01-VC/PVC-OSH

DEPARTMENT OF LABOR

Occupational Safety and Health Administration

[29 CFR Part 1999]

STANDARD FOR OCCUPATIONAL EXPOSURE TO VINYL CHLORIDE

Notice of Intent To Prepare an Environmental Impact Statement

The National Environmental Policy Act of 1969 (42 U.S.C. section 102) requires each Federal agency to consider the environmental effects of proposed actions and to prepare environmental impact statements on major actions affecting the quality of the human environment. Accordingly, the Occupational Safety and Health Administration, U.S. Department of Labor, in conformance with its procedures for environmental impact statements (29 CFR Part 1999), announces its intention to prepare an environmental statement assessing the impact of a proposed standard for occupational exposure to vinyl chloride to be published in the FEDERAL REGISTER in the near future.

The Office of Standards Development, Occupational Safety and Health Administration, is currently collecting information and data on possible environmental impacts of the proposed standard, such as any adverse environmental effects which cannot be avoided should the standard be adopted; alternatives to such a standard; the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity; and any irreversible commitments of resources which would be involved if the standard be implemented. Those issues of particular interest are:

a. Any medical or toxicological evidence which indicates that exposure to vinyl chloride or its polymers produces adverse effects to living organisms, especially primates.

b. Current and historical levels of occupational exposure.

c. Combustible characteristics associated with vinyl chloride or its polymers, especially information correlating accident experience; damage to facilities, interruption of plant activities, and/or storage and shipment difficulties.

d. Identification of the uses of vinyl chloride or its polymers, through finished products, and determination of the quantity of use.

e. Any information suggesting substitutes for vinyl chloride or its polymers, to include estimates of the extent to which substitution is feasible.

f. Any suggested actions which will control the health hazards associated with production, storage, or shipment of vinyl chloride or its polymers through finished products.

g. Any other pertinent information.

Any person having information or data on this subject which is not readily available in the open literature is invited to submit it, with accompanying documentation, to the Director, Office of Standards Development, Occupational Safety and Health Administration, 1726 M Street, NW, Room 500, Washington, D.C. 20210 by May 17, 1974. All information received will be available for public inspection at the Office of Standards Development.

When the draft environmental impact statement on vinyl chloride is completed, copies will be available to any member of the public who requests it. A 45-day period will be allowed for the public to submit their comments.

Signed at Washington, D.C., this 18th day of April 1974.

JOHN STENDER,
Assistant Secretary of Labor.

[FR Doc.74-9300 Filed 4-23-74;8:45 am]

Wage and Hour Division

[29 CFR Part 511]

WAGE ORDER PROCEDURE FOR PUERTO RICO, THE VIRGIN ISLANDS, AND AMERICAN SAMOA

Changes in Procedures as the Result of the Fair Labor Amendments of 1974

Under authority provided in the Fair Labor Standards Act of 1938 (52 Stat. 1062, 1064, as amended; 29 U.S.C. 205, 206, 208) and Rtorganization Plan No. 6 of 1950 (3 CFR 1949–53 Comp., p. 1004) and Secretary's Orders Nos. 13–71 and 15–71 (39 FR 8755 and 8756), it is hereby proposed to revise 29 CFR Part 511 to adapt the procedures set forth therein to the Fair Labor Standards Amendments of 1974, Pub. L. No. 93–259.

The proposed revisions of §§ 511.10 and 511.13 would prescribe the greater responsibility of the employers or of the industry in establishing its inability to pay the rates comparable to the ones in the various States. The amendment to § 511.8 would show the current title of the Director of the Caribbean Office.

Interested persons may submit written data, views, and arguments concerning the proposed revision on or before May 9, 1974. Such submissions may be filed with the Administrator, Wage and Hour Division, U.S. Department of Labor, 14th Street and Constitution Avenue, NW, Washington, D.C. 20210.

1. As amended paragraph (b) of § 511.8 would read as follows:

§ 511.8 Prehearing statements.

