

## Request for Decision

### Hydrant Water Use

Presented To: Policy Committee

Presented: Wednesday, Nov 16, 2011

Report Date Tuesday, Nov 08, 2011

Type: Managers' Reports

### Recommendation

Staff recommends that Council approve the development of the Fire Hydrant Usage Application protocol, associated application form and fee structure for implementation on July 1, 2012.

### Finance Implications

If approved, there is no budget impact as the cost of the work to set up, monitor and dismantle the equipment on the hydrant would be offset by the application fee.

### INTRODUCTION:

The Water Wastewater Services Division receives numerous requests annually for the use of fire hydrants for charity fund raiser projects including charity car washes, carnivals and community events including the Chelmsford Mudboggers and Downtown Sudbury's Annual Rib Fest.

This report recommends that Council approve the usage of fire hydrants for these special events and that staff develop Operational Procedures, Application Form, and User Fee to cover the City's costs in permitting the use of municipal fire hydrants for these events and for water used.

### BACKGROUND:

Councillors and Water Wastewater staff regularly receive requests from local charity groups for permission to use municipal fire hydrants.

Water Wastewater staff are very concerned that the uncontrolled and/or improper use of fire hydrants by such organizations could pose a significant health risk to the City as well as to the organization sponsoring the event using the fire hydrant.

Under normal operating conditions, the water supply system is maintained at a sufficient positive pressure to enable water to flow from the supply facilities to the customers' taps and fixtures. Under abnormal

#### Signed By

##### Report Prepared By

Cheryl Beam  
Supervisor III Distribution & Collection  
*Digitally Signed Nov 8, 11*

##### Division Review

Nick Benkovich  
Director of Water/Wastewater Services  
*Digitally Signed Nov 8, 11*

##### Recommended by the Department

Greg Clausen, P.Eng.  
General Manager of Infrastructure  
Services  
*Digitally Signed Nov 8, 11*

##### Recommended by the C.A.O.

Doug Nadorozny  
Chief Administrative Officer  
*Digitally Signed Nov 8, 11*

operating conditions (such as if a watermain breaks, pipes freeze or when there is an unexpectedly high demand on the water system), the pressure in the pipe may be reduced.

During these conditions, the pressure may be reduced enough to reverse the intended flow of water and actually draw water out of nearby service connections into our municipal water supply system. This condition is referred to as a type of backflow called backsiphonage. During these conditions, if our system is connected to private facilities or water trucks that have been hauling non-potable water, the possibility exists that dangerous backflow may occur resulting in contamination of our municipal water supply system.

Another concern with drawing water from hydrants at various flow rates is that our system becomes disturbed and could potentially result in disturbances to the water quality in the system (which manifests as dirty water) for surrounding customers. In some cases watermain breaks may be accelerated by inappropriate private fire hydrant usage.

Although backflow prevention equipment can be utilized to mitigate this risk, the very possibility of a contamination risk has given rise to efforts by Water Wastewater staff to eliminate non-essential uses of hydrants. Typically, alternate sources of water are usually available in place of using a fire hydrant. For example, one alternative is for the organization to hire a water truck which fills from our bulk filling stations where there are already processes and controls in place to address the above concerns. In most circumstances there are other locations on or near the event where water connections are available where the municipal supply can be accessed without using hydrants.

It should also be noted that many requests from event organizers within the City have been successfully denied for the reasons listed above.

If the municipal system becomes contaminated there is a serious risk of significantly impacting the health of those that consume contaminated water. Water Wastewater staff are very concerned about this risk and do not support the use of fire hydrants for non-municipal purposes.

However, staff acknowledges that there are occasions when obtaining water from a fire hydrant is the only option if the community event is to happen.

## **RECOMMENDATION:**

It is therefore recommended that 1) staff continue to work with community groups to find alternate sources of water for their events and discourage the use of fire hydrants for non-municipal purposes; and 2) develop an appropriate protocol, application form and fee structure for the use of fire hydrants for community events that have no other alternative for the supply of water.

The protocol will include:

1. Appropriate metering and backflow prevention equipment will be installed on the fire hydrant to mitigate the risk of backsiphonage of potable water into the municipal system and to record water used.
2. As organizing and scheduling for the connection to the hydrant often takes several days to complete and as most requests are for weekend events, it is recommended that the organizations must complete a written application at least one month before the event. This time frame will allow sufficient time for staff to secure the necessary equipment and schedule necessary staff for its installation, monitoring and removal.
3. The costs to carry out the work include setting up, monitoring and dismantling of the equipment is estimated to be \$250 per application. Correspondingly, staff recommends that this fee be the fee of the application. Similarly, it is proposed that the applicants pay for water consumed at the current bulk water rate available at our four existing bulk filling stations.

Staff recommends that Council approve the development of the Fire Hydrant Usage Application protocol, associated application form and fee structure for implementation on July 1, 2012.