

Onfield Experiences Disposal of Asbestos



Asbestos fibres

Impressions from (German)
disposal measures
by
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In the beginning there's a building

maybe like this



like this



or probably like this




... it seems peaceful ... but You know ...




... s.th. evil called asbestos might be under the cover ...

... something that once was looking like this:




Opencast asbestos



Rawmaterial asbestos

... but now it might look different ...



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... it could be part of ..

... the floor cover



Cushioned vinyl



Floor „flex“ tiles



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... it could be part of ..

... a window or the wall



2011/09/13

Asbestos rope



Leichte Asbestplatten hinter dieser Trennwand

Light asbestos boards behind coverage



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... it could be part of ..

... the inner or outer facade



Asbestos cement board



Asbestos cement window sill



Asbestos filler in door lock



Asbestos window filler / mastic



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... it could be part of ..

... the roof



Asbestos cement roofing

... the floor



Asbestos in the floor pavement

... and this is by far not all ...



... it could be part of ..

... the fire protection adjustment



Fire protection flap with asbestos in the flap and in the frame

... or any other technical equipment



Asbestos gaskets (up) or boards in fuses (right)




... but it could even be worth ...



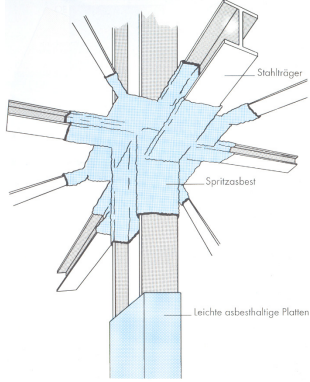
... it could be part of ..

... the structure




Sputtered asbestos isolation (beam)
and light asbestos boards (stilt)

... with fibres that easily eject



... there are countless further applications –
with other words ...



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... it could be everywhere



Conclusion: before You start your measures

- You have to investigate carefully
- You have to prepare carefully



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Asbestos guideline: evaluation sheet (Germany)

Bewertung der Dringlichkeit einer Sanierung

Formblatt

Zahl	Gruppe	Asbestprodukte - Bewertung der Dringlichkeit einer Sanierung	Bewertung*	Bewertungspunkte
1	I	Art der Asbestverwendung	<input type="checkbox"/>	25
2		Asbesthaltiger Putz	<input type="checkbox"/>	10
3		Leichte asbesthaltige Platten	<input type="checkbox"/>	3, 10 oder 15
4		Sonstige asbesthaltige Produkte	<input type="checkbox"/>	3, 10, 15 oder 20
5	II	Asbeststaub	<input type="checkbox"/>	2
6		Ampfblat-Asbeststaub	<input type="checkbox"/>	2
7	III	Struktur der Oberfläche des Asbestprodukts	<input type="checkbox"/>	10
8		Freie Fasern sichtbar oder mit nicht ausreichender dichter Oberflächenbeschichtung	<input type="checkbox"/>	4
9		Beschädigte, dicke Oberfläche	<input type="checkbox"/>	2
10	IV	Oberflächenzustand des Asbestprodukts	<input type="checkbox"/>	4
11		Leichte Beschädigungen	<input type="checkbox"/>	2
12		Kritische Beschädigungen	<input type="checkbox"/>	2
13	V	Bestandsführung des Asbestprodukts von außen	<input type="checkbox"/>	10
14		Produkt ist durch einen Zugänglichkeit (z.B. Öffnen des Containers) zugänglich	<input type="checkbox"/>	10
15		Produkt ist durch einen Zugänglichkeit (z.B. Öffnen des Containers) zugänglich	<input type="checkbox"/>	10
16		Produkt ist durch einen Zugänglichkeit (z.B. Öffnen des Containers) zugänglich	<input type="checkbox"/>	10
17		Produkt ist durch einen Zugänglichkeit (z.B. Öffnen des Containers) zugänglich	<input type="checkbox"/>	10
18		Produkt liegt im Bereich starker Luftströmungen	<input type="checkbox"/>	2
19		Im Raum mit dem asbesthaltigen Produkt sind weitere Luftströmungen vorhanden	<input type="checkbox"/>	2
20	Das Produkt kann bei entsprechendem Betrieb Arbeit aufweisen	<input type="checkbox"/>	2	
21	Das Produkt ist von außen nicht erreichbar	<input type="checkbox"/>	0	
22	VI	Begrenzung	<input type="checkbox"/>	25
23		Begrenzung von Kindern, Jugendlichen und Sportlern benutzter Raum	<input type="checkbox"/>	10
24		Caesium oder Blei in unmittelbarer Proximity benutzter Raum	<input type="checkbox"/>	10
25	VII	Leichte Beschädigungen	<input type="checkbox"/>	2
26		Leichte Beschädigungen	<input type="checkbox"/>	2
27		Leichte Beschädigungen	<input type="checkbox"/>	2
28		Leichte Beschädigungen	<input type="checkbox"/>	2
29	VIII	Wasser einer abgehangenen dichten Decke oder Bekleidung	<input type="checkbox"/>	25
30		Wasser einer abgehangenen dichten Decke oder Bekleidung, keine mechanischer Übertragung oder Beschädigung, außerhalb dichter Luftkanäle	<input type="checkbox"/>	2
31	IX	Summe der Bewertungspunkte	<input type="checkbox"/>	0-80
32		Bewertung unwirksam/erforderlich	<input type="checkbox"/>	70-79
33		Bewertung notwendig/erforderlich	<input type="checkbox"/>	<70

