
DESIGNATED SUBSTANCES REPORT

Replacement of Hangers Doors
3257 Carp Road
Ottawa, Ontario

Section 01060
Page 1 of 4

PART 1 GENERAL

1.1 Regulatory Requirements

- .1 The following Designated Substances Report (DSR) was prepared in order to meet the owners or engineer's requirements under:
 - .1 Section 30, of the Occupational Health and Safety Act, Revised Statutes of Ontario, 1990, Chapter 0.1.
 - .2 The Canada Labour Code, Part II, Sections 124 & 125.
 - .3 Ontario Regulation 347/90 General Waste Management, as amended to O. Reg. 326/03.
- .2 The designated substances identified in the Occupational Health and Safety Act and its corresponding regulations are:
 - .1 **Acrylonitrile:** O. Reg. 835/90 as amended by O. Reg. 101/04.
 - .2 **Arsenic:** O. Reg. 836/90 as amended by O. Reg. 102/04.
 - .3 **Asbestos:**
 - .1 O. Reg. 837 as amended by O. Reg. 279/05.
 - .2 O. Reg. 278/05.
 - .4 **Benzene:** O. Reg. 839/90 as amended by O. Reg. 105/04.
 - .5 **Coke Oven Emissions:** O. Reg. 840/90 as amended by O. Reg. 106/04.
 - .6 **Ethylene Oxide:** O. Reg. 841/90 as amended by O. Reg. 107/04.
 - .7 **Isocyanates:** O. Reg. 842/90 as amended by O. Reg. 108/04.
 - .8 **Lead:** O. Reg. 843/90 as amended by O. Reg. 109/04.
 - .9 **Mercury:** O. Reg. 844/90 as amended by O. Reg. 110/04.
 - .10 **Silica:** O. Reg. 845/90 as amended by O. Reg. 606/05.
 - .11 **Vinyl Chloride:** O. Reg. 846/90 as amended by O. Reg. 112/04.
- .3 The Guide to Green Government sets out the policy requirements for the federal government to comply with the most stringent environmental regulations, federal or provincial. Also, under the Code of Environmental Stewardship, the federal government has committed to meet or exceed the letter and spirit of federal environmental laws. Within the Guide to Green Government, pollution prevention efforts are required in federal projects. Pollution prevention is defined as the use of processes, practices, materials, products or energy that avoids or minimizes the creation of pollutants and waste, and reduces overall risk to human health and the environment. These policies must be adhered to throughout the duration of any projects performed at 3257 Carp Road, Ottawa.
- .4 Disposal of construction debris and waste are controlled by Regulation 347/90 as amended to O. Reg. 326/03 under the Environmental Protection Act.
- .5 Notification:
 - .1 All contractors requesting tenders from subcontractors shall provide this report to subcontractors.
 - .2 Contractors are required, on the Ontario Ministry of Labour Notice of Project form, to list all Designated Substances that may be used, handled or disturbed by work on the project. This includes Designated Substances already present as part of the structure or finishes as well as Designated Substances brought to the project site by the contractor.

DESIGNATED SUBSTANCES REPORT

Replacement of Hangers Doors
3257 Carp Road
Ottawa, Ontario

Section 01060
Page 2 of 4

- .3 Submit to the Engineer a copy of all notifications prior to the start of work.