• • • • •

(b) Any interested person who wishes to participate on his own behalf or by counsel shall file a written prehearing statement. Not later than ten days before the first hearing date set for any committee in a notice of hearing concerning minimum wages for Puerto Rico or the Virgin Islands, or such other period of time as may be prescribed in a notice of hearing, or other notice published in the FEDERAL REGISTER, the original and 11 copies of the prehearing statement shall be filed at the Office of the Director of the Caribbean Office of the Wage and Hour Division, United States Department of Labor, 7th Floor, Condominio San Alberto Building, 1200 Ponce de Leon Avenue, Santurce, Puerto Rico, and one copy at the Office of the Administrator of the Wage and Hour Division, United States Department of Labor, Washington, D.C. 20210. If such statements are sent by air mail from Puerto Rico or the Virgin Islands to the mainland, or from the mainland to Washington, such filing shall be deemed timely if postmarked within the time provided. The number of copies of such statements and the time and places for filing them will be specified in notices of hearings to determine minimum wages for American Samoa. The prehearing statement shall describe the person's interest in the proceeding and shall contain (1) the prepared statement he proposes to give, if any; (2) a statement of the individual classifications and minimum wage rates, if any, he proposes to support; (3) the written data he proposes to introduce in evidence, including all tangible objective data to be submitted pursuant to § 511.13; (4) the names and addresses of the witnesses he proposes to call and a summary of the evidence he proposes to develop; (5) the name and address of the individual who will present his case; and (6) a statement of the approximate length of time his case will take. If the prehearing statement is in conformity with the above requirements, the person shall have the right to participate as a party. In accordance with section 6(c) of the Administrative Procedure Act, industry committee shall, after considering the advice of committee counsel, issue subpoenas authorized by section 9 of the Fair Labor Standards Act of 1938, to parties who make a request therefor accompanied by a clear showing of general relevance and reasonable scope of the evidence sought.

• • • • •

2. As revised, § 511.10 would read as follows:

§ 511.10 Subjects and issues.

(a) The declared policy of the Act with respect to industries or enterprises in Puerto Rico, the Virgin Islands, and American Samoa engaged in commerce or in the production of goods for commerce is to reach as rapidly as is economically feasible without substantially curtailing employment the object of the minimum wage rate which would apply in each such industry under paragraph (1) or (5) of section 6(a) but for section 6(c). Each industry committee shall recommend to the Administrator the highest minimum wage rates for the industry which it determines, having due regard to economic and competitive conditions, will not substantially curtail employment in the industry and will not give any industry in Puerto Rico, the Virgin Islands, or American Samoa a competitive advantage over any industry in the United States outside of Puerto Rico, the Virgin Islands and American Samoa; except that the committee shall recommend to the Secretary the minimum wage rate prescribed in section 6(a) or 6(b),

SCC
3-0979

cc's to: J.E. Berger
C.D. Kaley
file - SPI/PVC

VCM
PVC 30:5

HILL AND KNOWLTON, INC.

TOXICOLOGY
NOV 28 1978

November 20, 1978

MEMORANDUM TO: PVC Communications Committee
The Society of the Plastics Industry, Inc.

FROM: Matthew M. Swetonic

SUBJECT: Revision of Q&A Booklet

Attached for your information is revised copy for the PVC and health question-and-answer booklet. As you know, it was decided earlier this year that an updated version of this booklet would be useful to the overall communications effort. The copy has been reviewed and approved by SPI staff, the PVC Health Committee and by legal counsel.

We will be discussing the printing and distribution of the booklet at the meeting next week (November 29) in Washington, so I thought it would be useful if each member of the committee had a copy in advance.

Matt S.

M.M.S.

