



A Division of The Society of The Plastics Industry, Inc.

NOTED
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July 16, 1990

TO: Health, Safety & Environment/Legal Committees

Enclosed are the following:

1. A copy of the final rule with regard to revisions to the NESHAP for vinyl chloride as published July 10th.
- ✓ 2. "Secretary of Labor vs. American Cyanamid" sent to me by Frank Borrelli, who believes this may be of interest to those attending the July 31st meeting on MSDS's and labels.

Sincerely yours,

Meredith N. Scheck
Assistant Director

MNS/pmb

*Donis,
Pls. copy for Maria Perinis - Columbus
Shirley
Cris G.
7/18/90*

SECRETARY OF LABOR vs. AMERICAN CYANAMID
OSHRC Docket No. 86-681

SUMMARY

REC'D JUL 16 1990

I. FACTS

American Cyanamid's Perrysburg, Ohio, plant which produces resins and molding compounds was inspected by a Occupational Safety and Health Administration (OSHA) Compliance Officer on December 6, 1985. As a result of the inspection, American Cyanamid was cited for the following alleged violations of the Hazard Communication Standard (HCS), 29 C.F.R. § 1910.1200:

- (A.) Failure to provide "appropriate hazard warnings" on its product labels for XC-4005 resin, Glaskyd, XC-4001 resin, XC-4011 resin, Cyglas and Fibercore.
 - (1) Product label for Fibercore did not identify the hazardous chemicals in the compound.
 - (2) (a) Product labels for XC-4005 resin, Glaskyd, XC-4001 resin, XC-4011 resin and Cyglas did not identify the effects of inhalation overexposure, target organs were not identified; and
 - (b) The label for Fibercore listed no hazard warnings.
 - (3) Product labels did not include the manufacturer's zip code as part of the complete address.
- (B) Failure to provide specific health hazards and short term exposure limits (STELS) on the material safety data sheets (MSDSs).
 - (1) (a) The MSDS for Glaskyd did not identify the specific health hazards for overexposures to talc, antimony and amorphous silica including signs and symptoms of overexposure and any medical conditions which are generally recognized as being aggravated by exposure to these chemicals.
 - (b) The MSDS for XC-4011 resin identified the health hazards for 2-ethoxyethanol, but

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the components of this product were listed as 2-Butoxy ethanol and n-Butyl alcohol.

- (2) The MSDSs for Fibercore, Glaskyd and Cyglas did not list eye and skin exposure as potential routes of entry.
- (3) (a) The MSDS for Fibercore listed the OSHA PEL for styrene as 100 mg/M³ instead of 100 ppm; it did not list the OSHA ceiling and peak concentrations or the ACGIH STEL for vinyl toluene.

(b) The MSDS for Glaskyd listed the OSHA PEL for silica as 80mg/M³ instead of 80 mg/M³/% Si O₂, and did not list the ACGIH TLV for amorphous silica or talc (unless talc is fibrous in which case the asbestos standard would apply).

(c) The MSDS for XC-4001 resin did not list the ACGIH STEL for propylene glycol methyl ether.

(d) The MSDS for XC-4011 resin did not list the ACGIH ceiling for butyl alcohol.

(e) The MSDS for Cyglas did not list the ACGIH STEL for vinyl toluene and listed the OSHA PEL for silica as 80 mg/M³ instead of 80 mg/M³/% Si O₂.

(f) The MSDS for Fibercore did not contain the date the document was prepared.

Cyanamid contested the citation and a hearing was held in early 1987 before Administrative Law Judge Salyers.

II. ISSUES AND TESTIMONY

OSHA testified that Cyanamid's MSDS for XC-4001 resin stated that "overexposure to butanol and propylene glycol methyl ether may cause eye and respiratory tract irritation, headache, dizziness or nausea." The MSDS for XC-4005 resin identified headache and irritation of the eyes as the effects of inhalation overexposure to butanol vapor. The labels for XC-4001 and XC-4005, however, only contained the following warning information: "Harmful if Inhaled," "Causes Eye Irritation," "May Cause Skin Irritation."

OSHA contended that this information did not constitute an appropriate hazard warning because it failed to detail the specific target organs that could be affected by overexposure to the hazardous chemicals. In addition, this information allegedly did not inform employees using the chemicals of the effects on the bodily systems that could be caused by overexposure through inhalation. OSHA suggested minor changes to the hazard warning and stated that a warning that exposure "May Cause Eye and Respiratory Tract Irritation, Headache, Dizziness or Nausea" would appropriately convey the target organ effects of overexposure to these products. (Emphasis added). Subsequent to the inspection, Cyanamid revised its MSDS for Fibercore to include a statement that inhalation overexposure to styrene and vinyl toluene may cause eye, nose and throat irritation. However, the container label never provided a hazard warning.

Cyanamid's product label for its Glaskyd molding compound stated that the product is "Harmful if Inhaled." The MSDS stated that the product "contains fibrous materials such as silica which may cause lung fibrosis after chronic overexposure." A revised MSDS stated that inhalation overexposure to its hazardous components, i.e., talc, antimony, oxide and amorphous silica dust "may cause respiratory tract irritation." OSHA contended that the words "May Cause Lung Damage" would provide the specific target organ effects.

