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Asbestos Rule

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Document Control Officer (TS-793)
Office of Toxic Substances
Environmental Protection Agency
Rm E-209
401 M Street, S.W.
Washington, D.C. 20460

Re: Proposed Rule on Asbestos. Docket Control No. OPTS-62036

Dear Sir or Madam:

I am writing as a concerned private citizen to comment on the proposed rule on asbestos contained in the Federal Register of January 29, 1986. My comments are in support of EPA's overall direction of banning certain asbestos products, and I have some recommendations.

I have worked in the area of solid waste management for twelve years, the first five with state regulatory agencies. With this experience, I am familiar with solid waste management issues and methods, with the inherent limitations of regulatory and educational efforts, and with the inevitability of and need to accept some risks. My comments are shaped in part by my prior work experience, but they represent my personal views only.

Summary

My comments proceed along the following lines. First are described a number of personally experienced examples that support EPA's statements that asbestos product use is widespread and that asbestos release occurs through product use, maintenance, dismantling and removal, and disposal. For some of these examples relatively simple, effective mitigation measures are available. To achieve the implementation of these measures and to reduce the need for other mitigation measures in the future, I recommend that a strong labelling rule be adopted. Because such labelling will not be effective in all areas, I also recommend a comprehensive ban on all uses of asbestos products for which there are acceptable substitutes.

Widespread Use

I have personally seen many products which contained asbestos, or are likely to contain it, in my home, in other residences and in common public buildings, like supermarkets and restaurants. In my home, which was constructed in 1978, the backing on my kitchen vinyl sheet flooring has been tested at 60% asbestos; the wiring in my stove was found to have asbestos insulation, after some persistent questioning of the manufacturer; and some ceiling lighting fixtures appear to have asbestos wire insulation also. My 1985 imported car is reported to have asbestos in both front and rear brakes by the manufacturer's customer service office. At a former residence I found deteriorating gaskets in the burners of an old gas stove which were tested and determined to have significant asbestos

content. In the homes of a number of friends, I have seen old pipe insulation of the type that contains asbestos. Numerous homes in the area have cement siding shingles and cement roofing shingles, many of which I presume to contain some asbestos. In a number of supermarkets and restaurants, I have observed very worn floor tiles which had long since lost any wax coating. Of course one cannot tell visually whether these tiles are vinyl asbestos tile, but I would guess that it is a good assumption that some of them are.

Asbestos Release

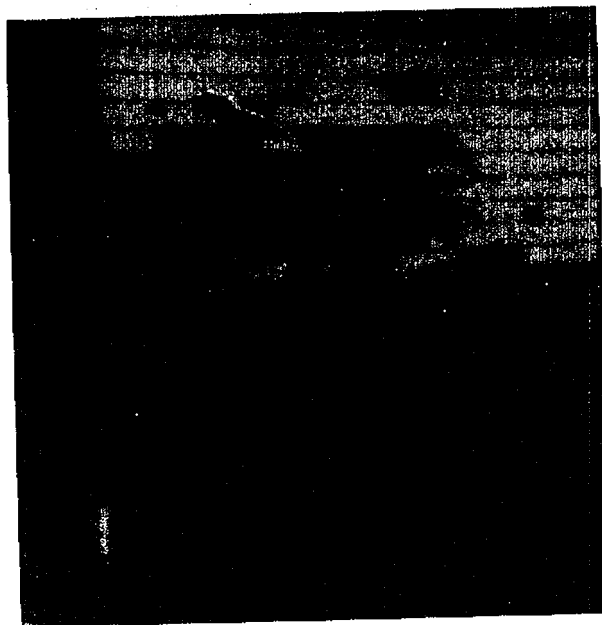
The mere presence of asbestos is of course not sufficient cause for concern. However I have found that most of the asbestos products I have seen can be expected to release some of their asbestos through normal use, maintenance and cleaning, dismantling and removal, and disposal.

Normal use of vinyl asbestos tile by customers entering restaurants or checking out of supermarkets will release asbestos into the indoor air.