MMS:sdd
Attachment

cc: Messrs. Collins, Lawrence, Hearle,
Blizin, Bochat, Venedam

SCC
3-0980

November 20, 1978
Approved Copy for Revised SPI-PVC Q&A Folder

Title: PVC, HEALTH AND SAFETY

Sub-Title: Answers to ten questions most often asked about polyvinyl chloride

Since early 1974 vinyl chloride, the gaseous industrial chemical from which polyvinyl chloride (PVC) plastic is made, has been the subject of widespread misinformation and misunderstanding regarding questions of occupational, community and consumer health and safety.

Although a variety of erroneous and misleading impressions concerning vinyl chloride and PVC have been created in the public mind, the known facts, supported by extensive medical and technical research, are that:

- The development of angiosarcoma of the liver, a rare form of cancer, from long-term, high-level exposure to vinyl chloride has been confined exclusively to the occupational setting.
- There is no credible evidence linking vinyl chloride emissions with an excess number of angiosarcoma cases or an excess of birth defects among people living in communities surrounding vinyl chloride plants.
- There is no reasonable likelihood today of vinyl chloride getting into a consumer's diet from PVC food packaging materials and no hazard to the public from the use of finished PVC products.

Following are ten questions most commonly asked about vinyl chloride and health. Answers are based on known scientific evidence and industry experience.

Q. What is PVC and for what is it used?

A. Polyvinyl chloride, or PVC, is the second most widely used plastic resin in the United States. It is produced from vinyl chloride monomer (VCM), a gaseous industrial chemical, by a process called polymerization. The resin is, in turn, fabricated into a wide variety of consumer and industrial products, including floor tile, curtains, shoes, electrical insulation, telephone equipment, medical-surgical devices, phonograph records, food packaging, upholstery, umbrellas and raincoats, luggage and sporting goods. Approximately 2.2 million American jobs are directly or indirectly dependent on the PVC industry.

Q. How serious an occupational hazard is vinyl chloride?

A. Over the past 16 years there have been a total of 23 deaths from angiosarcoma in six U.S. plants and approximately 48 in other countries. In the U.S. all of the deaths were among workers heavily exposed to vinyl chloride monomer. The workers' jobs involved cleaning residue of PVC resin from the reactor in which it was produced. Their work thus resulted in high exposure to VCM over a period of many years. While some additional deaths can be expected to occur in the future as a result of these heavy past exposures, with the strict control measures instituted during the last few years there is every reason to believe that vinyl chloride-related disease has already been eliminated as an occupational problem.

Q. Do current government vinyl chloride standards adequately protect industry workers?

A. Yes. The results of numerous epidemiological studies show that the current standard set by the federal Occupational Safety and Health Administration (OSHA) of one part per million averaged over an 8-hour period provides more than an ample margin of safety for industry employees. Vinyl chloride has been in use in industry for almost 40 years, and a sufficient number of workers have been exposed long enough to make epidemiological studies reliable indicators of the effects of VCM at various levels of exposure. In general, these studies show no excess of cancer nor any cases of angiosarcoma among workers exposed to low or intermediate levels (below 250 ppm) of vinyl chloride even if the exposure was extended over a long period of time.

Q. Is vinyl chloride a major air pollutant?

A. No. Measurements taken by the federal Environmental Protection Agency (EPA) in 1974 showed no scientific evidence that emissions from vinyl chloride facilities posed an imminent hazard to people living near the plants. EPA estimated that the average yearly concentration of vinyl chloride within five miles of uncontrolled PVC plants was only 17 parts per billion (17ppb). However, the EPA in 1976, as a precautionary step, promulgated regulations which would reduce even this insignificant level of community exposure to vinyl chloride by approximately 95 percent. Studies conducted for The Society of the Plastics Industry, Inc. (SPI) showed that the new regulations would theoretically reduce exposure

levels within five miles of vinyl chloride plants to approximately two-tenths of a part per billion (0.2 ppb) as a yearly average. All existing medical and technological data indicate that the standards promulgated in 1976 provide more than an ample margin of safety for people living in the vicinity of PVC plants.

