

HEALTH AND SAFETY ADVISORY

Gaskets, Boilers, and Asbestos

Beware of asbestos

If you work around boilers and pipes, you should know that friable asbestos (asbestos that is easily crumbled, pulverized, or powdered) was installed in some boiler components until around 1985. Asbestos is being used even in some new atmospheric boilers.

You can find asbestos in components such as boiler or pipe insulation, and some gaskets. When they're new, such gaskets are non-friable and pose less of a hazard than friable asbestos.

The gaskets become especially hazardous when they are:

- broken
- cut
- drilled
- exposed to heat over time
- abraded
- ground
- sanded
- vibrated

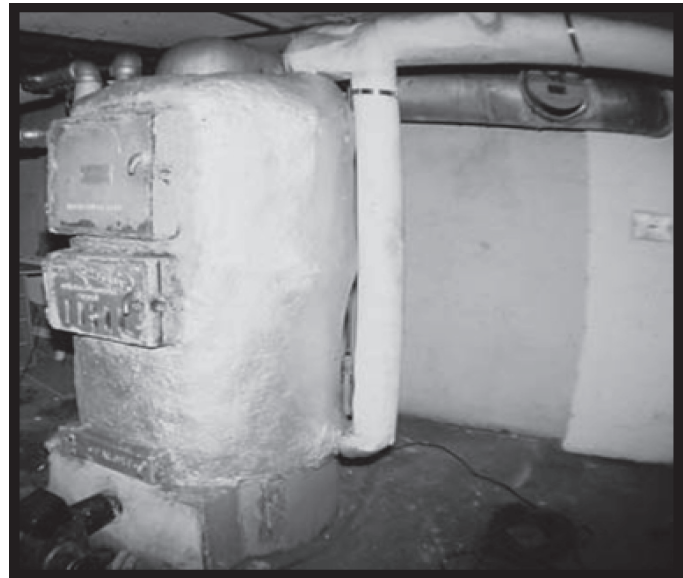
What information must I get from the project owner before beginning a job or finalizing contract agreements?

1. The owner's report

The owner's report can be obtained from the project owner. It tells you if material that is likely to be handled, dealt with, disturbed, or removed is:

- friable or non-friable asbestos-containing material (ACM)
 - to be treated as ACM
 - in good or poor condition.
2. Drawings, plans, or specifications to show the location of the ACM.

Note: Asbestos may also be called chrysotile, crocidolite, or amosite.



What am I required to do if boiler components contain asbestos?

Boiler and pipe insulation

Never disturb boiler or pipe insulation without complying with Regulation 278/05, Asbestos on Construction Projects and in Buildings and Repair Operations, which you can download at ihsa.ca.

The law requires special procedures for such asbestos operations, which are designated as Type 2 or Type 3, depending on the specific situation.

Gaskets

- Before disturbing a gasket, use a wetting agent. Using a wetting agent reduces airborne levels of asbestos.
- Do not use power tools.
- Wire brushes used to remove gaskets may generate asbestos fibres.
- Follow any additional requirements as described in Regulation 278/05 - Asbestos on Construction Projects and in Buildings and Repair Operations.

Note: If you'll be working with gaskets, ask for an N-100, R-100, or P-100 air-purifying respirator and protective clothing from your employer.

What should I do if I discover material that resembles asbestos but was not mentioned in the owner's report?

- Stop working immediately.
- Report the discovery to your supervisor or the constructor.
- The constructor must notify, orally and in writing, the Ministry of Labour, owner, contractors, and the Joint Health and Safety Committee or health and safety representative.

Note: Work can begin only if:

- the material has been identified (if it is asbestos-containing material, you must comply with regulation 278/05)
- the work is carried out in accordance with Regulation 278/05 as if the material did contain asbestos.

What about refractory ceramic fibres (man-made mineral fibres)?

Refractory ceramic fibres (also known as man-made mineral fibres or synthetic vitreous fibres) have replaced asbestos as an insulating material for boilers. According to the International Agency for Research on Cancer (IARC), it's possible that these fibres cause cancer.

To learn how to protect yourself from exposure, refer to *Synthetic Vitreous Fibres: Guidelines for Construction (DS036)* at ihsa.ca/products

Where can I get more information?

- *Asbestos: Controls for Construction, Renovation, and Demolition (DS037)* by the Infrastructure Health and Safety Association.
Download it free at:
www.ihsa.ca/images/pfiles/328_DS037.pdf
- Regulation 278/05 - Asbestos on Construction Projects and in Buildings and Repair Operations.
Download it free at:
www.ihsa.ca/WebHelp/OHSA_and_Regs.htm
OR
www.e-laws.gov.on.ca/html/regs/english/elaws_regs_050278_e.htm
- *A Guide to the Regulation Respecting Asbestos on Construction Projects and in Buildings and Repair Operations* by the Ontario Ministry of Labour.
Download it free at:
www.labour.gov.on.ca/english/hs/pubs/asbestos/
- *Synthetic Vitreous Fibres: Guidelines for Construction (DS036)* by the Infrastructure Health and Safety Association.
Download it free at:
www.ihsa.ca/images/pfiles/290_SVF.pdf
- For a list of consultants who specialize in asbestos identification in Ontario, call the Environmental Abatement Council of Ontario at (416) 499-4000, or visit www.eaontario.com

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