

TESTIMONY OF THE
NATIONAL ASSOCIATION OF MANUFACTURERS
ON THE
"EMERGENCY TEMPORARY STANDARD FOR CERTAIN CARCINOGENS"
29-CFR 1910.93C
AS REVISED ON JULY 27, 1973
BEFORE A
DEPARTMENT OF LABOR HEARING OFFICER

SEPTEMBER 12, 1973

My name is Kenneth E. Schweiger, Director of Employee Relations for the National Association of Manufacturers.

I appreciate this opportunity to present, on behalf of the National Association of Manufacturers, our comments on the proposed revision of the "Emergency Temporary Standard for Certain Carcinogens", in accordance with the invitation extended for comments in the Federal Register on August 16, 1973. Appearing with me and acting as NAM's spokesman on the technicalities involved in this standard, is Mr. Jack C. Radcliffe, who is our Special Consultant on environmental matters. Mr. Radcliffe is a certified Industrial Hygienists, with over 30 years experience in industry, government and as a private consultant. I do not believe I need embellish on the credentials of Mr. Radcliffe, since he is well-known, of high repute and an acknowledged expert in the field of Safety and Industrial Hygiene. Before asking Mr. Radcliffe to comment, I would like to address myself to the area contained in the proposed revision, with respect to the "permit system".

Part 1927 - Permits for Use of Carcinogens

The "permit system" proposed in this regulation, is a concept unique in the body of Occupational Safety and Health standards as promulgated under the authority of the Occupational Safety and Health Act of 1970. It is, in our opinion, a concept which is without authority under the terms and provisions of the Act. Nowhere in the legislation, or for that matter, in the legislative history surrounding the Act, was there any contemplation of or direct

Standards Advisory Committee on Carcinogens

In reading the text of the proposed standard for certain carcinogens as recommended by the Standards Advisory Committee on Carcinogens, I am struck by an underlying question which does not appear to be answered in that report. It seems that the Advisory Committee has worked diligently and brought forth a comprehensive document dealing with the means and practices by which employees are to be protected from the alleged harmful effects of the 14 listed carcinogens. However, it appears from the report that the Standards Advisory Committee at no time questioned whether each of the 14 listed toxic substances were, indeed, carcinogenic. The report seems to have started from the base that all 14 were carcinogenic and further that they were human carcinogens in effect. Nowhere in the text of the report can we detect a finding on the part of the Advisory Committee that each of the 14 substances listed were determined to be human carcinogens.

An attempt has been made in the Emergency Temporary Standard on Certain Carcinogens to establish in one set of regulations (1910.93C) control for 14 substances with dissimilar properties and dissimilar body organ effects.

The latest publication of Threshold Limit Values by the American Conference of Government Industrial Hygienists deals with carcinogens in Appendix A. This appendix lists substances carcinogenic to man in two categories; those recognized as occupational carcinogens with an assigned TLV and those known to be potent occupational carcinogens without an assigned TLV. Following these two categories is a grouping of experimental carcinogens which are classified as being "industrial substances found to be of high potency in inducing tumors under experimental conditions in animals."

When the fourteen materials contained in 1910.93C are related to the Threshold Limit Values List, one can agree that the following six materials are known human carcinogens and should be regulated:

4 - Amino diphenyl
Benzidine (and its salts)
Beta-Naphthalamine
4 - Nitrobiphenyl
Bis-Chloromethyl Ether
Methyl Chloromethyl Ether

The remaining 8, where all but one are in the category of high potency in inducing tumors under experimental conditions in animals, should be removed from the standard. These remaining 8 substances should be continued under study and added to the list as facts develop.

Specifically in these remaining 8 substances, great concern has been expressed by the users of alpha-naphthalamine. There is no evidence of carcinogenicity with this substance in a pure state even in experimental animals, and it is not listed in the TLV's because of this fact. When alpha is contaminated with beta-naphthalamine, there is evidence of carcinogenicity.