Q. Is there any special risk of getting angiosarcoma for people living in communities surrounding vinyl chloride plants?

A. No. A government survey of all angiosarcoma deaths in the United States between 1964 and 1974 found no excess of deaths from this disease among people living within five miles of vinyl chloride gas and PVC resin plants. The report concluded: "This survey has produced no evidence that living around vinyl chloride plants is a risk factor in the occurrence of liver angiosarcoma." Additional studies by industry, universities and research organizations confirmed this low risk. A professor at Harvard University, for example, has calculated that the risk of living within five miles of a PVC plant for one year is equivalent to the risk of contracting cancer from eating one-half of a tablespoon of peanut butter or to the hazards of smoking one-fifteenth of a cigarette.

Q. Does vinyl chloride increase the risk of stillbirths and miscarriages among the wives of heavily exposed industry workers?

A. While one 1976 research project at a single plant in Pennsylvania purported to show that such a risk may exist, serious scientific questions have been raised concerning the manner

in which the study was conducted and the sweeping conclusions reached. Eminent scientists from Harvard University Graduate School of Public Health and the University of Texas Health Science Center, after reviewing the study on behalf of SPI, were highly critical of the analytical methods used. One termed the conclusions as "misleading" while the other called the data "worthless," the analysis "naive" and the test "inadequate and misleading." In addition, since the original research was conducted, vinyl chloride exposure levels throughout the industry have been reduced a hundredfold or more. So even if a problem did exist, it has already been eliminated.

Q. Does vinyl chloride cause birth defects in communities with PVC facilities?

A. Because of a report from Ohio of excess birth defects in three widely separated communities with PVC facilities, the Center for Disease Control (CDC) of the U.S. Department of Health, Education and Welfare conducted three separate studies in 1975 and 1976 to examine the validity of the Ohio report. CDC concluded, on the basis of these investigations and a thorough analysis of the existing research data, that "no relationship between infants with malformations and parents' exposure to vinyl chloride could be established." In addition, a review conducted for SPI of the Ohio study by a noted Harvard scientist concluded that "the finding results from a combination of chance, reporting differentials and epidemiological gerrymandering." A recent Canadian study conducted in a manner

similar to the Ohio report suffers from many of the same deficiencies. In short, there is no credible evidence that vinyl chloride causes birth defects in communities adjacent to PVC plants.

Q. Is it safe to consume foods or beverages packaged in PVC?

A. Yes. As a result of strenuous industry efforts over the past few years, the residual vinyl chloride content has been reduced dramatically in packaging products made from food-grade PVC resins. Therefore, there is no reasonable likelihood of vinyl chloride migration into foods from present packaging materials and no scientific evidence that vinyl chloride monomer can be found at any level in food products now packaged in PVC.

Q. Is it true that PVC, if burned, can release toxic fumes?

A. Yes. Like all organic materials such as wood, paper, wool or cotton, PVC will burn in the presence of high heat or fire and will release fumes. Being a compound of hydrogen, carbon and chlorine, PVC can release both hydrogen chloride and carbon monoxide in a fire. However, PVC cannot burn on its own. Some outside source of heat is necessary. Fire is a problem of all organic materials. What is needed is a comprehensive approach to the problem, including increased use of fire detection and warning systems, installation of automatic sprinklers in commercial buildings, appropriate building codes and better education of the American public concerning action to take in case of fire.

Q. Should the manufacture and use of PVC products be banned?

A. Vinyl chloride concentrations in the workplace, in community air and in finished PVC products are being rigidly controlled, and there is, therefore, no reason to ban the manufacture or use of any polyvinyl chloride product. From a public health standpoint such bans are completely unnecessary and would serve no meaningful purpose.

If you would like more detailed information on any of the material in this folder, or have additional questions you would like to have answered, please contact:

(SPI logo)

The Society of the Plastics Industry, Inc.
355 Lexington Avenue
New York, NY 10017
Phone: (212) 573-9400

VINYL CHLORIDE (PVC - GENERAL

01 - VC/PVC - XXX (1975-77)(1978-80)(?)