levels are high homeowners can use an alternative heat source.
Ban the installation of HHs.	Eliminate emissions and nuisances through prohibition.
Implement a voluntary removal or change out program.	Provide incentive for residents to replace older less efficient HHs.
Create a time limit for appliance removal.	Require that all non-certified units be removed by a certain date.
Replace non-certified units prior to sale or transfer of property.	Owner must remove all existing non-certified appliances prior to sale or transfer of the property.
Voluntary or obligatory curtailment of use.	Reduce or prohibit the use of non-certified HHs during periods of poor air quality.

Controls to address smoke nuisance.	Sets a limit on the duration and number of times a HH can be lit over the course of a day.
Controls to address opacity.	Sets a numeric limit on the opacity (cloudiness) of emissions (20 percent).
Establish lot, setbacks and stack requirements.	Reduce potential for nuisances by ensuring that these devices have tall stacks and are located on large lots with greater separation distances between neighbours.

*Adapted from: Model Municipal By-law for Regulating Woodburning Appliances (Environment Canada, 2006)*

Many municipalities that have opted for a property standards by-law have implemented a range of the measures included in Table 1. A copy of Environment Canada's (EC) model by-law for HH's is included in Document 1 of this report. It is useful to note that since the publication of EC's sample by-law, regulating emissions from HHs has become popular in the United States (US) as a result of the Environmental Protection Agency's (EPA) 2008 voluntary emissions program. This program aims to reduce emissions by challenging manufacturers to bring cleaner, safer HHs to the market. This short-term solution has provided a backdrop for policy makers to regulate HH emissions.

To be eligible for the voluntary emissions program, a HH must not emit more than 0.32 pounds/Million Metric British Thermal Units (EPA, 2012). Currently, there are over 30 units that meet EPA requirements and are qualified through what is known as the Phase 2 White Tag Program. When used properly, these HHs are 90% cleaner than older, uncertified models (EPA, 2012). Although there is no national US requirement, many states including New York, New Hampshire, and Vermont have implemented laws requiring that all new HHs meet the EPA's emission criteria. The Canadian Standards Association (CSA) also revised their standard in 2010 to include an emission rate for HHs similar to the EPA's (B415.1-10). The CSA has indicated that the standard was developed to help federal, provincial and municipal policy makers regulate emissions from HHs. Quebec and British Columbia both require HHs to meet EPA/CSA emissions standards. In Ontario, Tay Valley allows a reduced yard setback from 100 to 40 metres for devices that meet these emission standards.

#### Why Not a Ban, Property Standards By-law or Building Permit

The Federal and Provincial governments do not regulate residential HHs, and have left this up to the municipality. While the Ministry of Environment does provide criteria for regulating commercial HHs, currently no appliances are able to meet their standards. Despite this, the Department does not believe that a ban is warranted given the differences between residential and commercial units, and the fact that few complaints have been received to date.

As one retailer has explained, residents who opt for these appliances do so to offset the operating costs of conventional types of heating. HHs tend to be popular in older, poorly insulated homes that are costly to heat with oil, gas or electricity. According to one retailer, these devices are less common in new homes because of improved efficiency and convenience factors. Because their popularity does not appear widespread, and since they are not typical in new construction, the Department believes that nuisances can be reduced by adopting zoning regulations, where currently none exist.

A discussion about the value of implementing a building permit and/or property standards by-law resulted in a mix of opinions. While a Property Standards By-law may help specify burn practices and other nuisance controls, it would be extremely difficult to enforce. Numerous municipalities have admitted falling short on the enforcement of these matters. For example, a HH produces more smoke during start-up; conditions are often improved by the time a By-law Officer arrives on site making it difficult to address the concern. Equally challenging would be attempting to determine the types of materials being burned in these devices. As a result, By-law and Regulatory Services believe a more useful and productive approach would be to develop a public education campaign to build awareness about appropriate burning practices and appliance use. By-law and Regulatory Services suggests that civil action may be a more effective route for neighbours impacted by smoke.

In terms of pollution reduction, one advantage of a property standards by-law is its ability to require EPA/CSA emissions criteria. According to the EPA, the emissions rates established through the voluntary program are expected to become compulsory in the US within the next year or so (refer to Document 2). In Canada, a contract has recently been awarded through the Canadian Council of Ministers of the Environment (CCME) to develop some guidance for reducing emissions from HHs, although it is unknown whether any national requirements will be imposed. In light of this information the Department recommends waiting for the EPA or CCME to release a response before pursuing emissions regulation. If a national US standard were passed, emissions-setting may become largely unnecessary, since the majority of large HH manufacturers are American. While emissions-setting may have a positive impact on the environment, the Department is not convinced that the EPA models should be exempt from the proposed zoning; they have caused smoke nuisances in numerous municipalities, including Ottawa. When used properly EPA qualified HHs result in fewer emissions than older models, however their performance, similar to older models relies largely on the user.