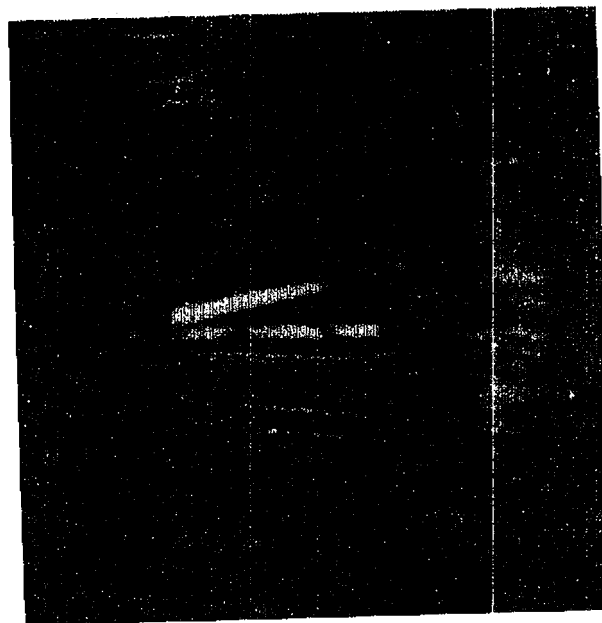
Maintenance and cleaning activities, even if infrequent, can probably result in much greater exposures than result from normal, routine use of asbestos products. Years ago I spent two days thoroughly cleaning a cellar in my old house which had large sections of hot water pipe covered with what was likely magnesia-asbestos insulation. Being unaware of any need for caution, I spent a good deal of effort dry sweeping the cellar and brushing the cobwebs and dust off of the top of the insulated pipe. I cannot tell what concentrations of dust and asbestos I was exposed to, but my nose did get its share of dust even after breathing through a wet handkerchief. Some idea of the magnitude of potential exposure can be gained by assuming that I was exposed to the current or proposed OSHA PEL of 2.0 f/cc or 0.1 f/cc for the 10 hours I was stirring up things in the cellar. At these assumed rates, the number of fibers I would have inhaled during those 10 hours would be equivalent to the exposure I would get from breathing the typical ambient urban air concentration of 0.00007 f/cc for 33 or 1.6 years respectively. My point is that infrequent, perhaps one-time cleaning or maintenance events may result in much greater exposure to asbestos than many years of routine activities, which may include routine use of many asbestos products.

I have also seen instances where damage to asbestos products has resulted in asbestos release. The asbestos wiring insulation in my electric stove and in one of my ceiling light fixtures has been frayed by vibration or some other cause. A friend has a vinyl sheet kitchen floor in which sections of the vinyl has been worn off exposing patches of the backing which might contain asbestos. I have enclosed a picture of damaged asbestos cement siding (tested a 18% asbestos) which borders on a vacant lot. From the configuration of that lot it appears that this siding has been broken off by children playing ball in the lot. I found pieces of this siding in the playing area, on the sidewalk and in the street nearby. Again the mere presence of these siding pieces does not constitute a problem by itself, but I expect some asbestos is being released by cars driving over the pieces along the side of the road and to a lesser degree by the children running on some of the other pieces.

I have also seen evidence of remodeling in which asbestos may have been released. In one apartment house someone was replacing the sheet flooring. The many pieces of the torn up old flooring, which may have had asbestos backing, were



Damaged Asbestos-Cement Siding Next to Vacant Lot Play Area



Pipe Insulation from Homeowner Remodeling Which Was Left at the Curb for Disposal

left in a pile out front for the refuse collector. I have also enclosed a picture showing another instance in which a homeowner was remodeling a room and had left some pipe insulation at the curb for collection. The removal of sheet flooring and pipe insulation which does contain asbestos can be expected to result in exposure to homeowners, exposure that may continue within the home for some time.

Disposal of similar asbestos products can also result in the release of asbestos as the discarded product moves through the solid waste management system. Collection vehicle personnel can be exposed when they handle the discarded products and when these materials are crushed and scraped along in the compactor bin in the back of the truck. Workers at our local shredding plant can be exposed as such material is dumped on the tipping floor, scooped up and/or pushed around by a front-end loader, shredded by the hammermill, and conveyed and packed in the transfer trucks. At some solid waste processing plants, different types of air classification devices separate light and heavy portions of shredded waste. Asbestos dust may be exhausted from such devices unless adequate air cleaning equipment is installed. At incinerators that burn shredded waste or unshredded solid waste, chrysotile asbestos exposed to high temperatures supposedly is converted to another nonfibrous mineral. It is not clear what happens to other types of asbestos or to asbestos materials that might be exposed to more moderate temperatures, which might be found on an incinerator grate. Disposal of asbestos products found in automobile hulks may also result in the release of asbestos. It is my understanding that brake pads, drums and shoes are not removed from auto hulks prior to shredding. Some shredder plants also air classify the non-magnetic fraction of the shredded autos. Without proper dust control and pollution control equipment, such shredders and air classifiers can be expected to release some asbestos.

Mitigation Measures

As indicated above, my experience confirms the position that asbestos products are widely used in everyday situations and that common activities of use, cleaning and maintenance, accidental damage, remodeling and disposal result in the release of asbestos from such products. Fortunately much of this asbestos release can be mitigated by relatively simple measures which are detailed in various EPA publications. Pipes and worn flooring can be covered. Accidental damage can be reduced with increased care. Proper precautions can also reduce any asbestos release from remodeling.

