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Halifax Regional Council
August 17, 2004

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY:


Councillor Bruce Hetherington, Chair
Harbour East Community Council

DATE: July 19, 2004

SUBJECT: By-law re Outdoor Solid Fuel Appliances

ORIGIN

Harbour East Community Council - July 8, 2004

RECOMMENDATION

Harbour East Community Council recommends to Regional Council that they direct staff to develop a by-law prohibiting the use or installation of outdoor solid fuel appliances used for heating buildings.

BACKGROUND

Consideration of a May 28, 2004 staff report from Chief Director Mike Eddy, Fire Services, was deferred from the June 3, 2004 meeting to the July 8, 2004 meeting.

DISCUSSION

Staff's recommendation was that the Municipality not proceed with developing a by-law at this time pending introduction of Provincial and Federal legislation.

Note was made that Provincial and Federal legislation regarding the use of the outdoor solid fuel appliances would not be introduced for up to three (3) years. Such a delay in addressing the issue is not considered to be acceptable.

BUDGET IMPLICATIONS

N/A

FINANCIAL MANAGEMENT/BUSINESS PLAN

N/A

ALTERNATIVES

- 1 Direct staff to develop a by-law prohibiting the use or installation of outdoor solid fuel appliances used for heating buildings.
2. Not proceed with developing a by-law at this time pending introduction of Provincial and Federal legislation.

ATTACHMENTS

1. Staff report dated May 28, 2004 re Outdoor Solid Fuel Appliances
2. Extract of draft Minutes of July 8, 2004 meeting of Harbour East Community Council

Additional copies of this report, and information on its status, can be obtained by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208. Report Prepared by: Sherryl Murphy, Legislative Assistant

7.1



P.O. Box 1749
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Harbour East Community Council
June 3, 2004

TO: Chairman and Members of Harbour East Community Council

SUBMITTED BY: Mike Eddy
Chief Director Mike Eddy

DATE: May 28^h, 2004

SUBJECT: Outdoor Solid Fuel Appliances

ORIGIN

At the February 5th, 2004, Harbour East Community Council Meeting, Councillor Smith requested staff investigate developing a by-law prohibiting the use or installation of outdoor solid fuel appliances used for heating buildings.

RECOMMENDATION

- 1) It is recommended that the Municipality not proceed with developing a by-law at this time as other legislation from the Nova Scotia Department of Energy and Environment Canada is currently being drafted. The provincial regulations are expected to be implemented in 2005 which would require all indoor solid fuel appliances, sold in the province, to be Environmental Protection Agency (EPA) certified. Regulations are anticipated to include restrictions on outdoor solid fuel appliances. Environment Canada is presently working on developing legislation to address inefficient burning appliances and it is anticipated to be introduced sometime in 2007.
- 2) It is further recommended that Fire Service continue to educate the citizens of HRM on the proper burning methods of wood burning appliances in an effort to reduce smoke emissions.

COMPLAINT HISTORY

Currently there are four or five such installations within the former cities of Halifax and Dartmouth, one in Lower Sackville, and one in Westphal. The two installations in the former County areas are used as heating sources for greenhouse operations. Of the installations within the former city limits, three of the installations belong to the same company or group of companies.

The number of complaints received by Fire Prevention personnel concerning solid fuel burning appliances within the last two years would be approximately 50 complaints. The vast majority of these complaints would be related to the installation and use of indoor solid fuel appliances. Most of which are created in new developments with homes built with air exchangers on small lots. These types of complaints could possibly be addressed through the development agreement or by covenants. Fewer than 5 complaints have been received regarding outdoor furnaces or boilers within this same time period.

EDUCATION

Heating with wood is a common practice throughout the Halifax Regional Municipality. The Fire Prevention Division actively promotes the use of Environmental Protection Agency (EPA) certified stoves, advance combustion stoves and catalytic stoves for individuals who choose to heat with wood. Appliances that are of these designs represent some of the best wood burning technologies available. We have partnered with industry and government to promote the proper and safe use of solid fuel appliances in addition to providing inspections for existing installations and educational information for residents and home owners. Fire Prevention personnel are certified as solid fuel appliance inspectors by the Atlantic Wood Energy Technicians Association.

Outdoor solid fuel appliances such as the Wood Doctor are notoriously inefficient. The manufacturers intent is that the appliance only needs to be refuelled after extended periods of time, in some instances once in a 24 hour time period. This practice creates a slow burning or smoldering fire resulting in large amounts of combustion by-products being released. This is often further compounded due to the atmospheric conditions such as a low ceiling or barometric pressures causing smoke and other by-products to drift back down to ground level. Fuel quality is another problem creating concern with these appliances.

Current Municipal and Provincial legislation regarding what is released into the atmosphere through burning is only applicable to municipal incinerators or open air burning. These appliances fall outside that realm as they are not open air nor are they classed as incinerators. To address fuel quality through a by-law or other legislation would be a logistical nightmare for the business unit charged with administering such a law.