With respect to a building permit, although it may be useful to track the number of appliances being installed and ensure that they are positioned properly, it does not address issues related to appliance use; the burning of inappropriate fuels and smoke. It was agreed that the Zoning By-law is equally capable of addressing unit location but less of an administrative burden. According to the Building Code Services Branch, a building permit is not an effective way to mitigate smoke complaints.

Some municipalities use a building permit to ensure that HHs meet national installation standards, although there is debate about the usefulness of this. One retailer who sat on the committee for the Canadian Standards Association (CSA) has indicated that solid fuel installation code CSA B365 has very little to do with HHs. It largely addresses the installation, clearances to combustible materials and venting of indoor solid fuel fired units. Clearances to combustible materials are outlined in the installation manuals sold with HHs.

## DISCUSSION

Each municipality has developed different zoning provisions for HHs (Document 3). Stringent setback requirements can be found in the Township of Smith-Ennismore-Lakefield just north of Peterborough and around London, Ontario. In the former, a HH is not permitted on a property less than 20 000 square metres and must be 30 metres from any structure on the same lot. A separation distance of 30.4 metres is required between neighbours. A less aggressive example is in North Grenville where a minimum lot area of just over 4 000 square metres is required, with a separation distance of 30.5 metres between neighbours. Although North Grenville permits HHs on smaller lots they do not allow them within registered subdivisions.

As a result of public and technical consultations, and a comprehensive review of current standards, the Department recommends that HHs be limited to Ottawa's rural area excluding village zones. Villages contain smaller lots and more compact development making them unsuitable for HHs. Retailers agree that densely populated areas are not appropriate locations for these devices. In addition to specifying zones the Department also suggests the following lot size and setback requirements:

- Minimum lot area = 8 000 square metres
- Minimum distance from a property line = 15 metres unless adjacent to a road allowance, then 30 metres
- Minimum distance of the unit from a dwelling on an adjacent property = 60 metres

The proposed 8 000 square metre lot size corresponds to the minimum requirement permitted in the Rural Residential zone. If approved, HHs would no longer be permitted on smaller clustered lots found in hamlets or along river fronts. The lot minimum also corresponds with the average area of an estate lot. Although the Department contemplated excluding HHs from registered subdivisions it decided that since no complaints have been received on estate lots they could continue to operate at these locations, provided the minimum lot size is achieved. While there are numerous accounts of HHs within these subdivisions, it is unlikely that they will become commonplace. It is important to note that the lot minimum only applies to rural residential zones and not to properties located in agriculture zones. This is to accommodate the use of these devices on severed farm lots where there are no close neighbours.

Owners in agriculture zones are still obligated to meet the minimum setback requirements to help distance these devices from neighbouring lands and dwellings.

After much consultation, the Department is recommending that a HH be setback 15 metres from a property line except when adjacent to a road allowance. This is to address concerns noted by the agriculture community. Smaller farm lots may not be able to meet a larger setback requirement, or they may have difficulty locating the device in relation to their home if not centered on the lot. A review of current estate subdivisions suggests that the average owner of this lot type will need to exceed the 15 metre setback to achieve the minimum distance from a dwelling on an adjacent property (60 metres). As a result, neighbouring amenity space will be buffered from potential smoke. Where adjacent to a road allowance a HH must be setback at least 30 metres from the property line.

After consulting with several retailers, the Department does not feel it is necessary to establish minimum setbacks between HHs and buildings located on the same property. These setbacks are outlined in the installation manuals sold with the appliances. This distance also has an impact on the efficiency of the unit, and may vary according to the type of HH purchased. Anyone who locates a unit closer to their dwelling than suggested by the manufacturer assumes the associated risks. More important to the Department is mitigating smoke nuisances for adjacent property owners.

In addition to lot size and setbacks, the Department also believes that stack or chimney height should be regulated to help ensure that smoke is dispersed away from living spaces. HHs are usually designed with stack heights between 2.5 and 3.6 metres from the base of the device (NESCAUM Report, 2006). To help with smoke dispersion, the Department recommends that all new and replacement units include a permanent stack at least 3.66 metres above ground level, or at least 4.88 metres above ground level if within 92 metres of a neighbouring dwelling. This increases the minimum requirement to match the typical maximum requirement noted by the Northeast States for Coordinated Air Use Management (NESCAUM). While many municipalities have incorporated more stringent requirements, these were not supported during consultations.

Originally the Department planned to apply the proposed zoning to all HHs, although this was challenged by the industry and public. As one retailer has pointed out, there are commercial units that have few features to control emissions and others that have many. In addition, some of these units burn fuel other than cord wood such as corn or anthracite. Retailers and the public believe that it is unreasonable to treat biomass units in the same way as traditional HHs. To address this, the Department has decided to exclude HHs with metered fuel, air feed, and controlled combustion specifically designed to burn pellets, corn or other biomass. These boilers produce so little smoke that many smokeless zones in Great Britain permit their use in high density areas. This exclusion was accomplished by creating a definition for HHs; the proposed zoning will only apply to manually loaded units.

