This newsletter has been developed to share updates about how the environmental issues are being monitored, reviewed and regulated by staff from the Ontario Ministry for the Environment, Region of Waterloo Public Health, Region of Waterloo Water Services, City of Cambridge and Grand River Conservation Authority.

Ministry of the Environment (MOE) Update

As was previously communicated, the Ministry of the Environment (MOE) entered into a settlement agreement with twelve of the former Directors and Officers of Northstar Aerospace in October 2013. The Environmental Review Tribunal (ERT) formally approved the settlement agreement in a decision released on December 2, 2013.

Effective December 4, 2013, the involvement of the former Directors and Officers came to an end and the ministry, pursuant to the ERT Decision, resumed contributing to the cost of the environmental work within the Bishop Street Community. The ministry has worked diligently to ensure a smooth and seamless transition, from the work being completed by the Directors and Officers to the Ministry, with no interruption to the operation of any of the monitoring or mitigation systems which have been put in place.

Currently, the Ministry has contracted the services of AET Group Inc. (“AET”) to manage the day-to-day activities including operating and maintaining the mitigation systems, routinely collecting samples, and acting as a resource for the community via the Bishop Street Community Information Centre (“CIC”). AET’s dedication to the work within the Bishop Street Community has been integral in ensuring the continued operation of the monitoring and mitigation systems without any interruption.

The Ministry, in consultation with the Region of Waterloo Public Health, will continue to take steps to ensure that the environmental mitigation and monitoring programs will continue over the long term and will continue to keep you informed with regular updates as additional information becomes available.
Summer Sampling 2014 – Update

Various sampling programs for indoor air, groundwater and surface water will be happening throughout the neighbourhood starting in late May 2014 and throughout the summer.

Air Sampling
The purpose of the summer air sampling in select homes is to ensure levels of TCE are not increasing as well as aid the CIC in determining whether any active mitigation is required. These samples are conducted based on results from the 2014 winter sampling program. Of the residences that were contacted this past winter season for an indoor air sample, over 80 per cent of residents responded. In general, the sampling results were within the expected range, with the overwhelming majority being less than five µg/m³. For the five homes in the area of investigation where indoor air levels are slightly above five µg/m³, the Bishop Street CIC will be offering these homes air sampling in the summer. If you receive a message or letter from the CIC concerning a summer air sample in July, please give the CIC a call to schedule the appointment.

Groundwater Sampling
Groundwater sampling and water level taking will be conducted throughout the neighbourhood in late May 2014. This annual activity requires AET staff to coordinate several sampling teams to complete the work within one week. Some of you may see AET staff during that week working diligently to acquire ground water samples from monitoring well locations in the roads, boulevards and parklands. The sampling data will be submitted to the Ministry of Environment for their review and will give an updated snapshot of the current ground water concentrations.

Surface Water Sampling
AET staff will be out late May, mid-summer, and early autumn to sample the Grand River and the seeps coming from the bank of the river throughout the neighbourhood. As with past sampling events, the water samples will be sent for analysis and reviewed by the Ministry of Environment to ensure water quality meets provincial guidelines.

Update on Regional Well P6
The drinking water supplied by the Region of Waterloo to area residents is safe and is unaffected by the contamination. The nearest Regional well (P6) is located in the Dumfries Conservation area, 750 m south east (and not directly down gradient of) the TCE source. P6 is constructed in a deep bedrock aquifer and extracts groundwater from depths of greater than 30 meters. P6 was monitored on a monthly basis for TCE from August 2005 until November 2011. There were no detections of TCE in P6. Since 2011, P6 has been out of service due to the need to repair the liner in the well. After assessing all of the water available in the Cambridge area, this repair is not considered a priority at this time. TCE continues to be monitored in other wells in the vicinity of P6.

For more information, contact Amy Domaratzki, Senior Hydrologist at Region of Waterloo Water Services by calling 519-575-4829.

Indoor Air Concentrations of TCE in the Bishop Street Community

The table below shows a summary of historical and current sampling results of indoor air TCE concentrations in homes in the Bishop Street Community. Historical results represent the number of homes with the highest TCE concentrations ever measured in those homes. Current results represent the number of homes with present-day TCE concentrations, as taken from the winter 2014 sampling season.

