

OWNER'S DUTIES

Designated Substances on construction projects

In Ontario, section 30 of the *Occupational Health and Safety Act* requires that a project owner identify designated substances on the project and provide a list to prospective constructors as part of the tendering information.

Designated substances are particularly hazardous, especially when adequate controls are not in place to protect workers. They can cause cancers, strong allergic reactions, liver and lung problems, and effects on the nervous system.

WHY SHOULD PROJECT OWNERS PROVIDE A LIST OF DESIGNATED SUBSTANCES?

- An owner is liable to the constructor, as well as every contractor, and subcontractor for loss or damages if a list was not provided or designated substances were not identified.
- An owner can be fined under the *Occupational Health and Safety Act*.
- The Ministry of Labour can issue a “stop work” order or the contractor may refuse to complete the work. This can cause delays and cost money.
- To ensure employers are aware of the hazards and put controls in place to protect workers.

OWNER CHARGED!

An owner of a commercial property was fined \$60,000 after workers were put in danger of asbestos exposure. The owner pleaded guilty for failing to determine whether any designated substances were present at the project site, and failing to prepare a list of all designated substances present.

BEFORE CONTRACTS ARE FINALIZED, THE PROJECT OWNER MUST DO THE FOLLOWING

FOR ASBESTOS IN CONSTRUCTION, BUILDINGS, AND REPAIR OPERATIONS

1. Identify asbestos-containing material (ACM).

- A competent worker must collect samples of suspect building materials and have them analyzed in accordance with section 3 of Regulation 278/05 – *Asbestos on Construction Projects and in Buildings and Repair Operations*. Refer to Section 3 of the regulation for sampling requirements. Multiple samples are almost always required.
- Historical records can be used if building materials have already been tested for asbestos, **and if**, under the condition that the tests showed no asbestos, enough samples were taken to satisfy Section 3 of the regulation.
- Building materials may be treated as ACM without testing them; however, adequate controls must be put in place.

2. Prepare an owner's report with the following information:

- The identity of the material (ACM or not ACM); or it must state if the work is to be performed in accordance with Regulation 278/05 as though it is ACM.
- The condition of the material and if it is friable or non-friable.
- For friable sprayed-on asbestos, the type of asbestos, i.e., chrysotile or other than chrysotile.

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- Drawings, plans, and specifications to show locations of the ACM.

3. Provide the owner's report to prospective contractors.

FOR ALL OTHER DESIGNATED SUBSTANCES

1. Identify designated substances on site. The owner may choose to hire a consultant or have a competent person perform a Designated Substance Survey (DSS).

The table on page 3 of this package gives examples of some of the more common building materials that should be suspected of containing designated substances. Note that this is not an exhaustive list. Designated substances may be present in other materials.

For designated substances stored on site, consult the Material Safety Data Sheet (MSDS). Also consider the possible presence of contamination from industrial operations. Designated substances such as lead, silica, or mercury might be present in process or ventilation equipment, or in settled dust on building surfaces.

2. Provide a list of designated substances to prospective constructors before contracts are finalized.

3. Ensure that prospective constructors have received a copy. Have a constructor sign off on this list (or provide other suitable documentation) to ensure they have received the list, and to avoid liability.

WHAT IS A DESIGNATED SUBSTANCE SURVEY (DSS)?

A Designated Substance Survey (DSS) is performed by a competent person or consultant and includes:

- A walkthrough of the facility to identify materials suspected of containing designated substances.
- Locations of suspect materials.
- Collecting samples of suspect materials to be analyzed by a lab.
- Noting the type and condition of suspect materials.
- Providing a DSS report to the owner.

The DSS report can be provided to prospective contractors so that measures can be taken to protect workers.

WHO ELSE HAS RESPONSIBILITIES?

- **The constructor** ensures that prospective contractors and subcontractors are provided with the owner's report or list of designated substances as part of the tendering information.
- **The constructor, contractors, and employers** all ensure that measures and procedures, such as personal protective equipment, are in place and that workers are provided with the proper training to protect their health and safety.

The attached list can help you identify and locate building materials that should be suspected of containing designated substances.