It should be noted that by approving this provision an automatically fed pellet boiler could locate anywhere in the City. Refer to Document 4 for a full copy of the proposed zoning by-law amendment.

### Summary

In the absence of a national or provincial strategy to deal with HHs, the Department believes that developing zoning provisions is a straightforward way to start dealing with potential smoke concerns. Precedents confirm that smoke complaints are reduced when regulatory controls are put into place. At this time the Department feels that it is not necessary to pursue further action since few complaints have been received. Although further regulatory controls such as start-up timeframes, opacity limits and burning requirements may be useful they would be extremely difficult to monitor and enforce, and are therefore not recommended from a cost/benefit perspective at this time. Instead, Public Health, Environmental Sustainability and the Rural Affairs Office will focus on educating both the public and industry on best burning practices and proper use of HHs as outlined in the Communication Plan.

Regarding emissions, the Department anticipates that the EPA will release New Source Performance Standards for HHs later this year, which will set national requirements in the US. Canada may also develop some recommendations to deal with HHs. As a result, it is not advisable to propose a by-law to control emissions at this time. If the proposed amendment is approved, the Department will continue to monitor complaints with Ottawa Public Health and By-law and Regulatory Services to ensure the proposed strategy is effective.

### RURAL IMPLICATIONS

If approved, residents not in compliance with the zoning will be financially impacted. For example, those operating HHs within village boundaries will be required to replace them with other heating systems once they reach the end of their lifespan (average 20 years). Owners operating non complying HHs without complaint may find the new regulations unfair. Conversely, impacted neighbours may find it unreasonable to live with smoke nuisance until a HH reaches its lifespan. In these cases, neighbours have the ability to pursue civil action. In support of change-out, the Ontario Government has a small grant program to encourage older models to be replaced with units that meet CSA/EPA emissions standards (\$375 per building).

### CONSULTATION

The Department consulted with By-law Services, Public Health, Environmental Sustainability, Building Code Services and Fire Services. Discussions also took place with the Ontario Ministry of the Environment, the Ministry of Municipal Affairs and Housing, Health Canada, British Columbia Ministry of the Environment, Ministère du Développement durable, de l'Environnement et des Parcs Québec, the Environmental

Protection Agency, Vermont Department of Environmental Conservation and the Massachusetts Department of Environmental Protection. Numerous Ontario municipalities and industry representatives were also consulted. Notice of the proposal was also distributed to the Rural Issues Advisory Committee, the Ottawa Landowners Association and the Ontario Federation of Agriculture.

With respect to the public, notice was given to all registered community organizations in the rural area. Additionally, two meetings were held in late May; one at the Goulbourn Town Hall and another at the Carlsbad Springs Community Centre. Notice of the meetings was given to rural Councillors and registered community groups. Ads were placed in the rural EMC's, on the City's website and in the monthly Rural Connections newsletter. Approximately 50 people attended the meetings, mainly HH owners. Two residents impacted by the devices also attended.

#### COMMENTS BY THE WARD COUNCILLOR(S)

Rural Councillors received a copy of this report; none provided formal commentary.

#### LEGAL IMPLICATIONS

The approach taken by staff builds upon best practices adopted by other municipalities in North America. In the event of an appeal to the zoning by-law, it may be necessary to retain specific opinion evidence in the area of the dispersal of the exhaust generated by hydronic heaters so that the Ontario Municipal Board could be provided with, as the rules of evidence require, the best possible evidence. Based upon the experience of retaining engineers in other areas, the anticipated cost would be \$25,000 to \$50,000.

#### RISK MANAGEMENT IMPLICATIONS

There are no risk implications.

#### FINANCIAL IMPLICATIONS

There are no direct financial implications.

#### ACCESSIBILITY IMPACTS

There are no accessibility implications associated with this report.

### ENVIRONMENTAL IMPLICATIONS

Concerns have been raised by neighbours regarding smoke and pollution from HHs. The age and style of the device, as well as the way it is operated, influence the amount of smoke produced. The Department recommends mitigating these impacts by restricting the location of HHs to rural areas, mandating minimum stack heights, and requiring setbacks between neighbours. In addition, the Department, along with Ottawa Public Health, will develop educational materials to promote best burning practices and emissions-qualified HHs.

### TECHNOLOGY IMPLICATIONS

There are no technology implications associated with this report.

### TERM OF COUNCIL PRIORITIES

The proposed zoning amendment supports Term of Council Priorities GP2 and GP3.

### SUPPORTING DOCUMENTATION

- Document 1 Sample By-law for Regulating HHs
- Document 2 Environmental Protection Agency's Draft Hydronic Heater Regulation
- Document 3 Example Regulations
- Document 4 Details of Recommended Zoning
- Document 5 Original Proposal
- Document 6 Summary of Technical and Public Comments

### DISPOSITION

Information about the new requirements will be included in local newspapers, newsletters and online. It will also be supplied to community associations, councillors and committees. Manufacturers, retailers, and organized groups including the Federation of Agriculture will also be notified of the changes. In addition, the Rural Affairs Office will create and distribute a brochure for residents, manufacturers and retailers explaining the new requirements. Information about appliance selection and set-up, along with best burning practices will also be included.

