

March 8th, 2017

Fraser Health Authority
Drinking Water Program

Attention: Barbara Haworth, B.Sc., B. Tech., CPHI(C)
Environmental Health Officer

Re: Testing Lead Content in Drinking Water of Langley School Facilities

The Langley School District responded immediately to concerns about the possibility of lead in drinking water when it was first raised in February 2015 by the Ministry of Education. Although it was not required at the time, the District completed full spectrum metal tests on all facilities drinking water as a precautionary measure. As the District has domestic water wells, we are required by law to regularly test the water for the associated school sites as part of the small water purveyor requirement. The process and results are closely monitored and governed by Fraser Health. The testing procedure and methodology used for the full spectrum tests was in accordance with the established procedure used for well testing which was approved by Fraser Health. The result of the full spectrum tests showed that all schools in Langley were found to have results below the allowable levels of Lead set by The Canadian Drinking Water Quality Guidelines. The results of all full spectrum tests were posted on the Langley School District website. In September 2016 the Ministry of Education issued a comprehensive policy and guidelines for school districts to follow. In accordance to the new Ministry of Education policy the Langley School District consulted with Fraser Health Authority to develop a new comprehensive testing procedure for lead in drinking water. The Ministry of Education policy requires the district to do the following to address the potential for lead in the drinking water:

1. Complete and submit risk assessments
2. Complete and submit water testing results
3. Develop a Communication plan
4. Develop and execute mitigation strategies

1. Risk Assessment

The District's risk assessment determined that there are 32 facilities that were built before 1990.

The complete list of facilities are as follows:

	School	Year Built	Years Additions Built
1.	Fort Langley Elementary 8877 Bartlett St	1957	Various additions until 1976
2.	Noel Booth Elementary 20202 35 th Ave	1981	South wing, 1981
3.	North Otter Elementary 5370 248 th St	1964	1974 and 1991
4.	James Kennedy Elementary 9060 212 th St	1987	1992 and 1999
5.	Coghlan Elementary 4452 256 th St	1959	1962, 1965, 1970, 1973 and 1994
6.	Willoughby Elementary 20766 80 th Ave	1920	1977, 1982, 1994 and 2000
7.	Alex Hope Elementary 21150 85 th Ave	1988	1989 and 1999
8.	Shortreed Elementary 27330 28 th Ave	1978	1981 and 1999
9.	Langley Fine Arts (K-12) 9096 Trattle St	1965	1968, 1972, 1974, 1976, 1996, 1998 and 2002
10.	Vanguard High School – Heritage Building Vanguard High School – Main Building 3825 244 St	1913 1964	1924 and 1976 Full renovation – 2007
11.	Alice Brown Elementary 20011 44 th Ave	1974	None
12.	Glenwood Elementary 20785 24 th Ave	1916	No additions past 1974
13.	Uplands Elementary 4471 207A St	1974	1975 and 1980
14.	West Langley Elementary	1981	1986

	School	Year Built	Years Additions Built
15.	Blacklock Elementary 5100 206 st	1972	1974
16.	Peterson Road Elementary 23422 47 th Ave	1962	4 additions between 1965 to 1974
17.	Wix Brown Elementary 23851 24 th Ave	1960	5 additions between 1965 to 1975; 1 addition 1992
18.	Nicomekl Elementary 20050 53 rd Ave	1974	1975 and 2001
19.	Langley Fundamental Elementary (purchased from Langley Christian School in 2007)21789 50 th Ave	1960's	We do not have information regarding additions
20.	Langley Meadows Elementary 2244 Willoughby Way	1983	1986, 1988 and 1992
21.	Douglas Park 5409 206 th St	1981	1985, 1992 and 1994
22.	Simonds Elementary 20190 48 th Ave	1959	1969, 1973 and 1993
23.	Parkside Elementary 3300 270 th St	1972	1975 and 1995
24.	Belmont Elementary20390 40 th Ave	1971	1972 and 2000
25.	HD Stafford Middle School 20441 Grade Cr	1969	1971, 1974, 1975 and 1994
26.	Aldergrove Community Senior Secondary26850 29 th Ave	1958	1965, 1974, 1976, 1979, 1981 and 1993
27.	DW Poppy High School 23752 52 nd Ave	1974	1980 and 1988
28.	Langley Secondary 21405 56 th Ave	1948	1963, 1969, 1974, 1978, 1988 and 1991
29.	RE Mountain High School 7755 202A st	1976	1988 and 1990

	School	Year Built	Years Additions Built
30.	Brookwood Secondary 20902 37A Ave	1974	1983, 1986 and 1995
31.	County Line (school not in operation) 26345 62 st Ave	1948	1962, 1968, 1969, 1976 and 1987
32.	James Anderson (school not in operation) 20381 66 Ave	1962	Additions from 1961, 1965, 1969, 1971 and 1973.

As directed by the policy, we will be testing 1/3 of our 32 identified facilities this year. We will test facilities #1 to 10 listed above. Our in-house testing program, including well testing, will continue as normal.

2. Water Testing

The District's process for water testing will be as follows:

- obtaining a stagnant sample on Monday mornings before school hours and repeating the sampling after a two minute flush. This sample will be taken from the furthest point from the water source in the school (obtaining samples from any additions that are pre-1990);
- Obtain an additional sample from water source at point of entry to the school.
- repeating the same sampling protocol on Thursday morning;
- submitting all water samples for analysis of lead, copper and ph.

3. Communication Plan

For schools in operation:

- Phone school administrators directly informing them of the concerns and the implementation of the immediate flushing mitigation strategy.
- Inform senior management of issue for them to develop a public message that will be posted on the website and sent directly to the families of the affected school.
- Inform Fraser Health on all tests that result in levels of Lead above maximum allowable concentration levels as set out by Health Canada's Guidelines for Canadian Drinking Water Quality.
- Inform School administration of long term mitigation strategy.
- All water testing results and procedures will be posted on the District's website.

For schools not in operation:

- Inform senior management of issue to develop a public message that will be posted on the website.
- Inform Fraser Health on all tests that result in levels of Lead above maximum allowable concentration levels as set out by Health Canada's Guidelines for Canadian Drinking Water Quality.
- All water testing results and procedures will be posted on the District's website.

4. Mitigating Strategies

If sample results reveal lead levels above the maximum allowable concentration as set by Health Canada's Guidelines for Canadian Drinking Water Quality, the District in consultation with their Regional Health Authority will commence daily flushing immediately for schools in operation, or will deactivate and place a "Not in Use" sign on the water source.

For schools in operation

Immediate Mitigating solutions may include:

1. Flushing regimes and supplemental signage
2. Deactivation or elimination of drinking water fixtures

More permanent solution may include:

3. Installation of filtration systems (water bottle fillers)
4. Plumbing upgrades
5. Auto-flush valves
6. Or other steps that result in reducing the exposure to lead to acceptable levels.

For schools not in operation:

For school's not in operation there is no risk of exposure as there are no students or staff in the building. Testing and reporting will take place as outlined below. As there is no immediate risk, the mitigation strategy will focus on more permanent solutions as follows:

1. Deactivation or elimination of drinking water fixtures.
2. Plumbing upgrades
3. Auto Flush valve installations
4. Potential deactivation of domestic water source in building and supplemental signage

Please do not hesitate to contact me should you have any questions or concerns.

Yours truly,

Brad Cairns
Manager, Mechanical Trades
Langley School District #35