Similarly the inclusion of 4.4' Methylene bis (2 - Chloroaniline) in this list is suspect. Large manufacturers of this product have confirmed that it is toxic to rats yet have not found it to be carcinogenic for dogs in studies of six years' duration. Obviously, more research is still needed on this substance.

There is no argument that the six substances cited are known human carcinogens and warrant regulation. There is, however, doubt that the other eight substances affect humans adversely. Studies should continue regarding these eight and if results warrant, they can be made subject to regulation later. Meanwhile, these eight substances which with one exception, alpha-naphthalamine, are of high potency in inducing tumors under experimental conditions in animals should be handled with extraordinary care so that worker exposure is at a minimum.

In all industrial hygiene control, one is trying within economic limits to bring a level of hazardous material exposure in the work environment to a level where no outward effect on the health of employers working a lifetime

is detectable. The hygienist does not control to a zero level. He is aware of the typical dose response curve where a high exposure causes an irreversible health effect, a medium exposure causes a mild effect, and a lower exposure causes no effect. He controls at least to the lower exposure, with an added factor of safety. It is a rare material that must be controlled to zero level.

Asbestos is listed in the TLV of the American Conference of Governmental Industrial Hygienists as a Human Carcinogen with an assigned TLV. Asbestos has been covered in another of the D. O. L. regulations. However, in the asbestos regulations a specific number of fibers greater than a certain length are the TLV for a hygienist to use. In addition, a very specific sampling procedure and analytical technique are dictated.

When a hygienist is required to control a chemical to a zero level, he must then have a reliable sampling and analysis technique which is accurate to the zero level. It is questioned that such techniques exist for each of the 14 chemicals listed. The report of the D. O. L. Advisory Committee under Monitoring indicates, "To provide information enabling the employer to comply with the requirements of this regulation, personal and environmental sampling procedures and monitors appropriate to each carcinogen or combinations of carcinogens and capable of detecting by the most sensitive, feasible methods available, shall be used by employers to detect and provide a record of the presence of any level of carcinogen in regulated areas and non-regulated areas, and to monitor the discharge of carcinogen into the external environment.*" The asterisk then leads to the following: "It should be an urgent concern of the Department of Labor in conjunction with the National Institute for Occupational Safety and Health and the Environmental Protection Agency to undertake and/or contract for the development of monitors which shall have a sensitivity of at least one part of carcinogen per billion parts of air (V/V), individual analytical results to be produced by such monitor at intervals

no greater than two hours throughout the working day. Of equally urgent concern should be the development of backup detection methods capable of producing a warning or signal at intervals no greater than ten minutes, with sensitivity of at least 100 parts per billion. Methods of equivalent detection shall be developed for water and other wastes. These achievements shall be viewed as milestones on the pathway to achieve the objective of no exposure rather than as ultimate targets."

It is apparent that the D. O. L. Advisory Committee also feels that adequate sampling and analytical techniques for each of the 14 listed chemicals is not available to the zero level so that a hygienist might make a fair evaluation of employee exposure. This would lead to an impossible compliance situation since neither the compliance officer nor industry could accurately measure or monitor the environment. This is incongruous, and apparently the regulation goes beyond the present state of the art.

In summary it would be illogical to assume that animal carcinogenic substances should be treated as though they are proven human carcinogens. Regulation should be established for the known human carcinogens which I have named. Your study of animal carcinogens should be continued for possible inclusion later.

The accurate monitoring of any environment of known human carcinogens is required if hygienists are to develop a true threshold limit rather than an absolute zero type exposure level. Your own committee proposed extensive study in the measuring and monitoring area for most of the 14 substances. It is recommended that any monitoring requirements be according to best available techniques and that such requirements be specified. Additional study in this area should be instituted immediately.

Finally, we believe that the "permit system" proposed is neither desirable nor lawful and that standards promulgated, whether permanent or emergency,

should be self contained and explicit and limited to those of known human carcinogenic effect.

Thank you.