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## Alterations and Managing Environmental Risks

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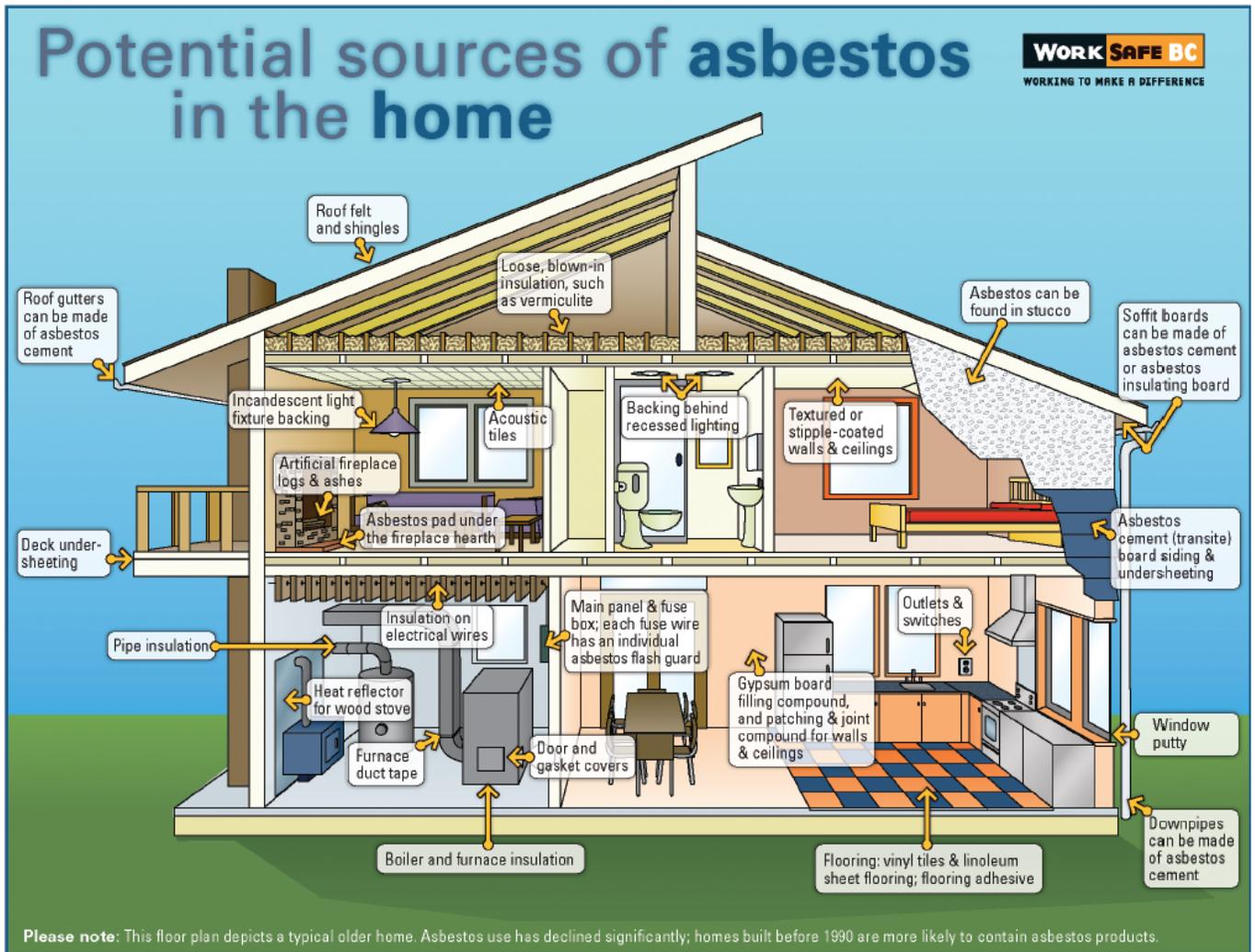
Strata councils are often being pressured by the owners to permit a wide range of alterations to strata lots and common property that frequently result in a significant burden or risk for the strata corporation. For example, a kitchen renovation may be the beginning of a plumbing and environmental nightmare for a strata if the details of the alteration are not clearly understood and the scope of work has a negative impact on the building services or expose the strata to environmental management risks.

alterations to a strata lot, common property, limited common property or an asset of the strata corporation.