**ENVIRONMENT CANADA'S SAMPLE  
BY-LAW FOR REGULATING HYDRONIC HEATERS**

DOCUMENT 1

7. Outdoor Solid-fuel Combustion Appliances

{This section may be used to regulate the installation of outdoor boilers. If a municipality wishes to limit the installation to certified appliances, it may refer to section 2 option a.1) and option c) to ban the installation of outdoor boilers}

7.1 Outdoor solid-fuel-combustion appliances shall be permitted on a lot which has a minimum lot area of [number] hectares and the unit shall be located/installed as follows:

- 7.1.1 at a minimum of [number] metres from all property lines;
- 7.1.2 at a minimum of [number] metres from any building on the property;
- 7.1.3 such that the perimeter ground area around the unit to a distance of [number] metres minimum from the unit shall be of a non-combustible material (i.e. gravel, sand, concrete pad);
- 7.1.4 the unit's chimney cap shall be fitted/equipped with a rain cap/spark shield;
- 7.1.5 in accordance with a site location/installation plan as approved by the chief building official or designate;
- 7.1.6 fuel shall be stored a minimum of [number] metres from the appliance.

7.2 Notwithstanding the provisions of subsection 7.1, outdoor solid-fuel-combustion appliances are not permitted on any lot which is:

- 7.2.1 located within a registered plan of subdivision;
- 7.2.2 located within Residential Zones in the zoning by-laws.

7.3 Where such installations are otherwise permitted in this by-law, there shall be no more than one (1) unit permitted per property within the municipality except where:

- 7.3.1 more than one (1) outdoor solid-fuel-combustion appliance is permitted on a lot where it serves a permitted accessory dwelling or an agricultural building on lands that are used primarily for agricultural purposes.

7.4 The installation of outdoor solid-fuel-combustion appliances shall comply with the [Jurisdiction] Building Code, the [Jurisdiction] Fire Code, the manufacturer's installation instructions and all other applicable laws and regulations.

7.5 No outdoor solid-fuel-combustion appliances shall be used for the incineration of material listed in subsection 1.1.

7.6 The installation of such unit shall require a permit to be issued by the chief building official or designate to ensure compliance with this by-law. The form of permit shall be in accordance with Schedule "[ ]" attached to and forming part of this by-law. The permit fee shall be \$[amount].

**ENVIRONMENTAL PROTECTION AGENCY'S  
DRAFT HYRNIC HEATER REGULATION**

DOCUMENT 2

- Exempt from 1988 New Source Performance Standards (NSPS)
- Typical emissions: >4 lb /mmBTU heat output
- EPA 2010 Phase 2 Voluntary Program Qualifying Level
  - 0.32 lb / mmBTU heat output
  - 23 EPA-qualified models already
- Typical State 2010 regulatory level
  - 0.32 lb / mmBTU heat output
- Many local jurisdictions ban HH or have setbacks and stack heights
- Draft NSPS limits for PM
  - 0.32 lb / mmBTU heat output for outdoor HH in 2013 and indoor in 2014
  - 0.15 lb / mmBTU heat output for both outdoor and indoor HH in 2016
    - 7 EPA-qualified models already
    - ~100 models qualified by EN 303-05 are estimated to meet this level
- Draft NSPS limits for CO
  - 1000 mg / m<sup>3</sup> at 12% O<sub>2</sub> in 2013/2014
  - 650 mg / m<sup>3</sup> at 12% O<sub>2</sub> in 2016
- Draft NSPS limit for Visible Emissions
  - 6 minutes per hour in field

*Source: Residential Wood Heaters New Source Performance Standards Current Draft Revisions, March 2011 (EPA)*