However some sources of asbestos release are more difficult to control. One example is the situation previously cited in which children playing in a vacant lot are breaking asbestos siding on the house next door. In this case a reasonable control strategy might include replacement of the damaged siding with non-asbestos shingles and a careful cleanup of the broken pieces in the yard and road. However in cases like this, which involve multiple parties, limited financial resources, no clear regulatory grounds for action and limited measurable impact, it is difficult to get even rudimentary control measures taken. This situation would not have been helped much by having a "contains asbestos" sign or label on the original stack of siding shingles when it was sold to the contractor who put it up years ago.

The release of asbestos during disposal activities is also not so easy to control or mitigate. The problem of disposal releases needs to be addressed on several levels, i.e. at the home or other generation source, on the collection route and at the processing plant or other destination of the waste. Homeowners who change their brake shoes every three years or who remove some asbestos-containing pipe insulation or vinyl sheet flooring only once in ten or twenty years are not likely to be very aware of how some of the asbestos can be released during waste collection or processing. It would take time and a continuing effort to train waste collectors about prudent precautions to take when handling asbestos products or about when to refuse to pick up certain asbestos products. Since such material will enter the waste stream on a non-continuous basis, it will probably be difficult to detect asbestos release levels at waste processing facilities and will therefore be difficult to set control requirements. It will take a major effort to attack this multi-faceted disposal issue. It will take more than labelling of asbestos products.

Dealing with the release of asbestos at auto shredding plants will also be difficult. Measurement of asbestos release rates at such facilities might be easier to accomplish due to the more uniform feedstock, but any needed changes will take time to implement. Labelling of auto containing asbestos materials would not do much good here either, unless the label was durable enough to outlast the useful life of the car and impact of an auto crusher.

Recommendations

1. EPA should require all products containing asbestos to be labelled as such.
2. EPA should also require marketers of such products to provide sufficient information to show the owner how to minimize asbestos release throughout the life cycle of the product, including disposal.

More specifically, all marketers should be required to provide owner's manuals at the time of purchase which clearly identify those parts of the product which contain asbestos, which explain what precautions should be taken and explain why it is important to take these precautions. The owner's manual for my 1985 car does contain a sentence saying that compressed air should not be used to clean brake parts. However there is no mention of any potential asbestos exposure. It is important to tell people why as well as what. The asbestos label itself should either list the asbestos-containing parts or should refer the purchaser to the owner's manual. The label should also contain a toll-free customer service number for further information or for ordering a new owner's manual if the original is lost.

Requiring labelling and an owner's manual would have several benefits:

- o It would make it easier for people who wanted to decide not to buy the product and thereby future releases would be reduced
- o It should improve the market for products containing asbestos substitutes.
- o It would allow people who were interested to know when to take proper precautions when cleaning, maintaining or disposing of the product, and would explain what to do.
- o It would sometimes allow regulatory officials and refuse collectors to determine on the spot that there was asbestos involved in a situation and then to take appropriate action. Local regulatory officials I have

talked to are sometimes reluctant to react in situations where there is some doubt about whether some damaged material contains asbestos or not.

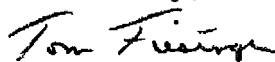
- o It would allow people who cared, to know how important it may be to have a malfunctioning appliance or other product repaired. For example, if the label or manual tells me that there is asbestos in the faltering clutch or brake in my washing machine, then I will have it repaired soon after hearing signs of slippage instead of running it into the ground and possibly releasing asbestos into my home.
- 3. EPA should institute a ban on the production and importation of all asbestos products for which there are acceptable substitutes.

As noted before there are some areas where the use of labels is not adequate, particularly in dealing with potential releases during disposal activities. It is also difficult to see how labels would be useful in having a major effect on releases from the use of some construction products, like vinyl asbestos tile. Unless the label were made part of the tiles themselves, which makes little sense, the fact that the floor of some public building contains asbestos and should be kept coated with wax or some other sealer is likely to be soon forgotten, with the passage of time or turnover of personnel.

Even in those areas where labelling and owner's manuals are appropriate, some people will not remember the label by the time maintenance is needed, when accidental damage might occur or when the product is eventually discarded. Some people will also choose to ignore the label and owner's manual precautions. If these people were the only ones ever to be exposed to asbestos from the products in question, that choice could be respected and accepted. However, it may well be that others will be exposed, for example when the product is installed by the owner of a public building or when the product is disposed of.

Some of the examples of asbestos release which I have cited no doubt involved small releases with comparatively small risk to my health or to anyone else who was exposed. I am sure that no regulatory agency has the time or the money or the lack of other priorities to allow it to visit everyone's home and every public building to measure asbestos release rates, even though it is likely that in a few instances significant exposures will be involved. Labelling and provision of appropriate owner's manuals can help reduce the numbers of such significant exposures, but a product ban will go much further in reducing asbestos release in the home, in public buildings and during disposal.

Sincerely,


Tom Fiesinger