HEALTH - WOOD USE

There are some disadvantages to heating with wood for the user. Wood is labour intensive, requiring considerable handling and storage. Disadvantages for nearby residents are primarily related to products of combustion. Wood smoke is made up of a complex mixture of various gases and small particles. Many components of wood smoke can be hazardous or toxic. Exposure to wood smoke can lead to a worsening of existing heart and respiratory conditions, eye, nose and throat irritations and headaches.

LEGISLATIVE INTENT

Prior to drafting another by-law some consideration should be given as to the nature and extent of the problem, if one exists. Are residents concerned equally throughout the Municipality or is it a problem that appears to be isolated to a few communities or areas within a community? Are residents concerned as a result of lack of information, education, or simply making assumptions as a result of ignorance on the subject. Can the problem be addressed through education of residents within the effected communities? Are the concerns based on health related concerns, aesthetic (appearance / smell), or environmental concerns? Does the problem exist as a result of the age of the appliances burning the wood? Are there any safety concerns? Is there access to alternate fuel sources? Is the appliance the sole source of heat for the home?

What would be the objective(s) or the intent of a new by-law? Improvement in the air quality within the Municipality through the prohibition of identified solid fuel appliances? Reduction of particulate matter within the Municipality or identified communities? To improve the health of residents? Improve the efficiency of home heating methods within the Municipality? Reduce the reliance on non-renewable resources? Reduce greenhouse gases? All of the above?

New appliances are available that do not produce visible smoke. As homes are sold or appliances replaced residents should be encouraged to retire older appliances that do not meet the current Environmental Protection Agency (EPA) certification and prohibited from selling, trading, swapping or gifting an older appliance within the Municipality, although this would be difficult to enforce with current resources.

AIR QUALITY

Air monitoring systems may be required along with processes for controlling air quality. Environment Canada air monitoring systems are in place at limited locations within the Municipality to monitor air quality. However the intent is to monitor air quality and particulate matter from a regional perspective, rather than locally. One item to note would be the levels measured at the Lake Major location, these are among the highest in Canada. This would most likely be attributed to the surrounding communities failure to practice clean burning, in particular, the higher incidence of outdoor burning, and the burning of refuse.

Some jurisdictions which use legislation to control or prohibit solid fuel appliances usually have a method of monitoring the air quality within the region. Permits are issued for individuals who contribute to lowering the air quality or systems are in place to communicate the time and or locations where burning is permitted when conditions permit.

The Fire Service receives many complaints each year regarding smoke from chimneys in high density residential areas usually caused by fuel quality or atmospheric conditions. These complaints are not limited to solid fuels burning appliances such as woodstoves but also to oil and gas particularly where direct venting or side wall vents are used.

BUDGET IMPLICATIONS

There are no budget implications associated with this report, however should Council direct staff to draft a by-law refer to **Alternatives**.

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

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

ALTERNATIVES

Council could direct staff to draft a By-law. Budget implications have not been costed at this time should this be the preferred course of action by Council.

The creation of a new by-law that would prohibit or control solid fuel appliances would impact on current resources and organizational structure. Additional resources would be required to enable personnel to provide reasonable customer service for the volume of complaints likely to be received by individuals suspecting someone in their neighbourhood of using inappropriate materials for burning, or using improper burning techniques that are generating excessive smoke emissions.

ATTACHMENTS

None

EXTRACT - DRAFT MINUTES - HARBOUR EAST COMMUNITY COUNCIL
JULY 8, 2004

7.1 Outdoor Solid Fuel Appliances (Re Item 4.1.1 Wood Doctor, June 3, 2004)

- Consideration of this matter was deferred to this meeting from the June 3, 2004 meeting of Harbour East Community Council in order to afford members of Community Council an opportunity to review the report. A staff report dated May 29, 2004 prepared for Chief Director Mike Eddy, Fire Services, was redistributed to Community Council.

Referring to the recommendation, Councillor Smith indicated that staff's position in this regard does not address his concerns. He went on to note that Provincial regulations are not expected before 2005 and that Federal legislation will not be introduced before 2007. Councillor Smith indicated that something has to be done with regard to these units, six of which are located in Dartmouth. Councillor Smith further noted that these units are all used commercially and the Chief should have some authority to deal with the issues around their use.

MOVED by Councillor Smith, seconded by Councillor Cooper that the Harbour East Community Council recommend to Regional Council that they direct staff to develop a by-law prohibiting the use or installation of outdoor solid fuel appliances used for heating buildings.

Gary McCurdy, Fire Prevention, responded to questions from members of Community Council noting that legislation is planned for over the next few years to regulate the construction and sale of these units. Mr. McCurdy noted that one of the problems is that there is no air monitoring system on a community basis located in the area of the units. He went on to suggest that even if legislation was put into place prohibiting the use of these units, it is likely that the existing units would be grand fathered.

A further brief discussion ensued and the **MOTION WAS PUT AND PASSED.**