**EXAMPLE REGULATIONS FROM THE UNITED STATES AND ONTARIO MUNICIPALITIES**

DOCUMENT 3

Location / Emissions Standard	Setbacks	Lot Size / Zone	Chimney Height	Year Regulation was Passed
United States Examples				
<a href="#">New York / EPA Phase 2 qualified</a>	<ul style="list-style-type: none"> <li>30 m from any lot line</li> <li>30 m to nearest neighbouring residence (contiguous agricultural land)</li> </ul>	N/A	<ul style="list-style-type: none"> <li>Minimum 5.5 m</li> <li>Maximum 0.6 m above roof peak of dwelling (if a complaint is received)</li> </ul>	December 2010
<a href="#">Vermont / EPA Phase 2 qualified</a>	<ul style="list-style-type: none"> <li>30 m from any building</li> </ul>	N/A	Above roof peak of dwelling if within 60 m of another dwelling (exempts EPA qualified)	October 2009
<a href="#">Maine / EPA Phase 2</a>	<ul style="list-style-type: none"> <li>15 m from any lot line</li> <li>21 m from nearest neighbour</li> </ul>	N/A	<ul style="list-style-type: none"> <li>Minimum 3 m</li> <li>0.6 m above roof peak of any roof peak within 91 m</li> </ul>	November 2007
<a href="#">New Hampshire / EPA Phase 2 qualified</a>	<ul style="list-style-type: none"> <li>15 m from any property line</li> </ul>	N/A	0.6 meters above roof peak of dwelling if within 91 m of another dwelling (exempts EPA Phase 2 qualified)	August 2008
Ontario Examples				
<a href="#">Kenora / none</a>	<ul style="list-style-type: none"> <li>15 m from any lot line</li> <li>15 m from habitable structure</li> <li>3 m from trees / hedges</li> </ul>	8 000 m <sup>2</sup> (2 acres) / none	5 m above ground	September 2004
<a href="#">Mississippi Mills / none</a>	<ul style="list-style-type: none"> <li>50 m to nearest neighbouring residence</li> </ul>	None / rural and agriculture zones	None	June 2001
<a href="#">Tay Valley / CSA certified or EPA qualified</a>	<ul style="list-style-type: none"> <li>100 meters from any lot line unless EPA approved, then 40 m</li> <li>15 m from a building on same lot</li> </ul>	None / rural and agriculture zones	3.6 m	May 2009
<a href="#">Township of Rideau Lakes / none</a>	Permitted on rural properties where all yards are a minimum of 100 m	10 000 m <sup>2</sup> (2.5 acres)	None	January 2005
<a href="#">Loyalist Township / none</a>	<ul style="list-style-type: none"> <li>60 m from any lot line</li> <li>9 m from any building on same lot</li> </ul>	20 000 m <sup>2</sup> (5 acres) / none	None	August 2005
<a href="#">Sarnia / none</a>	<ul style="list-style-type: none"> <li>30 m from any lot line</li> <li>60 m to nearest neighbouring residence</li> </ul>	None / rural zones	5 m above base of unit	February 2007
<a href="#">Township of Beckwith / none</a>	<ul style="list-style-type: none"> <li>46 m from any lot line (may be reduced to 23 m if adjacent property is vacant)</li> <li>9 m from any building</li> </ul>	12 140 m <sup>2</sup> (3 acres) / none	None	December 2011
<a href="#">North Grenville / none</a>	<ul style="list-style-type: none"> <li>30.5 m to nearest neighbouring residence</li> <li>Not permitted in any registered subdivision</li> </ul>	4 000 m <sup>2</sup> (1 acre) / none	0.6 meters above roof peak of dwelling if within 91 m of another dwelling	February 2009
<a href="#">Township of Smith-Ennismore-Lakefield / none</a>	<ul style="list-style-type: none"> <li>61 m from any lot line</li> <li>30 m from a building on the same lot</li> <li>304 m to nearest neighbouring residence</li> </ul>	20 000 m <sup>2</sup> (5 acres) / rural and agriculture zone	None	June 2011

<p><u>Proposed</u> Ottawa / none</p>	<ul style="list-style-type: none"> <li>• 15 m from any lot line unless adjacent to a road allowance, than 30 m</li> <li>• 60 m to nearest neighbouring residence</li> </ul>	<p>8 000 m<sup>2</sup> (2 acres) / in permitted zones except no requirement in agricultural zones</p>	<ul style="list-style-type: none"> <li>• At least 3.66 m above ground level</li> <li>• At least 4.88 m above ground level if unit is within 92 m of another dwelling</li> </ul>	<p>N/A</p>
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**DETAILS OF RECOMMENDED ZONING**

DOCUMENT 4

**Proposed Changes to Zoning By-law 2008-250:**

1. Amend Section 54 – Definitions, by adding the following definition in alphabetical order:

**“Hydronic Heater** means a manually loaded solid fuel burning device that is located outdoors or in a structure not used for human habitation, and is used for the heating of buildings, water or other such purpose on the same lot.”

2. “Amend Part 3 – Specific use Provisions, by adding a new Section XX containing subsections and clauses similar in effect to the following:”:

“XX. (1) A Hydronic Heater is:

- (a) not permitted on a lot within:
  - i. Areas A, B and C on Schedule 1; and,
  - ii. The V1, V2, V3 and VM zones;
- (b) only permitted on a lot with an area equal to or greater than 8 000 square metres, except in the AG zone;
- (c) required to be setback a minimum of:
  - (i) 30 metres from a lot line abutting a public street;
  - (ii) 15 metres from any other lot line; and,
  - (iii) 60 metres from a residential use building located on another lot,
- (d) required to have a chimney or stack which projects at least 3.66 metres above ground level,
- (e) notwithstanding clause (e), where a Hydronic Heater is within 92 metres of a residential use building located on another lot, the Hydronic Heater must have a chimney or stack which projects at least 4.88 metres above ground level.”