Strata councils often take a hands off approach when an owner wants to make significant alterations to their units; however, the moment the proposed alteration requires cutting into drywall, removal of any walls, altering ceiling finishes, altering soundproofing, changes to plumbing configuration, moving electrical equipment or changing ventilation, your alarm bells should sound and the council needs to pay close attention to the proposed alteration request.

In the event there are alterations that result in environmental abatement and disposal, the cost of the alteration could significantly increase, and the owner along with the strata corporation may be responsible for costs and penalties associated with environmental and health violations. Drywall, flooring, surface finishing and heating facilities that contain asbestos are a significant health hazard and should always be treated as property. Toxic mould, frequently discovered during renovations may also post a significant health risk and should be managed safely.

The following WorkSafeBC illustration, and Licensing and Consumer Services branch of BC Housing checklist, provides a good reference for strata councils and strata managers when an application is received for



## Environmental Hazards

	Asbestos	Vermiculite	Lead
What is the health concern?	Cancer, asbestosis and mesothelioma	May contain asbestos	Anaemia, nerve damage, reduced brain function, high blood pressure, reproductive effects
Where is it commonly found?	Finishing products like flooring, drywall and ceiling texture Exterior cladding and roofing Materials that require fire resistance, such as pipe insulation, electrical insulation Adhesives and putties	As insulation in attics and framed wall cavities Cavities in block walls	In paint, ceramic tile glazing, cast iron pipe joints and as solder on copper pipes
What age of building/ product may contain the substance?	Any, but construction after 1990 is at low risk	Any, but few buildings after 1990 use vermiculite	Interior paint: any, but construction after 1980 is at low risk Exterior paint and other materials: any, but construction after 1990 is at low risk
What activities can create an environmental risk?	Friable – any contact Non-friable – mechanical abrasion, drilling, sanding, when dust is created	Any contact	When scraping, grinding or sanding creates airborne material
How can you confirm if the material is present?	Bulk sampling and testing	Bulk sampling and testing (to confirm asbestos)	Bulk sampling and testing
Is a risk assessment by a qualified person required?	Yes	Yes	Yes
Is an exposure control plan required?	Yes	Yes	Yes
Is a Notice of Project required by WorkSafeBC?	Yes	Yes	Yes
What steps are appropriate for minimizing environmental risks?	Avoid disturbing Risk assessment by qualified person Controlled disturbance by qualified person Encapsulating / enclosure Abatement and temporary air monitoring Asbestos exposure control plan	Avoid disturbing Risk assessment by qualified person Enclosure Abatement and temporary air monitoring Asbestos exposure control plan	Avoid disturbing Encapsulating Risk assessment by qualified person Lead exposure control plan

## Environmental Hazards

	<b>Mould</b>	<b>Silica</b>	<b>Carbon Monoxide</b>
What is the health concern?	Irritations Allergic or asthmatic reactions	Silicosis	Asphyxiation and death
Where is it commonly found?	Areas of high moisture and condensation	Quartz rock and sand Concrete Fibre cement board Granite	Buildings with combustion appliances
What age of building/product may contain the substance?	Any	Any	Any
What activities can create an environmental risk?	Surface contact Aggressive air movement (fans)	Grinding, sanding, drilling, concrete, granite counters, terrazzo floors, etc. Cutting fibre cement board siding	Airtightening the building enclosure (installing new windows and cladding)
How can you confirm if the material is present?	Air sampling	Sampling	Carbon monoxide detector
Is a risk assessment by a qualified person required?	Yes, if a large area of mould is present or suspected	Not normally required	No
Is an exposure control plan required?	Possibly, requirement varies with extent of mould growth	Yes	No
Is a Notice of Project required by WorkSafeBC?	No	Yes	No
What steps are appropriate for minimizing environmental risks?	Remove moisture source Risk assessment by qualified person Abatement, temporary air monitoring and clearance air sampling	Adhere to an effective silica exposure control plan Avoid disturbing Risk assessment by qualified person Encapsulating Abatement	Measure building airtightness Flue gas spillage test if required Completion

## Environmental Hazards