1.2 Scope and Validity Date

- .1 The following report was prepared to provide an overall view of designated substances that were confirmed or potentially present in the following locations of 3257 Carp Road, Ottawa, Ontario:
- .1 West interior and exterior walls of Hanger
- .2 An assessment must be made prior to commencing any project to ensure that the information presented herein reflects the scope of work and the requirements of the proposed project. It is important to note that more specific sampling may be required depending on the scope of work and the area affected by the proposed project(s).
- .3 The following report was prepared by Kiama Engineering Inc. (KEI) by conducting a survey on January 12, 2012. Since that time, designated substances may have been removed from or added to the project area.
- .4 The scope of work for this report involved a visual inspection of all accessible areas of the select room, which may present designated substance within the building's material and finish. Included in the scope of work was the survey for polychlorinated biphenyls (PCBs) and ozone depleting substances (ODS).
- .1 On the basis of this inspection suspected lead based paint samples were collected for analysis. The samples were submitted to Paracel Laboratories Ltd. in Ottawa, Ontario (an accredited NVLAP laboratory).
- .2 Summary tables of the analytical test results (paint) are presented at the end of this section.
- .3 The surveys, visual inspections and sampling were limited to readily accessible areas by non-destructive means. Destructive testing was not included in the investigation, however, is recommended prior to any major demolition. Due to the nature of building construction, some inherent limitations exist as to the possible thoroughness of the designated substances surveys. The surveys did not include the demolition of floors, floor finishes, plaster ceilings or walls or other areas to examine concealed conditions.
- .6 It is possible that the designated substances mentioned above are present in non-accessed areas and concealed spaces (i.e., wall and ceiling cavities).
- .7 In addition, the survey does not refer to substances that may be present in the day-to-day usage for other specialized equipment or area in the building (i.e. portable equipment, lead shields, fume hoods, etc.). There is a possibility that materials may exist which could not be reasonably identified within the scope of this assessment, or which were not apparent during previous site visits.
- .5 Prior to beginning work, confirm with Engineer that additional designated substances have not been brought to the project area.

PART 2 DESIGNATED SUBSTANCES

2.1 SURVEY RESULTS

- .1 **ACRYLONITRILE:** Not Identified
- .2 **ARSENIC:** Not Identified
- .3 **ASBESTOS:** Not identified
- .4 **BENZENE:** Not Identified
- .5 **COKE OVEN EMISSIONS:** Not Identified
- .6 **ETHYLENE OXIDE:** Not Identified

DESIGNATED SUBSTANCES REPORT

Replacement of Hangers Doors
3257 Carp Road
Ottawa, Ontario

Section 01060
Page 3 of 4

.7 ISOCYANATES: Not Identified

.8 LEAD: Identified

According to the proposed Lead in Paint and Dust Guidelines, Revision 4, March 2001, by Health Canada's Occupational Health and Safety Agency, paint is considered to be a lead-based if the concentration of lead in the paint is equal to or greater than 0.5 percent by weight, which is equivalent to 5000 ppm.

The Ontario Ministry of Labour (MOL) Draft Proposed Lead Regulation on Construction Projects, made under the Occupational Health and Safety Act, May 5, 1995, states that the removal of lead paint is not required unless work on these materials are likely to produce airborne lead dust or fumes. For example, this could occur during welding, torch cutting, sanding or sand blasting.

- .1 Test results of suspected lead based paint and materials collected from the painted surfaces within the building are located at the end of this section. Copies of the laboratory analysis are included in **Annex A**. These are for general information only and are not representative of all the painted surfaces or paint coats contained within the scope of the proposed project.
- .2 Three (3) paint samples were collected from the areas surveyed. Test results revealed that the samples analysed contain levels of lead below the regulated concentration of 5000 ppm (ug/g).
- .3 Based on the historic use of lead in building construction, lead is also presumed to be present in the solder joints on copper plumbing and drainpipe joint caulking throughout work area.

Table 1 Summary of paint sample collected and laboratory analysis

Location	Description	Sample Number	Lead Concentration (ppm)
Interior wall, on ply-wood between canvas doors	Grey	P1	84
On metal beams at floor and ceiling adjacent to canvas doors	Red	P2	2260
Exterior wall, on ply-wood between canvas doors	White	P3	39

.9 MERCURY: Not identified

.10 SILICA: Identified

Based on the history of the composition of building materials, crystalline silica is expected to be present in the following building materials as part of the scope of this project:

- .1 Concrete and cement;
- .2 Masonry blocks and mortar.

.11 VINYL CHLORIDE: Not Identified

.12 POLYCHLORINATED BIPHENYLS (PCBs): Not identified

.13 OZONE DEPLETING SUBSTANCES (ODS): Not Identified

2.2 RECOMMENDATIONS**.1 LEAD**

Ontario Ministry of Labour draft Proposed Lead Regulation on Construction Projects, made under the Occupational Health and Safety Act, May 5, 1995, states that the removal of lead paint is not required unless work on these materials are likely to produce airborne lead dust or fumes (i.e. from welding, torch cutting, sanding and sand blasting). If these operations are likely to occur during renovation or demolition projects, the removal of lead-based paint will be required in accordance with the procedures outlined in the proposed regulation as well as outlined under Ontario Regulation 843/90 as amended by O. Reg. 519/92, O. Reg. 389/00 and O. Reg. 109/04

.2 SILICA

Silica occurs naturally as crystalline material in cement. Crystalline silica is significantly more toxic than amorphous silica, therefore for health reasons; only crystalline varieties are regulated under O. Reg. 845/90 as amended by O. Reg. 111/04 of the Occupational Health and Safety Act.