3. Amend Section 55 – Accessory Uses, Buildings and Structures by adding a subsection similar in effect to the following as subsection 55(8):

“(8) This Section does not apply to Hydronic Heaters, which are by definition an accessory structure, as they are regulated by Section xx – Hydronic Heaters.”

**ORIGINAL PROPOSAL**

DOCUMENT 5

The following was originally presented to the public and industry for comment:

Outdoor Hydronic Heaters (Section 96)

96. The following applies to all Outdoor Hydronic Heaters:

- (1) Outdoor Hydronic Heaters are only permitted to occupy land in AG, RR, and RU zones as well as MR1, ME1 and ME3 subzones,
- (2) a lot on which an outdoor hydronic heater occupies land must be equal to or greater than 8 000m<sup>2</sup> in area,
- (3) an outdoor hydronic heater must be located on land at least 30 metres from any lot line,
- (4) an outdoor hydronic heater must not occupy land closer than 60 metres from any dwelling on other land,
- (5) an outdoor hydronic heater occupying land must have a permanent stack or chimney at least as high as the peak of the highest residential roof within 150 metres.

**Summary of Major changes between Original and Revised Proposals**

- Definition to exclude automatically-fed biomass boilers (pellet boilers)
- Devices permitted in more locations
- Agricultural Zones no longer required to meet the 8 000 square-metre lot minimum
- Setback from a property line was reduced from 30 to 15 metres, unless abutting a road allowance
- Chimney height was reduced from roof peak to 3.66 metres above the ground
- Distance to a neighbouring dwelling unit was reduced from 150 metres; if a HH is within 92 metres of another dwelling the stack must be at least 4.88 metres above the unit

**SUMMARY OF COMMENTS**

DOCUMENT 6

**Public Comments**

- Suggested that nuisances seem limited to a small number of individuals, questioned the need for a by-law. Believes City should determine extent of problem before developing a regulation. Acknowledged that some of the older boilers are problematic with respect to smoke production, but suggested that newer boilers have been greatly improved, concerned that original proposal included pellet boilers.
- Sees value in setting lot minimums but disagrees with proposed setbacks, believes that these are arbitrary and will not provide smoke relief in situations where winds and topography have an influence. Did not support original chimney height, believes the solution to smoke relies on technology and engineering improvements. If a by-law is adopted, would rather see opacity and nuisance controls used instead of setbacks.
- The City does not have the right to regulate how a person heats their home. The civil court system is well-suited to deal with those causing nuisances.
- Boilers are tremendously practical for farmers, can efficiently heat multiple buildings without taxing the power grid or consuming fossil fuels; the extraction and transport of which are environmentally detrimental. We use dead elm trees for the majority of our fuel (and a sustainably planted wood lot for the balance), from our own property, and find this works very well. I recognize not everyone has their own supply of fuel trees, nor sufficient space for these appliances, but I hope the authors of the by-law will give consideration to those in circumstances like mine where the technology is highly beneficial. For the record, I have had asthma since I was a young child and have not found the boiler exacerbates my condition in the least.
- In over 40 years of burning wood for our main source of heat there has never been a smoke issue and my chimney is lower than neighbours roof peaks'. Please remember one set of restrictions will not fit all situations. Numbers must remain flexible, keeping in mind you must not disturb or cause discomfort to your neighbours.
- Industry is moving rapidly towards less emissions and higher efficiency. Most of the old stoves will be grandfathered in. These new regulations are coming out at a time with this change in industry design. I recommend a policy very similar to the regulations found in New York; setbacks of 30 metres from lot lines and 30 metres from nearest neighbour, 1 acre in rural, mineral extraction and agricultural zones, and 0.6 metres above any peak within 45 metres (150 metres is more practical for mountainous regions such as Vermont and British Columbia).

- I think proposed setbacks and lot size are fair, but I am not sure a high stack will keep the smoke above the neighbour's house; if the air is heavy smoke will fall anyways.
- I don't know if it is necessary to consider zones in as much that you are considering establishing minimal areas of lot size and distance from property lines and other dwellings. The offsets proposed are considerably unrealistic and largely unemployable for most dwellings. The issue of a permanent stack may have some structural consideration, poorly installed chimneys, but the height is largely a practical matter of whether you have smoke billowing about in enclosed yards. The thoughts that went into delimiting stack height are a little out of place, and again impractical for most circumstances. I'm definitely looking at wood or coal source heating so I can stop paying for oil and to cut down on my electricity consumption, both of which have more than doubled in cost. I prefer an indoor furnace or boiler but will look at outdoor units to compare.
- I would like to see the engineering specifications of the support requirements for such a chimney, which might be required to exceed the height of a two-story house plus attic/roof-space. What will the building code requirements for such a chimney be? What are the requirements for lightning protection? I think this is a poor option for a by-law amendment, which seems to choose a potential hazardous and ugly chimney with a low standard of emission, over an environmentally preferable, safer alternative.
- New installations should be EPA-qualified; Phase 2 would be preferred, especially in those non-AG areas. People can still buy the "old smokers", granted, many times it is what they are burning that is the smoke problem.