How urgent is a decontamination: depends on how many points the product achieves:

80 pts. or more: at once

70 to 79 pts: medium term recharge (2 – 5 years)

less than 70 pts.: long term recharge (5 – 10 years)



Which rules do have to obey (Germany)

- Technical rules for Hazardous Substances: Asbestos
 - demolition,
 - reconstruction or
 - maintenance work
- (TRGS 519)
- + you have to engage a **safety and health protection coordinator** (in almost every case; due to the Construction Site Ordinance)
- Before you unblock the black zone you have to make a visual control and to verify the success with an **air sampling** (must be less than **500 F/m³**)
- + of course the safety rules of the employers mutual insurance association



Who is authorized to deal with asbestos (Germany)

- Company needs a special permission
- Investigators, surveillants and foreman have to be a technical expert for asbestos (according to TRGS 519)
- employers have to be medically tested

Who is responsible for the investigation (Germany)

- The owner or operator of the real estate has to get knowledge about hazardous material and has to inform those who have to deal with it

respectively

- the experts he is engaging

(If he doesn't it will be much more expensive)

Frequently observed mistakes

Faulty organisation

- No risk assessment available
- Employees had not been tested or instructed properly
- No emergency plan
- The group of persons that might be affected had not been informed
- No documentation at the field
- ...

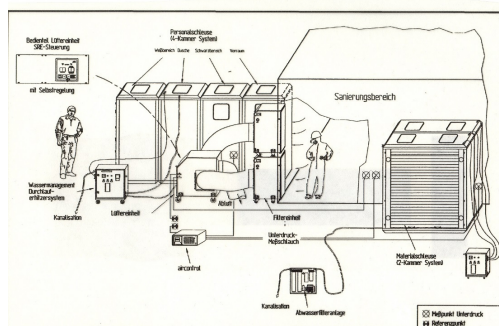


Remember: You deal with hazardous material !

Frequently observed mistakes

Faulty equipment

Theory ...



... and reality

- Missing or wrong personal protection fittings – especially breathing masks and suits
- Missing or falsely dimensioned suction devices
- Low budget material: missing or wrong incidentals, such as interlayer, adhesive tape, wooden slats
- ...

Remember: You deal with hazardous material !

Frequently observed mistakes

inside the „black zone“



The interlayer looks fine, but ...



Remember: You deal with hazardous material !



