CITY OF VANCOUVER

REAL ESTATE & FACILITIES MANAGEMENT
Facilities Planning & Development

Targeted Hazardous Building Materials Review of:

Firehall Arts Centre

Building Code: 1760

Address: 280 E. Cordova Street, Vancouver BC

Surveyor: Patrick Li

Work Notification Number: 10437770

Requested By: Vincent Soo, Capital Maintenance

Purpose: TARGETED HAZARDOUS BUILDING MATERIAL REVIEW

Executive Summary

A City of Vancouver Hazardous Materials Technician has completed a targeted hazardous building material sampling review of the Firehall Arts Centre – 280 E. Cordova Street in preparation for the upcoming Boiler Upgrade Project.

This targeted hazardous material sampling review only identifies the hazardous building materials that could be encountered or disturbed during the Boiler Upgrade work. Any hidden or inaccessible materials that were not addressed which may contain asbestos or lead should be assumed to be hazardous until sampling demonstrates otherwise.

Scope of Work

- This hazardous building materials review was completed based on the scope of work outlined in *Rocky Point Engineering Ltd. Project 19337-V dated JUN/2019* which includes, but is not limited to:
  - Demolition and removal of existing gas boilers
  - Demolition and removal of existing hot water return pump
  - Demolition and removal of existing air separator tank
  - Demolition and removal of existing HWS & HWR piping at ceiling level
  - Replacement of existing radiator control valves

- A visual inspection of the areas being affected by the Boiler Upgrade work at the Firehall Arts Centre – 280 East Cordova Street for the presence of building materials suspected to contain asbestos or lead.

- A review of existing hazmat data in the Hazardous Materials Inventory Program

- A risk assessment and recommendations for any asbestos/lead containing materials determined to be present within the building.

Asbestos-Containing Material: Methodology and Results

As per WorkSafeBC guidelines, an Asbestos Containing Material is defined as any manufactured article or other material that would be determined to contain at least 0.5% asbestos through analytical testing.

Refer to the *Hazardous Materials Management Survey* completed by *Levelton Consultants* Ltd in 2014.

> The Hazardous Materials Management Survey completed by Levelton Consultant identified the brick mortar on the East wall of the basement boiler room to contain 1-5% Chrysotile Asbestos.
>
> The mechanical insulation throughout the Boiler room was found to be NON-Asbestos.

Lead-Based Paints and Coatings: Methodology and Results

As per WorkSafeBC guidelines, a lead-containing surface material is defined as:
"a paint or other similar material that dries to a solid film that contains over 90 mg/kg (0.009%) dry weight of lead" (As defined by the Federal Ministry of Health, under the Hazardous Products Act)

Refer to the *Hazardous Materials Management Survey* completed by *Levelton Consultants* Ltd in 2014.

Various painted surfaces throughout the Firehall Arts Centre were identified as paint containing lead.

RISK ASSESSMENT AND RECOMMENDATIONS

Asbestos
Asbestos-containing brick mortar was identified in the boiler room area at the Firehall Arts Centre.

Please note that surrounding areas within the Firehall Arts Centre may have asbestos-containing materials. If the scope of work changes, the CoV Environmental Services Department must be contacted to determine if changes will impact any asbestos containing materials.

Lead
Various painted surfaces identified throughout the Firehall Arts Centre exceeded the suggested exposure prevention limit of 90 mg/kg.

Prior to the cutting, grinding, removing or otherwise disturbing lead-based paint, safe work procedures should be developed. Refer to applicable WorkSafeBC Regulations, including Guidelines outlined in the publication titled "*Safe Work Practices for Handling Lead*" for direction on methods that should be used to control exposure.

Recommendations

If during the Boiler Upgrade project, suspected materials are uncovered that were previously concealed, the City of Vancouver's Hazardous Materials Division must be notified immediately to determine if additional testing of the suspect materials is warranted.

All work involving hazardous building materials must be completed by one of the City of Vancouver's pre-qualified abatement contractors, unless otherwise approved. Workers performing any disturbance or removal of hazardous building materials must be adequately trained and qualified to do so and follow Work Safe BC Occupational Health & Safety Regulations.

Report Prepared by City of Vancouver Hazardous Materials Team

Patrick Li, Hazardous Materials Technician
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