With respect to Cyanamid's label for its vinyl toluene based Cyglas molding compound, the label contained the general hazard warning "Harmful if Inhaled." The MSDS stated that "prolonged inhalation of vinyl toluene vapor may cause depression of the central nervous system including headache, dizziness and drowsiness" and that the product contains "silica which may cause lung fibrosis." OSHA contended that an appropriate hazard warning for Cyglas would have stated, "May Cause Lung Damage," "May Cause Irritation of Eyes, Nose, Throat and Skin," "May Cause Drowsiness." OSHA also argued that Cyanamid did not include the applicable ACGIH short-term exposure limits (STELs) on its MSDSs for XC-4001 resin containing propylene glycol methyl ether; Fibercore, containing styrene and vinyl toluene; and Cyglas, containing vinyl toluene.

Cyanamid maintained at trial that its labels were appropriate and that labels need not convey comprehensive information concerning potential hazards. In addition, Cyanamid contended that the target organ effects should only be stated on the MSDS. Specifically, Cyanamid testified that based upon toxicological studies, amorphous silica and talc are not hazardous substances. Additionally, there would be no

exposure to respirable silica or talc under any conditions. Cyanamid's expert stated that there would be no exposure in normal conditions of use or in grinding the material after it had been formed into such articles as distributor caps. Cyanamid argued that for the substances at issue, amorphous silica and talc, the warning "Harmful if Inhaled" is appropriate. Moreover, Cyanamid's expert testified that there is insufficient evidence to establish that overexposure to Cyanamid's Glaskyd and vinyl toluene based Cyglas, which contain a non-asbestos form talc and amorphous silica, may cause lung damage.

With respect to Cyanamid's XC-4001 resin, XC-4005 resin, Fibercore and Cyglas, Cyanamid denied central nervous system depression as a target organ effect to be included on its product labels. Cyanamid testified that styrene and vinyl toluene do not cause permanent damage to the central nervous system but rather slow down the function of nerve cells which is reversible upon removal from exposure.

III. ALJ'S DECISION

The Administrative Law Judge (ALJ) disagreed with Cyanamid's position that amorphous silica and talc are not hazardous substances. Since Cyanamid admitted that the substances were components of untested mixtures, the Judge ruled that "these mixtures must be considered to present the same hazards as its components." The ALJ's decision, however, did not address Cyanamid's argument that chemicals are exempt from the Standard to the extent that there is no potential for exposure. Rather, the ALJ upheld the citation simply because hazardous chemicals were present in the resins at concentrations higher than the 1 percent threshold level for mixtures, and the resins had not been tested as a whole to determine their potential hazard.

With respect to the key issue in this case, whether labels must reflect target organ effects, the Judge ruled that this is a reasonable interpretation of the HCS. Specifically the Judge stated that "the key requirement is that the label transmit an immediate warning of the hazards of the chemical as it may affect one or more of the target organs".

The ALJ further found Cyanamid in violation of 29 C.F.R. 1910.1200(g)(2)(vi) for failing to specify STELS for styrene and vinyl toluene in its Fibercore product. The Judge stated that "the STEL is essential to a downstream employer who must advise employees of the potential hazards of these products."

IV. REVIEW COMMISSION ISSUES

Cyanamid requested a hearing by the Review Commission, which accepted the case, American Cyanamid Co., No. 87-681, Slip Op. (OSHRC Aug. 5, 1987), for consideration of Eight issues, including:

- (A) Whether the Judge erred in concluding that the HCS applies to hazardous chemicals which are present in the workplace in such a manner that employees are not exposed to them under "normal conditions of use or in a foreseeable emergency."
- (B) Whether the Judge erred in concluding that the HCS requiring "target organ warnings" on shipping container labels, as provided in Instruction CPL 2-2.38, is a reasonable interpretation of the HCS.
- (C) Whether the Judge erred in concluding that the HCS requires the listing of STELS on the MSDS.
- (D) Whether the Judge erred in concluding that a preponderance of evidence established that butanol, vinyl toluene and styrene produced "target organ effects" as termed by Appendix A of the HCS.
- (E) Whether the Judge erred in concluding that there was insufficient evidence to establish that amorphous silica and talc contained in Cyglas and Glaskyd resins are "articles" as defined in the HCS and interpreted in Instruction CPL 2-2.38.
- (F) Whether the Judge erred in concluding that a preponderance of the evidence established that the labes for XC-4001 resin, XC-4005 Resin, Fibercore, Glaskyd and Cyglas did not contain "appropriate hazard warnings" as required by the HCS.
- (G) Whether the Judge erred in concluding that a preponderance of the evidence established that amorphous Silica and talc present the health hazards alleged by the Secretary.

The last issue for consideration focuses on Instruction CPL 2-2.38 and its amendments. Because the Instruction is not the product of Notice and Comment Rulemaking, American Cyanamid argues that the Instruction cannot create obligations not created by the HCS. As such, the Instruction's requirement

that "target organ warnings" be placed on shipping container labels must be created by the HCS itself.