

parts of the World will be sought so that standards for testing air cleanliness can, as far as possible, be held in common. Even so, the risks that may be tolerated can vary from country to country and from one situation to another within a country.

The air quality attained in industry in different countries does differ and, no doubt, will continue to differ. A wealthy country can afford to spend more money on air-contaminant control. Also, a country very conscious of the slightest risks to which its workers may be exposed through their occupation may be expected to have different standards from one which is not, where other health risks may be so much the greater.

The benefits to the community from the use of inexpensive asbestos products have in some measure to be weighed in the balance against the benefits to the health of the workers that would accrue by reducing asbestos dust exposure.

The British Occupational Hygiene Society Sub-committee on Hygiene Standards for Asbestos has not yet decided whether their chrysotile standards would be suitable for amosite or crocidolite dust, nor whether they give sufficient protection against lung cancer or mesotheliomas. The ACGIH, on the other hand, make no distinction between different types of asbestos in their standards. In this country it should be remembered that the Senior Medical Inspectors' Advisory Panel on Problems arising from the use of Asbestos considered that the evidence to date on balance indicated that a particular significance must be given to crocidolite as a cause of mesotheliomas (Ministry of Labour, 1967). That Panel recommended that other types of fibre should be substituted for crocidolite wherever possible and where this is at present impossible special precautions should be taken to reduce the risks of inhaling the material to the lowest possible level. Whatever measures may be adopted to control asbestos dust, the Panel urged that these be even more rigidly applied to crocidolite. The Factory Inspectorate is also developing procedures for testing hygiene standards in factories and is seriously considering the adoption of especially rigid requirements where crocidolite is used.

To derive hygiene standards for an air contaminant which provide a known degree of protection against a health hazard, it is necessary to have a body of data showing the amount of air contaminant to which people are exposed and the corresponding effects or lack of them in the people. It is also necessary to have a grasp of the consequences to industry and users of limiting and controlling emissions of the contaminant. Our present information is very imprecise, particularly in terms of the practical consequences of specific hygiene standards. In developing recommendations for a hygiene standard, the British Occupational Hygiene Society Sub-committee found that knowledge of the relationship between exposure and risk was not the greatest area of uncertainty. A much more difficult and contentious problem was to decide on what, in fact, was an acceptable level of dust control.

More information is needed, for example, on the expense of dust control. Where this is done by ventilation it is important to know what is the minimum amount and what kind of local exhaust ventilation and dilution ventilation is necessary to achieve a given degree of air cleanliness in a work place, since costs tend to climb as the cube of the air flow.

Research is needed to determine the balance between local and general ventilation which produces a specified degree of control at minimum cost. By setting down the capital cost, installation cost, running and maintenance costs, it becomes possible to

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