Frequently observed mistakes

inside the „black zone“



Disposal of sputtered asbestos isolation
looks fine, but ...

Remember: You deal with hazardous material !



Frequently observed mistakes

Sluices

Personenschleuse (Prinzipskizze)

The diagram shows a vertical stack of rooms: Kammer 1 (bottom), Kammer 2/Dusche, Kammer 3, Kammer 4/Vorraum, and an ARBEITSBEREICH (work area) at the top. Arrows indicate the flow from 'EINSCHLEUSEN' (entry) at the bottom to 'AUSSCHLEUSEN' (exit) at the top.

Safety signs on the door include: 'Unbefugten ist das Betreten der Baustelle streng verboten!' (Unauthorized entry is strictly prohibited), a 'No Hand' symbol, and 'Asbestfasern!' (Asbestos fibers!).

The sluice looks fine, but ...

Remember: You deal with hazardous material !

Frequently observed mistakes

Equipment

High performance vacuum cleaners

Decontamination unit

The equipment looks fine, but ...

Remember: You deal with hazardous material !

Frequently observed mistakes

Further examples



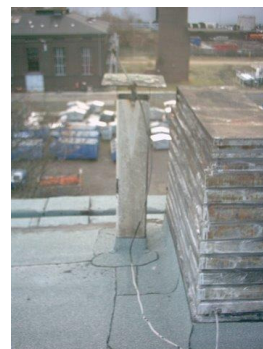
The equipment looks fine, but ...

Remember: You deal with hazardous material !



Frequently observed mistake

Besides: what about the ordinary accident prevention regulations



The situation really doesn't look fine ...

Remember: You have to obey regular safety rules as well !



How to become famous

Press release

- 5 press criminal charges after illegal disposal of asbestos waste



TV report

- „Asbestalarm in Hamburger Hochhaus“
- **Panorama 3 - 12.11.2013 21:15 Uhr**
- Decontamination measures in a high rise building in Hamburg caused the disposal of asbestos fibres ..



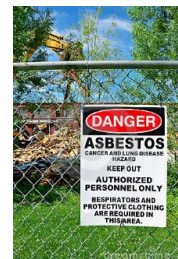
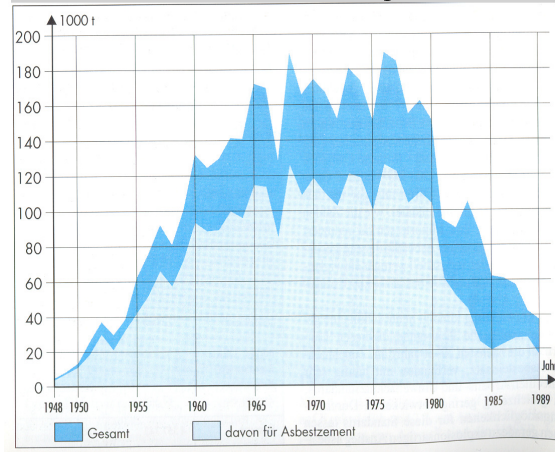
- The prosecution is investigating

Bodily injury caused by (gross) negligence ?



Once we didn't care ...

Asbestverbrauch in der Bundesrepublik bis 1989



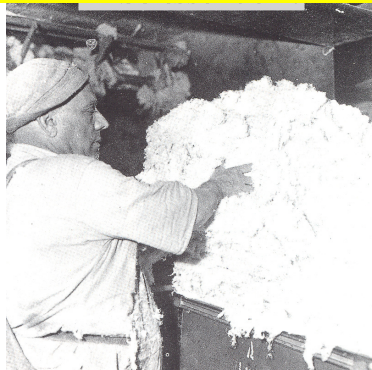
Today we know better ...

Asbest - Todesfälle durch Erkrankungen



Today we know better ...

Safety first ...



... so please feel responsible to protect people from asbestos effects !

At the end of the day ...



Thank You
for Your
attentiveness !!!