Silica dust can be generated through such processes as blasting, grinding, crushing and sandblasting silica-containing material identified in Section 2.1.10. Therefore, appropriate respiratory protection, and ventilation must be utilized during the demolition and modification of these structures. The MOL's document "*Guideline – Silica on Construction Projects*" has become an industry standard for protecting workers from silica exposure. This document outlines method for controlling silica hazard and offers classification criteria and measures and procedures for different types of operations.

PART 3 – CONTRACTOR DUTIES

- .1 The contractor must review the designated substance report and take the necessary precautions to protect the health and safety of the workers and the environment. As per s.30 (4) of the *Ontario Occupational Health and Safety Act*, the party hiring the contractor (i.e. the Engineer) shall ensure that the contractor and subcontractor (if any) for the project has received a copy of the designated substance report prior to entering a binding contract for the supply of work on the project. As per s. 27 (2) (a,b,c) of the *Ontario Occupational Health and Safety Act* and s. 124 of *Canada Labour Code, Part II*, while on site, the contractor supervisor shall take every reasonable precaution in the protection of a worker. If you have any questions about the designated substance report, please contact the Engineer.
- .2 If potentially hazardous materials are identified that are not identified in the survey, work should stop immediately until the materials are sampled to properly identify them and determine their means of disposal.

PART 4 - EXECUTION

Not Applicable

*******END OF SECTION*******

DESIGNATED SUBSTANCES REPORT

Replacement of Hanger Doors
3257 Carp Road
Ottawa, Ontario

Section 01060

ANNEX A
LEAD PAINT ANALYSIS RESULTS

Certificate of Analysis

Levac Robichaud Leclerc Associates

1-2884 Chamberland St.
Rockland, ON K4K1M6
Attn: Jessica Arthurs

Phone: (613) 446-7777
Fax: (613) 446-1427

Client PO:
Project: K11021
Custody: 1429

Report Date: 13-Jan-2012
Order Date: 12-Jan-2012

Order #: 1202145

This Certificate of Analysis contains analytical data applicable to the following samples submitted:

Paracel ID	Client ID
1202145-01	P1
1202145-02	P2
1202145-03	P3

Approved



Mark Foto, M.Sc. For Dale Robertson, BSc
Laboratory Director

Any use of these results implies your agreement that our total liability in connection with this work, however arising shall be limited to the amount paid by you for this work, and that our employees or agents shall not under circumstances be liable to you in connection with this work

Certificate of Analysis

Report Date: 13-Jan-2012

Order Date: 12-Jan-2012

Client: **Levac Robichaud Leclerc Associates**

Client PO:

Project Description: K11021

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Metals	EPA 6020 - Digestion, ICP-MS	13-Jan-12	13-Jan-12

Sample Data Revisions

None

Work Order Revisions/Comments:

None

Other Report Notes:

n/a: not applicable

MDL: Method Detection Limit

Source Result: Data used as source for matrix and duplicate samples

%REC: Percent recovery.

RPD: Relative percent difference.

Certificate of Analysis

Report Date: 13-Jan-2012

Order Date: 12-Jan-2012

Client: **Levac Robichaud Leclerc Associates**

Client PO:

Project Description: K11021

Sample Results

Lead					Matrix: Paint
					Sample Date: 12-Jan-12
Paracel ID	Client ID	Units	MDL	Result	
1202145-01	P1	ug/g	5	84	
1202145-02	P2	ug/g	5	2260	
1202145-03	P3	ug/g	5	39	

Laboratory Internal QA/QC

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Matrix Blank									
Lead	ND	5	ug/g						
Matrix Duplicate									
Lead	278	5	ug/g	292			4.8	50	
Matrix Spike									
Lead	60.3		ug/L	11.7	97.2	70-130			