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Suspect Designated Substances in these common building materials or locations

ASBESTOS	<ul style="list-style-type: none"> • Insulation (boiler, pipe, and sprayed-on/fire-stop/fireproofing materials) • Transit pipe or panels • Loose-fill vermiculite as attic or block insulation • Wallboard • Asphalt 	<ul style="list-style-type: none"> • Adhesives and caulking • Ceiling tiles • Vinyl floor tiles and sheet flooring • Gaskets • Drywall joint-filling compound • Plaster (smooth, texture, stipple) • Roofing shingles and felts
LEAD	<ul style="list-style-type: none"> • Old paint • Old mortar • Old water pipes 	<ul style="list-style-type: none"> • Lead sheeting (radiation or sound control) • Contaminated soil
SILICA	<ul style="list-style-type: none"> • Brick/block • Granite • Abrasives used for blasting • Concrete 	<ul style="list-style-type: none"> • Sandstone • Cement • Mortar
ISOCYANATES	<ul style="list-style-type: none"> • Fresh polyurethane spray foam insulation • Sealants • Rock support in underground mining 	<ul style="list-style-type: none"> • Paint shops and auto-body repair • Finishes • Adhesives
MERCURY	<ul style="list-style-type: none"> • Fluorescent lights • Switches • Contamination in laboratory drains 	<ul style="list-style-type: none"> • Pressure gauges • Electrodes • Contaminated soil
ARSENIC	<ul style="list-style-type: none"> • Wood preservatives • Smelters 	<ul style="list-style-type: none"> • Glass production • Contaminated soil
COKE OVEN EMISSIONS, BENZENE, ACRYLONITRILE, VINYL CHLORIDE, ETHYLENE OXIDE	<ul style="list-style-type: none"> • Chemicals that are typically used in, or are by-products of, manufacturing facilities and health-care settings • Contaminated soil 	

Note: Some designated substances can exist in different chemical forms and be known by different names.

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Designated Substance List

1. Project owner identifies and lists the location(s) of all designated substances on the project site. This list is provided to prospective constructors as part of the tendering information.
2. The constructor provides this list to all contractors and subcontractors on site.
3. Project owner ensures constructor signs off on this list (or provides other suitable documentation).

Project name & address: _____

Project begins: ____ / ____ / ____
Day Month Year

Project ends: ____ / ____ / ____
Day Month Year

Designated substance	Location(s) or work activity

Project Owner: _____ Tel: _____

Prospective Constructor: _____
Signature

Date: ____ / ____ / ____
Day Month Year

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LINKS

LEGISLATION

- **Occupational Health and Safety Act**
http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90o01_e.htm
- **Construction Regulation** — Ontario Regulation 213/91
http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_910213_e.htm
- **Asbestos on Construction Projects and in Buildings and Repair Operations** — Ontario Regulation 278/05
http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_050278_e.htm
- **Workplace Hazardous Materials Information System** — Ontario Regulation 860
http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_900860_e.htm

GUIDELINES AND OTHER RESOURCES

- **Guideline – Lead on Construction Projects** by the Ministry of Labour
<http://www.labour.gov.on.ca/english/hs/pubs/lead/index.php>
- **Guideline – Silica on Construction Projects** by the Ministry of Labour
<http://www.labour.gov.on.ca/english/hs/pubs/silica/index.php>
- **A Guide to the Regulation Respecting Asbestos on Construction Projects and in Buildings and Repair Operations** by the Ministry of Labour
<http://www.labour.gov.on.ca/english/hs/pubs/asbestos/index.php>
- **Asbestos: Controls for Construction, Renovation, and Demolition** by the Infrastructure Health & Safety Association
<http://www.csao.org/topics/asbestos.cfm>
- **Protecting Your Family from Asbestos-Contaminated Vermiculite Insulation** by the US Environmental Protection Agency
<http://www.epa.gov/asbestos/pubs/verm.html>
- **Lead in Older Homes** by Canada Mortgage and Housing Corporation
http://www.cmhc-schl.gc.ca/en/co/maho/yohoyohe/inaiqu/inaiqu_007.cfm