<table>
<thead>
<tr>
<th>Number of homes with an indoor air concentration of TCE:</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historically (based on highest values recorded)</td>
<td></td>
</tr>
<tr>
<td>Less than or equal to 0.5 µg/m³</td>
<td>124 homes</td>
</tr>
<tr>
<td>Greater than 0.5 but less than or equal to 5 µg/m³</td>
<td>226 homes</td>
</tr>
<tr>
<td>Greater than 5 µg/m³</td>
<td>308 homes</td>
</tr>
<tr>
<td></td>
<td>658 homes</td>
</tr>
</tbody>
</table>

Current (as of March 22, 2014)
<table>
<thead>
<tr>
<th>Number of homes with an indoor air concentration of TCE:</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than or equal to 0.5 µg/m³</td>
<td>484 homes</td>
</tr>
<tr>
<td>Greater than 0.5 but less than or equal to 5 µg/m³</td>
<td>189 homes</td>
</tr>
<tr>
<td>Greater than 5 µg/m³</td>
<td>5 homes</td>
</tr>
<tr>
<td></td>
<td>658 homes</td>
</tr>
</tbody>
</table>

Ongoing groundwater remediation activities in the Bishop Street Community continue to decrease groundwater concentrations of TCE. These actions, along with other mitigation measures, have been instrumental in significantly reducing indoor air concentrations of TCE within the Bishop Street Community.

Current Indoor Air Concentrations
Presently, more than 99 per cent of homes have TCE concentrations below the level where mitigation is recommended – that is, concentrations less than five µg/m³. Efforts to reduce the onepper cent of homes with concentrations above five µg/m³ and mitigate these indoor air concentrations remain a priority for government agencies. Approximately 29 per cent of homes have current TCE concentrations that are greater than 0.5 but less than or equal to five µg/m³. For these homes, it’s recommended that annual indoor air monitoring tests are taken. The remaining 70 per cent of homes with indoor air concentrations less than or equal to 0.5 µg/m³ require no further action (i.e., no testing or remediation required). When homes have two sequential air samples with TCE concentrations less than or equal to 0.5 µg/m³, they are taken off the annual winter home air monitoring list.

What are the recommended action levels?
The recommended action levels are as follows:
- Less than or equal to 0.5 µg/m³
  - No further action required for these homes (i.e., no sampling or mitigation required).
- Greater than 0.5 but less than or equal to five µg/m³
  - Annual indoor air monitoring recommended, while groundwater remediation is on-going (i.e., remediation of the TCE source contamination in the groundwater).
- Greater than five µg/m³
  - It is recommended that homes be assessed for indoor air mitigation (i.e., active TCE removal from indoor air) while groundwater remediation is on-going.

What is the overall trend of indoor air concentrations?
Concentrations of TCE in indoor air have been falling for the past several years. More than two-thirds of homes in the Bishop Street Community are below 0.5 µg/m³ levels. As a result of groundwater remediation efforts and indoor air mitigation activities, levels have been steadily falling. Results also show that in buildings with no mitigation, levels are also tending to decrease.
HRV Update – Friendly Reminders

As April comes to a close, the CIC reminds homeowners who are asked to run their HRV mitigation equipment to turn the dial to the sunshine icon. This lower setting continues to bring fresh air into the home but at a lower rate. In the summer, we are much more likely to enter and exit the home several times through the doors and keep windows open, providing fresh air through natural ventilation.

To access the TCE Fact Sheet, provincial report, or other resources about TCE in the Bishop Street Community, go to: www.regionofwaterloo.ca/ph. Under “Healthy Living & Health Protection”, choose “Environmental Health”, and then choose “Environmental Hazards”. Or use the website’s search engine, by typing in “Bishop”.

For more information contact:

Ontario Ministry of the Environment ...................... 519-826-4262 or toll-free: 1-800-265-8658 ext. 4262
Region of Waterloo Public Health ................................................. 519-883-2008 ext. 3418
Region of Waterloo Water Services ........................................... 519-575-4426
City of Cambridge ................................................................. 519-740-4650 ext. 4601
Grand River Conservation Authority ........................................... 519-621-2761

Accessible formats of this document are available upon request.
Call 519-575-4400 (TTY 519-575-4608) to request an accessible format.