### **Department Response to Public Comments**

The Department has found the input from owners incredibly valuable in the crafting of this proposal. Owners who participated in this process appear to be responsible users and considerate of their neighbours' welfare. Unfortunately the Department has no simple way of determining how many HHs exist. However, it is confident that the proposed zoning is fair; the community and industry helped inform the proposal and are largely in support of it. The Department has decided to recommend excluding pellet boilers from the zoning provisions. With respect to setback requirements, the Department acknowledges that the proposed setbacks may not protect neighbours from smoke nuisances in all situations. It believes civil action is an appropriate avenue for those that remain impacted by smoke. The chosen setback from a neighbouring dwelling is a precedent commonly applied to Phase 1 or non-EPA qualified HHs in the US. The Department has decided that it's best to apply a more aggressive setback to all HHs regardless of whether or not they are EPA qualified/CSA certified.

The proposed 30 metre setback from a road allowance is also a well-established precedent. The intent is to distance potential smoke from high traffic road corridors. It may be worth noting that some States, including Vermont do not include property line setbacks in their regulations; this has to do with land surveying difficulties and not opposition to the approach. Maintaining a 15 metre distance from all other property lines is intended to ensure that a neighbours' amenity space is also protected. This was reduced from 30 metres to ensure HH's can be easily installed on severed farm lots. For similar reason, the Department also removed the minimum lot requirement in Agricultural (AG) zones.

Regarding chimney height, the Department conceded on its original proposal to reflect information gathered through public and technical consultations. According to a retailer, no amount of added stack will remedy a poor unit or user; however, an appropriate chimney increase will help improve smoke dispersion under typical conditions for both owners and neighbours. By-law and Regulatory Services maintains that it would be extremely challenging to regulate opacity and other nuisances related to appliance use; Ottawa does not have the resources or expertise available to contemplate this.

The Department believes that providing owners with the right to choose how they heat their homes is important although it also recognizes that there is a need for common-sense regulations to help ensure that HHs are located away from densely populated areas. While establishing setbacks and lot minimums may alleviate the need to outline zone restrictions, the Department sees practicality in removing the ability to establish these devices in villages, where population densities are greater. In villages, the expectations of residents' are also different than in the countryside. In addition, retailers have confirmed that villages are not suited for conventional HHs. Restricting HHs in villages also helps the Department achieve its environmental objectives. A village resident has the option of installing a pellet boiler if desired.

After consultations with a resourceful retailer who is also a farmer, former Councillor and HH owner, the Department believes that all owners should supply a minimum stack extension of 1.22 metres. An increase of 2.44 metres should be added to HHs within 92 metres of another dwelling, therefore impacting most estate lots. HHs are shipped with a small stub from the manufacturer because of transportation issues, additional stack is often recommended by retailers. An increase in stack will help regulate the rate of the combustion of by-products and ensure that these by-products (noxious gases) are dispersed away from the ground, in reduced concentrations. The proposed stack increases will not require supporting apparatus and will not impact overall affordability.

Finally, the EPA will be pursuing a national emission regulation in the US within the next few years, suggesting that changes in the industry are imminent. As a result the Department does not believe that it is necessary to regulate emissions at this time, but will re-evaluate after the NSPSs are updated. In the meantime, staff will continue to monitor complaints and educate stakeholders on burning practices and HH types (conventional versus EPA-qualified).

### Retailers Comments

- Sees problems with using zoning, applies the same rules to all HHs, despite the many differences between units, what they burn and the amount of smoke they produce. The problem tends to be caused by a few older HHs. Zoning attempts to solve a problem by exempting the problem makers from the solution and penalizes the people who can really benefit from having a HH, and those that create no nuisance.
- No effort to reprimand users, focus is on unit and may not always address the problem.
- Notes that unlike conventional forms of heating, a HH cannot burn down a house, cause an explosion or carbon monoxide poisoning.
- May look at requiring better insulation of underground piping to help reduce emissions. In the past a lot of resources have been wasted on heating the ground.
- With respect to EPA qualified units, not all customers want the hassles of needing to call a high priced service man. Some refer to a neighbour's wood usage and unit when purchasing a HH. Not all buyers want to pay the extra \$2500 to \$2700 for the EPA model when they've seen an efficient traditional model in operation.
- Important to be mindful of the difference between smoke and steam. Hot moisture leaving the stack on a cold day looks like a plume of smoke, similar to a crop dryer.
- Older HHs should have at minimum 4 feet (1.22 metres) of additional stack, but 8 feet (2.44 metres) is preferred. Very long chimney extensions are often used to cover up a unit that smokes heavily. Proper burning practices are crucial. A solution to a poor device or user could be to switch fuel (for example anthracite coal).
- HHs should never be placed in villages; even the new raw wood units should not be placed too close to neighbours. Where this occurs dealers are either uninformed or desperate for a sale.
- The major storage of wood fuel should be away from the HH, with only a few weeks supply within 10 feet (3 metres). The front loading door of an HH should not be inside a wood storage shed; leave at least 6 feet (1.8 metres) between the shed and the HH.

