

Radon Update

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Backgrounder:

As part of School District No. 20's ongoing commitment to the health and safety of our students and staff, radon gas screening has been once again completed throughout the district. The latest round of testing was done in conjunction with Interior Health and the District Joint Health and Safety Committee.

The Canadian guideline indicates that remediation should be undertaken in any building with radon concentrations over 200 Becquerels per cubic metre (Bq/m³).

When the concentrations fall between 200 and 600 Bq/m³, Health Canada recommends the remediation be completed within a two year timeframe. For sites with concentrations above 600 Bq/m³, the remediation should be completed within one year.

In our District, the results showed that most of our buildings had radon concentrations that were well below the 200 Bq/m³ threshold. Three sites did have samples with radon concentrations above the 200 Bq/m³, one site with a sample just below that threshold, and no sites with concentrations over 600 Bq/m³.

The School District has contracted Interior Radiation Protection Services Ltd (a company that is certified in radon mitigation) to evaluate the results and affected buildings. In reviewing the results, it was determined that the three sites with results with concentrations above the 200 Bq/m³ and the one site with results just below that threshold, would be further reviewed by Interior Radiation Protections Services Ltd. (IRPS). Those four buildings are JL Crowe Secondary School, Stanley Humphries Secondary School, Kinnaird Elementary and KCLC Castlegar Campus (Online Learning). During the month of July 2016, these four sites were evaluated by IRPS.

JL Crowe Secondary and Stanley Humphries Secondary

At JL Crowe Secondary, there was one result over the 200 Bq/m³ threshold in the basement where there are no occupants.

At Stanley Humphries Secondary School, there was one result over the threshold in the basement where we have no occupants.

The plan, as determined by IRPS, is to complete some sealing of ductwork and some sealing of cracks in the floors of both buildings. As well, with the installation of new HVAC units at Stanley Humphries Secondary, a balancing of the system needs to be completed. Once these items are complete, IRPS will conduct further testing as per the current standards at both JL Crowe Secondary and Stanley Humphries Secondary. This testing

would happen during the winter months as this provides the most accurate information. According to IRPS, the current standard for testing would include 100% of the basement and rooms in contact with the ground that are occupied for 4 hours or more per day, and 10% of the rooms on each floor above thereafter.

Kinnaird Elementary

At Kinnaird Elementary, we had several results with radon concentrations over the 200 Bq/m³.

On October 21, IRSP will be conducting sub-slab communications testing which helps to ultimately determine the mitigation work required to remediate the elevated radon levels. Once this work is completed, the complete mitigation plan will be developed by IRPS and carried out as soon as possible.

KCLC Castlegar Campus

Although there were no tests above the threshold at this site, IRPS recommends the sealing of exposed soils underneath. This will improve both the levels of radon as well as improving general air quality. Based on the recommendations of IRPS, we will also be installing de-pressurization piping and system to help vent the radon. This work will be completed by the end of November by IRPS.

Summary

Once all work at the four sites is complete, further testing by IRPS will be completed to ensure the affected buildings are now within the acceptable concentrations for radon. The next round of District testing is currently planned for winter of 2020/21.