Dear residents of Place Vanier Sherwood Lett House and Robson House,

I am writing you to provide some background information on the plumbing issues that have now been resolved in your buildings. As you may recall, on Jan. 31, 2017 in Sherwood Lett House and Feb 2, 2017 in Robson House, hot water was abruptly shut off. This was to allow equipment that helps heat the building to be removed and replaced, and to allow the hot water remaining in the pipes to be flushed out. What we have subsequently learned is that water quality tests indicate that there was the presence of a rust inhibitor containing nitrite in the buildings’ hot water. This was because the equipment, known as heat exchangers, had allowed building heating water that contains nitrite to pass through the doubled-walled system and into the building’s hot water supply. The cold water supply in the building was not affected. Water quality tests indicate that there is no longer any evidence of nitrite in the water following the repairs. We continue to monitor the new equipment to ensure this won’t happen again.

What is the exposure risk?

Individuals who may have consumed a significant amount of hot water from a hot water tap, e.g. by filling kettles etc. regularly, may have experienced gastrointestinal (GI) symptoms. Note that there are many causes for GI symptoms, chemical exposure being one potential.

How did UBC discover the heat exchangers in these buildings had failed?

We had reports of foul smelling water at the Friedman addition building on campus. After an investigation, we discovered the heat exchanger in that building had failed, causing nitrite to enter the hot water supply. Out of concerns for the safety of hot water in other buildings on campus, we investigated all similar devices on campus and discovered three additional failed units in Sherwood Lett, Robson House and another building called Scarfe.

Are heat exchangers safe?

Heat exchangers used on the UBC campus are certified for use in domestic (drinking) water applications and are a very common method for heating water in buildings. Their double-walled structure is designed to leak onto the floor in the event of a malfunction and it is unclear what led to the heating water transmitting into the buildings’ hot water supply. These devices have a life expectancy of 15 years, so to see a premature failure of this type is one we could not anticipate, as it is so unusual. We are working with a third party to examine the root cause of the failures. We have installed new heat exchangers in the buildings, they are functioning properly and we continue to monitor them to ensure this won’t happen again.

What are the Health Canada guidelines for Canadian drinking water quality and what were the measurements in my building?

Health Canada guidelines are 1.0mg/L for nitrite-nitrogen. At Sherwood Lett House the measurement was 8.72 mg/L and at Robson House the measurement was 3.17mg/L. It is important to contextualize the drinking water standards are to prevent ill effects in regularly consumed water. If you did not regularly consume hot water from the hot water taps in these buildings then you would not have an exposure risk. Post replacement, both buildings had measurements of <0.005mg/L nitrite-nitrogen in the hot water, well below the Health Canada guidelines (1.0 mg/L).
Why are you just telling us now?

Risk Management Services (RMS) is reviewing the water quality sample results and is also discussing nitrite concentration levels with experts to understand the exposure risk. As the risk is now resolved it was felt that we would communicate once we had a better understanding of the situation to share. However we understand there may be some media around this issue and we did not want you to hear about this without hearing from us first.

I have been drinking hot water from hot water taps in these buildings and I experienced gastrointestinal (GI) symptoms. What should I do?

Visit your health-care professional to discuss your symptoms. Explain that there was the possibility that you ingested low concentrations of nitrite. You can also contact UBC Risk Management Services if you have further questions. We can be reached at riskmanagement@rms.ubc.ca.

The health and safety of UBC students is a top priority. We take every precaution to maintain safe infrastructure and communicate when we have information that needs to be shared with you. We hope this notice does not raise alarm for you and would encourage you to be in touch with us if you have concerns.

Yours Truly,

Ron Holton
Chief Risk Officer
UBC Risk Management Services