Asbestos ban: towards a European consensus

The European Commission's internal market directorate, DGIII, launched consultations last July on a possible marketing ban on asbestos[1]. A year after France's "asbestos scandal" led to legislation outlawing asbestos production and marketing[2] from January 1997, three Member States - Spain, Portugal and Greece - still seem unwilling to fall in line.

The Commission's DGIII hosted a first meeting in July and a second in December for experts from the various European Union Member States and Norway, as well as representatives from the AIA (Asbestos Industry Association), the AAA (producers' anti-asbestos association) and the European Trade Union Confederation, represented by the TUTB. The Commission presented reports by Environment Resources Management (ERM)[3] reviewing and analysing the reams of documents submitted to DGIII by the Member States as part of the consultation process[4].

ERM's report

The report presented at these two meetings appraised the situation from the documents collected by the Commission on assessment of the risks posed by the use of asbestos and substitute fibres[5]. The report clearly aims for a comprehensive overview of asbestos exposure risks, and substitute fibres, and in a series of key conclusions said that:

- "clean chrysotile asbestos" may cause lung and pleural cancer;
- there was no safe threshold dose below which any type of asbestos did not cause cancer;
- intermittent exposure in some occupations was a factor to be considered;
- possibilities of substitution: ERM claims that, as the case stands, PVA, cellulose and p-aramide fibres are much less of a health hazard than chrysotile asbestos.

Even so, the apparent wish to accommodate all arguments, however divergent, has produced some conflicting and dubious conclusions. For example, the assertion that no threshold value has been found below which chrysotile does not constitute a cancer hazard is rapidly followed by a claim that the cancer risk from exposure to white asbestos below a value of 1 f/ml is "very low". ERM's final report cites evidence from Germany and the Netherlands that exposure levels below 1 f/ml are a significant risk, but qualifies this with the Spanish view that there is still too little information on the hazards of such exposure levels. ERM reports that Member States which have taken action against asbestos have used no-threshold models, but claims that this has probably led to an overestimation of risks, and takes up the suggestion of some submissions that an annualized threshold limit value of 5 f/ml be set.

We argue that public health policies must work on the assumption that substances and products are dangerous until proved harmless rather than vice versa. The benefits of such a policy are already to be seen in countries with long-standing asbestos bans. A policy which

puts health protection measures on hold pending a "scientific" tally of victims to confirm evaluations is unacceptable.

ERM claims an identifiable link between asbestosis and lung cancer; but those exposed to asbestos can develop lung cancer without having asbestosis first[6]. Likewise, ERM's claim that most mesotheliomas are linked to amphibole exposure (now banned in many countries) must not mask the fact that, having spread its products worldwide with full knowledge of their carcinogenicity[7], the asbestos industry has become a vocal supporter of a ban on crocidolite and similar products in order to divert attention from and maintain free movement for chrysotile. The debate has been rumbling on for decades on this, and the scientific community, unfortunately, is not always independent of the interests involved[8]. A recently published[9] critical analysis of research on the carcinogenicity of the different types of asbestos - some of it cited in the ERM report - points up the conclusion that chrysotile asbestos is the main cause of pleural mesothelioma.

No less important, as the ERM report stresses, are the high risks entailed in asbestos stripping, bearing in mind that workers are still exposed today to carcinogenic fibres in workplaces in Union countries which have not yet outlawed asbestos products.

Arguments for an asbestos ban

There is a no-threshold, linear dose-effect relationship between exposure to amphiboles and chrysotile asbestos and increased risk of asbestosis, lung cancer and pleural mesothelioma. There is no distinction between the different types of asbestos fibres.

All carcinogens must be eliminated wherever technically possible. That is a statutory preventive principle of European directives.

The risk below 1 f/ml is real and not insignificant[10]

"There is no convincing argument based on an analysis of existing direct or indirect epidemiological data that no-threshold linear extrapolation from data corresponding to higher levels of asbestos exposure is not the most plausible, although uncertain, model. None of the data examined enables an alternative and in any way credible model to be proposed"[11].

The results of estimates are alarming not just for workers but also for communities exposed to asbestos residues in crumbling buildings, uncontrolled demolitions and waste dumping.

Some European countries are experiencing a rising toll of asbestos-related cancers which could continue for more than twenty years unless production and marketing are banned.

Aside from the asbestos product manufacturing industry, the most dangerous work situations and environments are those where asbestos-containing materials are used (shipyards, chemicals and construction industry, asbestos insulation and removal, plumbing, electricians, etc.). Waste is also an important hazard.

Existing regulations on handling, demolition and environmental protection need to be strengthened.

Asbestos must be replaced by non-carcinogenic materials[12], with strictly defined exceptions, tightened up as scientific knowledge advances.

Economic considerations should be secondary to health assessments, not the other way round. Costing must include the costs of compensation and health care for asbestos-related diseases.

Safe new industrial products must be allowed to emerge on the European Union market.

