

July 22, 2025

T&T OHS Reference: 2756

City of Quesnel
410 Kinchant Street
Quesnel, BC
V2J 7J5

Attention: Brad Emslie – Capital Works Project Manager

Sent vial Email: bemslie@quesnel.ca

Reference: TCLP Lead Leachate Analysis: 325 Lewis Drive, Quesnel, BC

On June 15th, 2025, three (3) samples of lead-containing paints on wood and concrete substrates were collected from the above referenced site by T&T OHS for lead leachate analysis. This sampling was done to address lead-containing paints identified in the June 20th, 2025, dated T&T OHS report titled, *Pre-Demolition Hazardous Building Materials Survey of 325 Lewis Drive, Quesnel, BC*. The samples were submitted in labelled and sealed containers to Tsolum & Tsable Environmental Ltd. for TCLP lead leachate analysis using Inductively Coupled Plasma Flame Atomic Absorption Spectroscopy (ICP-FAAS). The results of this TCLP lead leachate sampling and analysis will determine if these materials should be disposed of as hazardous materials or as regular construction waste.

Applicable Regulations

WorkSafeBC has designated lead as an ALARA substance. This means that exposures to this material must be kept “as low as reasonably achievable”. An employer must not permit workers to engage in a work activity or lead process that may expose workers to lead dust, fumes or mist unless a risk assessment has first been completed by a qualified person. OHS Regulation 6.60(1)(a) states that “If a risk assessment indicates that a worker is or may be exposed to lead dust, fumes or mist, the employer must ensure that a qualified person develops an exposure control plan” meeting the requirements of sections 5.54.

The currently allowable level of lead in paint is set by Health Canada under the Canada Consumer Protection Act (CCPA), Surface Coating Materials Regulation (SOR 2005-09). Under this regulation the maximum allowable concentration of lead in paint sold to consumers is 0.009% (90 µg/g). The laboratory that T&T OHS uses for lead-in-paint analysis reports concentrations of lead-in-paint in mg/kg, therefore results reported here are in those units; 90 µg/g = 90 mg/kg. This level has been adopted by WorkSafeBC as the standard for lead-containing paint and coatings in British Columbia since September 2011. WorkSafeBC considers paint which contains lead at concentrations greater than 0.009% to present a potential health hazard, if it is removed incorrectly.

WorkSafeBC does not have a maximum allowable concentration for lead in paint. WorkSafeBC does not numerically define what would be considered lead-containing as exposure depends on the nature of the work and not just lead concentration. The International Agency for Research on Cancer (IARC) has categorized inorganic lead as group 2A (probably carcinogenic to humans). Inorganic lead is a designated substance under section 5.57 of the OHS Regulation. There are no WorkSafeBC regulatory limits for lead on surfaces. However, other jurisdictions have developed acceptable levels for lead on various surfaces and these levels can be useful in helping determine whether a worker is or may be exposed to lead. A summary of these values can be found in the

WorkSafeBC publication *Safe Work Practices for Handling Lead*. OHS Regulation 6.60(1) states that, “if a risk assessment indicates that a worker is or may be exposed to lead dust, fumes or mist, the employer must (a) ensure that a qualified person develops an exposure control plan meeting the requirements of section 5.54 and (b) implement the exposure control plan.

Results

TCLP Lead Leachate

TCLP analysis (toxicity characteristic leaching procedure) is used to determine if a waste is characterised as hazardous waste due to leachability and is expressed in mg/L. The British Columbia Ministry of Environment (BCMOE) defines hazardous waste as having a level of 5.0 mg/L or greater.

Table 2 – Results of Leachable Lead In Paint Samples

Sample No.	Location	Lead Leachate Content (mg/L)	BCMOE Limit for Hazardous Waste (mg/L)
2756-LL1	Exterior Wood Siding (dark brown)	<0.5	5
2756-LL4	Interior Concrete Floor (dark grey)	<0.5	
2756-LL5	Interior Door Trim (cream)	<0.5	

Note: **bold and highlighted** values are levels exceeding the BCMOE limit.

Levels of lead leachate in excess of the BCMOE limit are highlighted and in bold for ease of recognition. Copies of the lead leachate sample analysis results have been attached for your information and records.

Conclusions & Recommendations

All three (3) lead-containing paints on wooden and concrete substrates were determined to have leachable lead concentrations **below** the BCMOE limit for hazardous waste of 5 mg/L and **can therefore be disposed of as regular construction waste**.

T&T OHS recommends that Toxicity Characteristic Leaching Procedure (TCLP) testing be performed on any lead containing materials present, prior to disposal. This testing will determine if these materials should be classified as Hazardous Waste or regular demolition debris and will ensure compliance with the BC Ministry of Environment Regulations.



We thank you for having T&T OHS conduct this work for you. Should you have any questions, please contact our office at 250-563-8484.

Sincerely,

T&T OHS

A handwritten signature in black ink, appearing to read "Corey Arnett", is written in a cursive style.

Corey Arnett, B.Sc.
Occupational Health & Safety Specialist
Interpretation & Report

Attch: Tsolum & Tsable Environmental Ltd. – TCLP Lead Leachate Report #2756