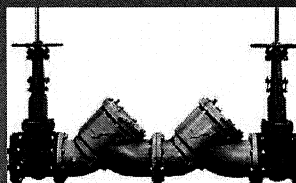


Markham's Backflow Prevention Program 2014 Status Update

Presented by
Peter Loukes,
Director Environmental Services



9/06/2014



Backflow Prevention Program

- Ministry of Environment (MOE) Drinking Water Inspection Report Recommendation
- Implemented under Safe Drinking Water Act & Ontario Building Code
- Council passed Backflow Prevention Bylaw (No. 2007-142) June 2007 & Bylaw Update (No. 2012-27) February 2012
- MOE "A Guide for Drinking Water System Owners Seeking to Undertake a Backflow Prevention Program" posted April 2014, for public consultation.
- The MOE document to be finalized in June 2014

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Markham's Backflow Prevention Program Status Update



Markham's Backflow Program

- **Extensive program,**
 - Applies to all Industrial, Commercial, Institutional (ICI) & multi-residential properties.
 - Applies to existing buildings as well as new constructions
 - Requires assessment by survey as to degree of risk (minor, moderate, or severe)
 - Premise Isolations required for each building with moderate or severe risk.

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Markham's Backflow Prevention Program Status Update



Markham's Program Requirements

- Survey buildings and assess cross connection risks, (resurvey every five years);
- Inspection & Test Backflow Preventers every year to ensure each device is in good working condition;
- Device Upgrade Implementation when Resurvey requires an upgrade of existing device(s) or installation of new device(s);
- Only Qualified Persons registered with the City can do backflow prevention work in Markham

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Markham's Backflow Prevention Program Status Update



Current Program Survey & Test Status

- Program rollout over 8 years (Jan 2009 to Dec 2016)
- Currently in 6th year of program
- Phase I - 7% (66 properties) not compliant
 - Issuing “order to comply notices” Q2 2014
- Phase II 63% (524) not compliant
 - Final notice requesting compliance are being sent out
 - Issuing of “order to comply notices” will follow Dec 2014- March 2015
- Phase III to start in 2015
- City Facilities will require resurveys in 2015
- City Parks surveys to start in 2014

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Markham's Backflow Prevention Program Status Update



Program Optimization

- A customer centric, efficient & effective program requires:
 - multiple information and education tools
 - computerize report submission process such as web portal
 - rigorous review & administration of submissions
 - development of robust data tracking & records management system
 - allow customers secured access to their properties backflow program information 24/7.
 - detail technical policies
 - a site inspection process

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Markham's Backflow Prevention Program Status Update



Customer Service Strategic Priorities

- Education
 - Comprehensive website in Q3 2012.
 - Backflow Program brochure in Q3 2012.
 - Ten videos on City's website in Q2 2013
- Computerization
 - Portal in Q2 2013 allowing Test Report submission online.
 - Submissions screened accuracy prior to transmittal to City
 - Portal expanded in Q3 2014 allowing all report (Survey, Test, and Device Upgrade) submission online
 - Portal expansion provides property owners access to their buildings backflow prevention records 24/7

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Markham's Backflow Prevention Program Status Update



Program Efficiency

- Portal
 - Input error check on all Test Report fields & Identifies fields not filled out correctly before accepting transmission
 - This function has significantly helped administrative workload
 - 2014 enhancements to build on current portal success.
- Data tracking & records Management automation
 - Specialized software used & further customized in 2014
 - Can keep all correspondences / records (current & past history)
 - Can review & process the Portal submissions electronically & append records automatically.

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Markham's Backflow Prevention Program Status Update



Program Effectiveness

- Technical policies
 - A Survey Report is subjective as to the degree of protection & device to be used.
 - Survey Report results in financial impact on property owners so need to make guideline as clear as possible
 - Technical guideline to be completed Q3 2014 intended to standardize practices in Markham and reduce over or under backflow protection
- Site Inspection,
 - Start in late 2014 and include quality control on Survey Reports completed by private contractors.
 - Expect to increase compliance rate through face to face communication & promotion

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Markham's Backflow Prevention Program Status Update



Conclusions

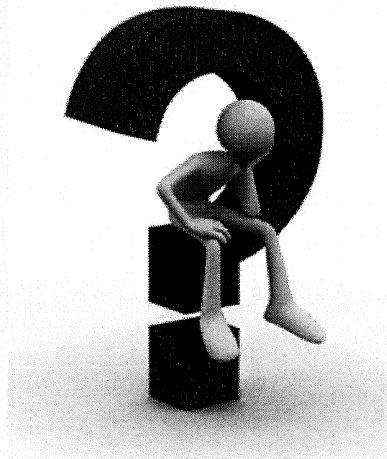
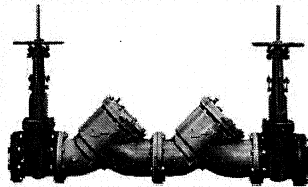
- Markham's program will be implemented over 8 years
- Program is designed for excellent customer service
- Program will evolve into more field inspection
- Some properties in 'order to comply' stage (could be controversial)
- With help of recent computerization enhancements, program rollout completion Q4 2016
- Backflow Portal & videos are industry leading initiatives closely monitored by other municipalities.
- Program status update in 2016

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Markham's Backflow Prevention Program Status Update



Any Questions



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Markham's Backflow Prevention Program Status Update