- The amount of smoke and how continuous that smoke is a reflection of the different makes of HHs. Some do not have forced draft; they smoke and smell a little for a large part of the day. Some have a forced draft and firebrick, when these units call for heat, the electrically powered fan forces air into the firebox and encourages a very hot fire very fast. These may smoke for about 3 minutes and then the firebox reaches the smoke burning temperature of 1 000 degrees Fahrenheit, the smoke burns and then no smoke is visible out of the stack, whereas the natural draft units may never reach the smoke burning temperature and just smoulder all day.
- All units emit smoke sometimes, including EPA units so it seems our industry still needs these units to be installed a ways from the nearest neighbour, the nearest road, which excludes them from establishing in villages except for HHs that burn pellets, since they are virtually smoke free all the time.
- Part of the EPA's mandate is to encourage owners to let their wood season (dry out) for 6 to 12 months before burning. If owners burn unseasoned wood, it takes 30% more volume of wood, because they burn wood to burn out the water in the wood. Encouraging the use of seasoned wood is very important. In some European countries, you have to have a permit to burn wood and certification from a wood policeman.

### **Department Response to Retailers Comments**

Although a Property Standards By-law can call for the removal of a HH if not compliant with its regulations, the Department feels that the court system is better-equipped to deal with nuisance disputes between neighbours. A judge is more capable of analysing facts and making a sound decision. Another difficulty with a removal program is that it may target owners who are not creating nuisances because of the type of unit they own or the size of their property. It could also require the establishment of a relief fund to help those unable to afford alternative forms of heating; the Department is aware of numerous owners who rely exclusive on HHs for their heating.

The Department is attempting to develop a regulation that is aimed at reducing smoke nuisances, while remaining mindful of City resources and abilities. Simply put, the proposed zoning attempts to ensure that HH are located on large lots away from densely populated areas. It is the City's first attempt at regulating a continually evolving device where performance relies on its user. Nevertheless, the Department is confident that the proposed zoning incorporates the opinions of experts, owners and the public. Any perceived shortcoming in the zoning will be addressed as part of the City's plan to educate the public and retailers on matters related to best burning practices and the proper use of these devices. The Department will also reiterate the importance of installing a HH as per the manual supplied by the manufacturer.

EXTRACT OF DRAFT  
AGRICULTURE AND RURAL  
AFFAIRS COMMITTEE  
MINUTES 24  
6 SEPTEMBER 2012

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REGULATING HYDRONIC HEATERS / OUTDOOR WOODBURNING  
BOILERS

ACS2012-PAI-PGM-0090

WARDS: WEST CARLETON-  
MARCH (5), CUMBERLAND (19),  
OSGOODE (20) RIDEAU-  
GOULBOURN (21)

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Geraldine Wildman, Coordinator, Strategic Support in the Rural Affairs Office gave a PowerPoint presentation and brief summary of the staff report. The presentation is held on file with the City Clerk's office.

Following the presentation the Committee heard from the following delegations:

- 1) Glen Roberts, resident near an existing wood burning heater stated that he is pleased with the direction of the report but not happy with the "grandfathering" clause. He presented a video of a neighbours wood burning heater and the noxious smoke which covers his home and property.
- 2) Catherine McKenzie-Roberts, echoed the sentiments of her husband that grandfathering should not be allowed and the health dangers involved.
- 3) Daniel Renaud, resident who lives close to the Roberts also stated that the report is headed in the right direction but unfortunately not far enough.
- 4) Wilmer Verch, Verch Furnace Sales of Pembroke, stated that the report is good and unfortunately the previous delegations are dealing with a neighbour who does not use the right wood or properly maintain his equipment since if properly maintained and used does not create the problems described or viewed in their video.
- 5) Glen McMahon, a resident of Cumberland also voiced his approval for the direction of the report but felt the regulations could go further.

Following the delegations the Committee questioned staff on the differences of these regulations being in a Zoning By-law or Property Standards and Tim Marc, Senior Legal Counsel advised that Property Standards regulations would entail city wide implementation whereas Zoning By-law could be more area specific.

**MOTION No. ARA 24/4**

Moved by Councillor S. Moffatt

**That the proposed lot minimum be reduced from 8000 square metres to 4000 square metres.**

FAILED

YEAS (1): Councillor S. Moffatt

NAYS (2): Councillors S. Blais, D. Thompson

**That the Agriculture and Rural Affairs Committee recommend that Council approve an amendment to the Zoning By-law 2008-250 to include provisions for regulating hydronic heaters (outdoor woodburning boilers), as detailed in Document 4.**

CARRIED

YEAS (2): Councillors S. Blais, D. Thompson

NAYS (1): Councillor S. Moffatt