PLAINTIFF'S EXHIBIT
CT-1354

BACKGROUND, CURRENT STATUS, AND IMPACT OF GOVERNMENTAL REGULATIONS RELATING TO ASBESTOS CEMENT OPERATIONS

8/.4-71

OSHA

Background

a) The current OSHA regulation for asbestos became effective on June 7, 1972 and permitted an exposure level of five (5) fibers per cubic centimeter on a time-weighted average basis with a maximum exposure of ten (10) fibers per cubic centimeter of air. This permissible level was reduced, by the regulation, to two (2) fibers per cubic centimeter TWA, with a maximum of ten (10) fibers per cubic centimeter as of July 1, 1976. That regulation is still in effect. It applies to every employment and place of employment where workers could be exposed to asbestos dust.

b) On October 9, 1975, OSHA issued a new proposed regulation which would reduce the permissible exposure level to one-half (0.5) fiber per cubic centimeter on a time-weighted average basis with a maximum allowable level of five (5) fibers per cubic centimeter. It also called for very stringent controls regarding work clothes, change rooms, area isolation, medical surveillance, etc. This proposed regulation applied to all employment covered by the current regulation except the construction industry which was specifically excluded. A separate regulation to cover the construction industry was to be proposed. No date was proposed for the new regulation to become effective.

   As required by the law which was in effect at the time of issuance of this proposal, following its issuance OSHA contracted with CONSAD Research Corporation to do a Technological Feasibility and Inflationary Impact Study on the effects of the proposed regulation.

   No hearings have been held nor has any further action been taken by OSHA up to this time with regard to the proposal.

c) On December 15, 1976, the National Institute for Occupational Safety and Health (NIOSH), whose function it is to advise and make recommendations to OSHA, recommended to that agency that the asbestos standard be set at the lowest detectable level, which they defined as one-tenth (0.1) fiber per cubic centimeter.

   Thus far, OSHA has taken no official action with regard to this recommendation other than to delegate CONSAD Research Corporation to do a Supplemental Analysis of the Technological Feasibility and Economic Implications of a 0.1 Fiber per Cubic Centimeter Exposure Limit of Asbestos. This analysis was completed in May 1977. Reportedly, it was determined that a 0.1 fiber per cc TWA exposure level was not

attainable through engineering controls and, therefore, substitution for asbestos would be essential. Also, reportedly, an Appendix by Clayton Environmental Consultants was added to the CONSAD Report and this document covered in detail the various substitutes for asbestos.

d) In early 1977, OSHA contracted with Research Triangle Institute to do a study on Asbestos Dust in the Construction Industry. The purpose of this study was to examine the impact of the proposed revision for sectors of the construction industry in which potential worker exposure to asbestos exists. OSHA's intent at the inception of this document was to revise the asbestos standard as it applied to industry in general, and to develop a separate revision to the standard which would apply only to occupational asbestos exposure in the construction industry. The four scenarios addressed in this analysis included 2.0 fiber/cc (as in the current standard), 1.0 fiber/cc, 0.5 fiber/cc, and 0.1 fiber/cc. These are eight hour time-weighted averages with ceiling limits of five times the TWA limit. Additionally, those provisions of the proposed standard judged by RTI as most likely to be finally adopted, and those compliance activities and controls judged by RTI as most likely to be chosen by industry to meet the proposed standard were identified on the basis of the feasibility analysis and an economic impact analysis was performed.

e) In late 1977, OSHA contracted with Research Triangle Institute to develop a Technological Assessment and Economic Impact Analysis for Asbestos. This document to incorporate the above three referred to Economic Impact Analyses on Asbestos into a single study, with the necessary updating of obsolete data. Three scenarios to be addressed:

1. 0.1 fiber/cc eight hour TWA, 5.0 fiber/cc ceiling
2. 0.5 fiber/cc eight hour TWA, 5.0 fiber/cc ceiling
3. 1.0 fiber/cc eight hour TWA, 10.0 fiber/cc ceiling

It is our understanding that this study has been completed and was very recently submitted to OSHA.

Current Status

We are in a holding pattern waiting for OSHA's next move. From what we have been able to learn we believe that they will take about 60 days to digest the final RTI report following which they will issue a new proposal to cover all occupational exposure to asbestos, both manufacturing and construction. The October 9, 1975 proposal will thus be superseded. It is our belief that it will be at least late 1978 before the new proposal will be issued and that, allowing time for responses and hearings, it could not be made effective before mid 1979.

We do not know what the new proposed levels will be, but we shall be surprised if they are higher than 0.5 fibers per cc. Most believe that they will be lower than that with possible time allowances for attainment.

Industry, both through the AIA/NA and independently, has responded to the current proposal and has had an independent study done on the effects on the construction industry in preparation for response to the new proposal when it is issued.

It is possible that we may wish to consider challenging the new regulation in the courts if it looks unattainable, and our responses have been prepared to provide the basis for such a suit if it becomes necessary.

With regard to the construction industry, we have mounted a campaign to have the regulation based on work practices rather than exposure monitoring which we believe to be completely impractical.

Impact

As far as A/C pipe manufacturing operations are concerned, we believe that we could live with a 0.5 fiber per cc regulation. Most of our operations are now below that level and those that are not could probably be covered by use of personal protective equipment such as respirators.

If a regulation similar in other respects to the currently proposed one were adopted, expenditures of the magnitude of $100,000 per plant will probably be required for change rooms, entrance and exit provisions, isolation areas, etc. In addition, increased operating costs of approximately $100,000 per year per plant would be incurred for work clothes, respiratory protection equipment, monitoring record keeping, etc.

The greatest impact of a new regulation could very well be on the market for A/C pipe. If monitoring, medical surveillance, and record keeping provisions proposed for manufacturing operations are adopted for construction, the burdens placed on contractors would be so great as to discourage them from using the product and cause them to change to other materials.

EPA

EPA has adopted very stringent standards with regard to air quality, waste disposal, and water emissions connected with asbestos operations. As far as our A/C pipe manufacturing

operations are concerned, we see no significant problems in this regard. We have no visible emissions, our solid waste is crushed and recycled, and we operate with closed water systems so that no process water is discharged from the plants.

We will be faced with some substantial expenditures to put a dirt and vegetation cover over our old and now unused scrap piles at some of the older plants, but this is the major impact of the regulations as we now see them.

Waste disposal could prove troublesome to the installation contractors, but since most if not all of their scrap is buried with the pipeline, this does not appear to be an area of great concern at this time.

Other

From an operations point of view, we do not see any activities on the part of other governmental agencies which would have a significant impact on our ability to continue efficient production.

T. A. Dougherty

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