From:	Wong, Elaine
To:	LegislativeServices
Cc:	Kozak, Ed
Subject:	Fwd: Bylaw 14665 - Environmental and health effects of concrete construction
Date:	Friday, December 13, 2024 7:52:38 AM

From: Suzana Kovacic Redacted as per FIPPA S.22

Date: December 12, 2024 at 6:37:18 PM PST

To: Mayor <<u>Mayor@burnaby.ca</u>>, "Calendino, Attilio Pietro" <<u>AttilioPietro.Calendino@burnaby.ca</u>>, "Dhaliwal, Sav" <<u>Sav.Dhaliwal@burnaby.ca</u>>, "Gu, Alison" <<u>alison.gu@burnaby.ca</u>>, "Keithley, Joe" <<u>Joe.Keithley@burnaby.ca</u>>, "Lee, Richard" <<u>Richard.Lee@burnaby.ca</u>>, maita.santiage@burnaby.ca, "Tetrault, Daniel" <<u>Daniel.Tetrault@burnaby.ca</u>>, "Wang, James" <<u>James.Wang@burnaby.ca</u>>

Subject: Bylaw 14665 - Environmental and health effects of concrete construction

Dear Mayor Hurley and Members of Council,

I am writing to you in regards to Bylaw 14665 and urge you to consider restricting construction within the Stoney Creek watershed to wood frame construction only. My reasons are outlined below.

I am a volunteer Stoney Creek streamkeeper. Since 2019 when construction first began in the Stoney Creek watershed, I have been documenting construction waste effluent in Stoney Creek. In 5 years of monitoring, the situation is growing worse as construction comes closer to Stoney Creek. **Since 2022, there have been 112 days when pH went out of range**, likely due to concrete contact water released from construction sites. Coquitlam's Hoy Creek, which is not challenged by construction effluent discharge, had zero incidents of out of range pH during a similar time frame. **The frequency of pH incidents in Stoney Creek is increasing** from 2.6 days per month in 2022, to 3.7 in 2023, and 4.2 in 2024. Since 2022, there have been 10 days when pH in the creek was in the lethal range for fish. **This works out to an average of one fish kill every three months.**

Concrete contact water is not only extremely detrimental to the environment, it can be very hazardous to human health. Concrete is contaminated with carcinogenic hexavalent chromium, a contaminant in Portland Cement. Water that comes into contact with concrete during the pouring and curing processes becomes contaminated with hexavalent chromium. Water treatment systems on construction sites typically are not configured to remove hexavalent chromium from water. Construction sites in the Stoney Creek watershed remove sediment and adjust for pH (and are doing it poorly, I should add). The water coming out the pipe and going into the storm system is likely to be contaminated with carcinogenic hexavalent chromium during concrete pours.

A construction wastewater system recently started discharging large quantities of water onto the road in the Stoney Creek watershed, less than 100 metres from Stoney Creek. A sample was taken and submitted for analysis. **Carcinogenic hexavalent chromium was detected at 42 parts per billion (ppb).** This is well above the allowable 1.5 ppb for protection of the aquatic environment. There is, however, **no safe limit for human exposure**.

The environmental consequence of construction in the watershed over the last five years has been disastrous. We now know that the health risks are significant.

Burnaby is about to invite the same developers that have unleashed an environmental and health disaster in our watershed to work at the very edge of the creek itself. Developers have failed to earn this right. I urge you to consider banning concrete construction within the Stoney Creek watershed. Concrete is the source of high pH effluent that has likely led to at least 10 fish kills in the last 31 months. It is also the source of carcinogenic hexavalent chromium that is now documented to have been released into our environment, impacting the health of streamkeepers who work in the creek, of children who are often seen playing in the creek, of dogs and other wildlife that drink from the creek and all who come to enjoy one of the few remaining salmon supporting creeks in Burnaby.

Sincerely, Suzana Kovacic 9983 Rathburn Drive Burnaby BC, V3J 7J5 Redacted as per FIPPA S.22