Conclusions

The ERM report was generally well received. While the divergent views on ERM's conclusions, especially on the moot point of asbestos cement products[13], remained

unreconciled, a majority consensus was reached on the need to ban asbestos with very limited exceptions (mainly on grounds of urgency, especially in Britain).

The Commission will carry out more detailed technical and economic assessments, which most participants believe should be subject to health considerations. Some countries believe that the induced costs of asbestos substitution will be very low. It was also felt that a common position on substitutes will have a positive economic impact by stimulating a new European market.

The next meeting, in March 1998, will consider the economic and social impacts of a ban. The Commission has also asked the Member States to set out their national positions on exceptions and derogations to such a ban with a view to an approximation of practices.

The dangers of asbestos are now well known in Europe, and most European States have passed laws banning the production and marketing of asbestos products. The main outstanding problems stem from occupational exposure in industries like construction, building demolition and maintenance, and asbestos-containing industrial sites, and non-occupational exposure of occupiers of contaminated buildings. Environmental contamination by asbestos waste is also a major accident waiting to happen. The European legislative framework absolutely must be strengthened, either by revising the Asbestos Directive (118A) or adopting a new directive (100A) to harmonize evaluation methods for substitutes, etc.

An agreement seems possible at European level. But surely the real issues are international? The future progress of the debate could have a powerful impact on the interests of European producers on the world market (like Eternit and Saint-Gobain,...)[14] because, as was made clear at the ICFTU seminar in Brussels in October (see next article), the European debates are being very closely followed by the Canadian, Brazilian and developing country markets where the leading European asbestos producers are key economic players.

But the workers of producer countries like Brazil, where trade unions are pushing for an asbestos ban, are also banking heavily on the European experience[15]. That makes it all the more important and essential to put over the European trade union case for an international ban on asbestos production and marketing.

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[1] With a view to a future technical adaptation of Directive 76/769/EEC.

[2] See “Asbestos ban in France: too late for many”, in *TUTB Newsletter*, No. 4, November 1996, p. 2.

[3] “Recent Assessments of the Hazards and Risks posed by Asbestos and Substitute fibres,” Alistair Fulton and Charles Allison, Environmental Resources Management, Oxford (Draft: June 1997, Final report: November 1997).

[4] ERM examined 119 documents, mostly from opponents of a ban. No documents were received from Britain, Finland, Denmark, Belgium, Ireland, Luxembourg, Greece or Portugal.

[5] The report (submitted in two versions) is broken down into six sections, looking at: the role of fibre length and diameter; fibre biopersistence; the risks of amphiboles; exposure levels; the carcinogenicity of chrysotile (white asbestos); dose-effect relationships. Appendices contain a summary of every document submitted to DGIII, and information on substitute fibres (PVA, p-aramide, cellulose, organic synthetic fibres).

[6] David Egilman, Alexander Reinert, “Lung Cancer and Asbestos Exposure: Asbestosis is Not Necessary,” *American Journal of Industrial Medicine*, 30: 398-406 (1996).

[7] David E. Lilienfeld, "The Silence: The Asbestos Industry and Early Occupational Cancer Research – A Case Study", *American Journal of Public Health*, 81, 6: 791-800 (1991).

[8] Barry Castleman, “Building a future without asbestos,” *New Solutions*, 1995: 58-63.

[9] Allan H. Smith and Catherine C. Wright, "Chrysotile Asbestos is the main cause of Pleural Mesothelioma," *American Journal of Industrial Medicine*, 30: 252-266 (1996).

[10] German and Dutch representatives reported that this had been discussed in 1991 when the exposure limit was set at 0.25 f/ml for chrysotile asbestos. However, based on epidemiological studies in the asbestos cement industry where exposure levels were below this value, Germany banned the production of these fibres.

[11] INSERM, "*Effets sur la santé des principaux types d'exposition à l'amiante*", 1996, p.39.

[12] The French representatives said that ERM had failed to take account of glass fibre-reinforced cement products. The French Ministry of Labour has commissioned a study on substitute fibres from INSERM, due for publication in 1998. French Rail (SNCF - trains, trams, metros) will be doing away with asbestos-based friction materials (brake linings and clutch facings) following a series of cases of pleural mesothelioma among maintenance crews. Sweden and Finland have also removed asbestos-based friction materials from cars, heavy goods vehicles and trams.

[13] ERM claims that the current European asbestos market breaks down into: asbestos cement, 81% (in volume), 71% (in value); friction materials, 23% (in value) and other products, 6%. Substitution would have the greatest impact in the first two industry segments, therefore (ERM, Description and Characterisation of the asbestos industry of the European Union, 1995).

[14] F. Giannasi, A. Thébaud-Mony, Occupational exposure to asbestos in Brazil, *International Journal of Occupational and Environmental Health*, vol. 3, Mo. 2: 150-157 (1997).

[15] The Brazilian unions CUT, CGT and FS put a joint paper to the ICFTU's October 1997 seminar (cf. next article).