### Government of Alberta 🔳

Infrastructure

## TECHNICAL BULLETIN

**TECHNICAL SERVICES BRANCH** 

#### ISSUE NO. 20B

#### **REVISED, SEPTEMBER 2013**

### ASBESTOS MANAGEMENT

In the early 1980's, Alberta Infrastructure embarked on a program of asbestos management. In a number of cases, enclosure or encapsulation were utilized to provide the necessary control measures. These methods, while providing proper protection to the building occupants, allow the known asbestos containing materials (ACMs) to remain in the building.

The condition of these materials changes with time and may become potentially unhealthy or hazardous if the materials are disturbed during routine maintenance, equipment maintenance or replacement, building renovations, building demolition or similar activities. Some of the more common ACMs which may be present in buildings are in the following forms and places:

- 1. Sprayed-on fireproofing to structural columns, beams, joists, etc.
- 2. Decorative/acoustic ceiling textures, suspended ceiling tiles and asbestos board used for fire, heat and mechanical protection, siding and interior panels.
- 3. Insulation on mechanical equipment such as hot water/steam lines, sheet metal air ducts, and steam and hot water vessels and boilers.
- Flooring materials such as vinyl asbestos tiles or as a backing or underlayment beneath sheet vinyl goods. Also found in some concrete floor levelling compounds.
- 5. Roofing materials such as asphalt shingles or as a base sheet under the shingles or in built-up roofing.

A more detailed list of building materials known to contain asbestos follows this article.

As a general rule of thumb, when there is any concern or doubt about a material it should be considered as potentially harmful. A sample of any material in your building(s), which you suspect contains asbestos, should be analyzed by a laboratory to determine whether or not it contains asbestos prior to any disturbance. We feel that a policy of preventative caution is the only attitude to assume.

ACMs encountered in Alberta Infrastructure facilities

must be dealt with in accordance with present legislation in a responsible manner. Practicality and common sense should take a leading role in determining required action and establishing a proactive management program.

A proactive management program must take into account that the human resources and physical conditions of a building are in constant change, and must contain "safeguards" to accommodate these variables.

Historically, Alberta Infrastructure has followed a policy of "opportunistic removal", that is, if an ACM is in good condition it may be left in place, so long as it remains undisturbed and its condition is monitored on an ongoing basis.

If a renovation or demolition project is planned where ACMs are to be disturbed, the opportunity should be taken to remove them in a proper manner.

ACM removal is to be discussed with the Building Environment Unit.

The Building Environment Unit has been dedicated to provide asbestos management advice including, but not limited to, such services as:

- 1. Building surveys
- 2. Hazard assessments
- 3. Contract document preparation
- 4. Construction management
- 5. Asbestos management workshops
- 6. Asbestos awareness seminars
- 7. Assistance with asbestos management plans

The above services may be provided by Alberta Infrastructure and/or a private environmental consultant. Where provision of services by an outside consultant is selected as the route to follow, the Building Environment Unit is available to assist in setting the scope of work, terms of reference and to assist with contract and construction administration.

For information or assistance, contact 780-422-7472, 780-422-7600 or 780-422-7440.

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CATEGORY	DESCRIPTION	ASBESTOS %	DATE OF MANUFACTURE	USE	FRIABILITY
CEILINGS, WALL, & TEXTURES	Drywall Taping Compounds	1 - 10	1950 - 1985	Gypsum wall or ceiling board edge treatment	Low to Moderate
	Sprayed on texture or troweled on texture	1 – 95	1935 – 1985	Fire resistance acoustic treatment thermal insulation condensation control	Moderate to High
	Ceiling Tiles	1 - 10	1960 - 1985	acoustical suspended ceiling finish	Moderate to High
	Plaster brown or finish coat, stucco, drywall joint cement	2 - 10	1930 - 1985	Wall – Ceiling finish rough or smooth	Low
FLOORING	Vinyl Asbestos (V.A.) Tile	30 - 50	1950 – 1985	Hard wearing floor covering	Low
	Resilient Sheet	30 - 50	1950 - 1985	Backing layer to vinyl facing	Moderate to High
	Concrete Levelling Compounds	1 - 10	1950 - 1985	Concrete floor leveller and fin- ished flooring	Moderate to High
	Asphalt/Asbestos Tile	20 - 30	1920 - 1985	Roof or exterior walls finish	Low
MECHANICAL	Rigid block insulation	40 - 60	1926 – 1985	Boiler or pipework insulation	Moderate to High
	Paper like insulation	50 - 70	1910 - 1985	Pipework insulation	Moderate
	Insulating Cement	10 - 80	1949 – 1985	Pipework insulation at elbows and fittings	Moderate to High
	Corrugated paper sheets	70 - 80	1925 – 1985	Duct and pipe insulation	Moderate
	Insulating Cement Parging	10 - 80	1910 – 1985	Duct parging or pipe insulation applied over glass fiber	Moderate to High
ELECTRICAL	Wire Insulation	90 - 100	1910 – 1985	High heat applications	Moderate
	Insulator Board	40 - 60	1930 - 1985	Electrical insulation	Low
	Reflective Layers	70 - 90	Until 1985	Heat resistant incandescent light reflector	Low

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CEMENT LIKE PRODUCTS	Millboard	40 - 50	1930 – 1995	Industrial type siding, heat shields, water proofing	Low
	Roof Tiles	20 - 30	1930 – 1985	Roof Finish	Low
	Cement Pipe	20 - 30	1935 – 1995	Subterranean Water Pipes	Low
	Siding and shingles	20 - 40	Until 1985	Domestic and Comercial Cladding	Low
	Mortars	1 - 10	Until 1985	Brick or concrete block mortar	Low
ROOFING	Shingles	1 – 5	1971 – 1985	Asphalt Roof Shingles	Low
	Roofing Felts	10 – 15	1910 – 1985	Built-Up Roofing	Low
	Slip Layers	70 - 80	Until 1985	Base layer for Built-Up Roofing	Low to Moderate
TEXTILES	Woven Cloth	90 – 100	1910 – 1985	Fire Blankets Stage/Welding Curtains Isolation Joints in Ductwork Heat Shields Fire Hoses Gland Packing	Low to Moderate
Other	Caulking	20 - 30	1930 – 1985	For Flowability in mastic	Low
	Coatings	5 – 15	1900 – 1985	Roof – Coatings and Air Barriers	Low
	Brake/Clutch Linings	30 - 40	1920 – 1995	Elevator Motors Mechanical Plant	Low
	Filters	50 - 70	1930 – 1985	Cooling Towers Humidifiers	Low to Moderate
	Gaskets	20 - 60	1900 - 1985	Mechanical Equipment	Low to Moderate
	Vinyl Wallpaper & Textured Paints	5 - 10	Until 1985	Decorative Wallcovering	Low
	Fire Doors	50 - 70	Until 1985	Fire Rating	Low to High but enclosed within wood or steel door.