



REAL ESTATE & FACILITIES MANAGEMENT
Facilities Planning & Development

Hazardous Materials Sampling: Vancouver Art Gallery

Building Code:4491

Address: 800 West Georgia

Surveyor(s): Jun Han Poon

Purpose: TARGETED HAZARDOUS MATERIAL SAMPLING



A City of Vancouver (COV) Hazardous Materials Technician has completed a targeted hazardous materials survey at Vancouver Art Gallery as requested by the City of Vancouver's Capital Maintenance Department in preparation to upgrades to elevator machine equipment.

Asbestos-Containing Material: Methodology and Results

Building materials were assessed for potential asbestos content and analyzed for asbestos by a COV-approved lab.

Please refer to **Table 1** for asbestos sample results. Asbestos containing materials were not identified during this assessment.

Table 1: Materials Tested for Asbestos

Material	Location	Asbestos
Brick Mortar	Elevator Machine Room, East Wall, Gallery Hydraulic Elevator	Not Detected
Brick Mortar	Elevator Machine Room, West Wall, Gallery Hydraulic Elevator	Not Detected

Lead-Based Paints and Coatings: Methodology and Results

Total Lead in Paint

Four (4) representative samples of paint were collected and tested for the presence of lead. Samples collected were analyzed at a COV-approved lab for total lead.

The Canadian Surface Coating Materials Regulations and WorkSafeBC state that a lead content in paint in excess of 90 mg/kg constitutes a lead-based paint.

Depending on the potential receptors and the work to be performed, paints with lead contents as low as 90 mg/kg can also result in dangerous airborne lead levels. **A task, and site-specific risk assessment must be conducted by City of Vancouver's Hazardous Materials Team to determine if an Exposure Control Plan and safe work procedures are required** (Lead-Containing Paints and Coatings: Preventing Exposure in the Construction Industry, WSBC 2017)

One (1) of the four (4) Paint samples did exceed the suggested exposure prevention limit of 90 mg/kg paint (**Table 2**).

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Leachable Results of Lead in Paint:

No samples were analyzed for leachable lead. Lead-based paint should be tested for leachable lead prior to disposal to determine if they are a hazardous waste, as defined by BC Ministry of Environment.

Table 2: Lead-based Paints and Leachable/Hazardous Waste Paints (Lead).

Colour	Location	TOTAL LEAD (mg/kg)	CHPA LEAD-BASED PAINT? (90 mg/kg)	TCLP LEAD (mg/L)	HAZ WASTE ? (Y/N)
White	Elevator Machine Room (Gallery Hydraulic Elevator) - White Paint on North Concrete Wall	10.7	No	-	-
White	Elevator Machine Room (Gallery Hydraulic Elevator) - White Paint on East Concrete Wall	47.9	No	-	-
White	Elevator Machine Room (Gallery Hydraulic Elevator) - White Paint on Concrete Ceiling	6.4	No	-	-
Grey	Elevator Machine Room (Gallery Hydraulic Elevator) - Grey Paint on Metal Elevator Machine Equipment	1010	Yes	-	-

Note: Concentrations above 90 mg/kg are highlighted and in bold:
TCLP: Toxicity Characterization Leaching Procedure
CHPA: Canadian Hazardous Products Act

RISK ASSESSMENT AND RECOMMENDATIONS

Prior to renovation or demolition activities, the hazardous materials identified in this report must be safely contained before disturbance. Depending on the areas to be renovated or demolished, additional destructive sampling may be required to identify asbestos-containing and/or lead-based materials that were not accessed during this management survey.

ASBESTOS

Asbestos-containing materials were not identified during this targeted hazmat survey.

LEAD PAINT

In the event that the surfaces to which lead-based paint has been applied are to be disturbed by sanding, grinding, burning, cutting or otherwise disturbing lead-based paint, then the paint must be removed prior to these activities. The removal of lead paint must be accomplished in compliance with the requirements of the WorkSafeBC Occupational Health & Safety Regulation (current edition).

SILICA-CONTAINING MATERIALS

Present in concrete foundation and may be present in ceramic tiles, stucco and drywall. In the event where materials containing silica are disturbed, safe work procedures must be followed in compliance with the requirements of the WorkSafeBC Occupational Health & Safety Regulation (current edition).

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Report Prepared by City of Vancouver Hazardous Materials Team



Per: Jun Han Poon, Hazardous Materials Technician
AHERA Certification No. CABIR-16-073

PHOTOS: 800 West Georgia

Photo 1: Grey paint on Metal Elevator Machine Equipment is lead containing. Paint on walls and ceiling throughout is not lead containing. Brick mortar is also non-asbestos.

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LABORATORY REPORTS: Attached