

Hazard Communication in the Workplace

Bill Number:

Hearing Date: March 25, 2004, 10:00 am

Location: SD-430

Witness:

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President

Testimony

Hearing on

Material Safety Data Sheets

and

Hazard Communication

UNITED STATES SENATE

COMMITTEE ON HEALTH, EDUCATION, LABOR AND PENSIONS

SUBCOMMITTEE ON EMPLOYMENT, SAFETY AND TRAINING

HONORABLE MICHAEL B ENZI, CHAIRMAN

March 25, 2004

Submitted by:

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CHAIRMAN ENZI AND MEMBERS OF THE SUB-COMMITTEE:

My name is Tom Grumbles and I am President of the American Industrial Hygiene Association (AIHA). I am a certified industrial hygienist and have been involved in the occupational health and safety profession for nearly 30 years. I am also the Manager of Product Safety and Occupational Health for Sasol North America, Inc., an international corporation involved with chemical manufacturing. I appreciate the opportunity to appear before this hearing of the Senate Subcommittee on Employment, Safety and Training and provide testimony on the issue of Material Safety Data Sheets (MSDSs) and hazard communication. I would ask that my entire written testimony be inserted into the record.

Before I begin Mr. Chairman, I would like to take this opportunity to thank you on behalf of both employees and employers who desire a healthy and safe workplace for your past and present involvement in occupational health and safety. Your leadership is crucial if we are to improve this country's record of workplace-related injury and illness that

affects workers and their families and impacts our communities. I applaud your efforts.

The American Industrial Hygiene Association (AIHA) appreciates the opportunity to provide input and offer recommendations in support of the overall goal of this Senate hearing to address improving the accuracy, quality, and maintenance of Material Safety Data Sheets (MSDSs). Founded in 1939, AIHA is a nonprofit international organization comprised of 12,000 members and more than 75 local sections. AIHA's more than 30 technical committees deal with the health and safety challenges facing occupational health experts and workers everywhere. AIHA's Stewardship and Sustainability Committee is an active participant in the development of the revised ANSI Standard on MSDS Preparation Z400.1.

AIHA shares the concerns that inaccurate, incomplete and outdated MSDSs can increase risks of illnesses and injuries and environmental consequences arising from the handling, storage, transportation and use of hazardous chemicals. Industrial hygiene, safety, emergency response and environmental health professionals rely on MSDSs as a source of information to assist employers and employees properly manage hazardous chemicals.

It has been almost 20 years since the Occupational Safety and Health Administration (OSHA) adopted the Hazard Communication Standard with its provisions for development and distribution of MSDSs for hazardous chemicals. As originally intended, a MSDS was not meant to be a stand-alone document. It was part of an overall hazard communication program designed to include labeling and, perhaps most importantly, training in the hazards and use of labels and MSDSs. The target audience for MSDSs at that time was employers, employees, industrial hygiene and safety professionals and occupational physicians and nurses. We believe there is little doubt that the implementation of this standard by chemical producers and employers has improved the availability and understanding of information on hazardous chemicals in the workplace. In fact, the provision of MSDSs and labels is a standard business practice today, even resulting in many employers having MSDS requirements for everything they purchase, including products that are not hazardous as defined by the hazard communication standard.

Today, audiences for MSDSs continue to expand beyond the workers handling chemicals, IHs, and others. Target audiences now include emergency response personnel, environmental professionals, R&D chemists, process engineers and product stewards. The content of MSDSs attempting to meet these needs varies and the value to target audiences needs to be improved.

In addition, we are now in a truly "global economy" where international cooperation and harmonization is required. If MSDSs are to remain a valuable tool in the protection of workers and others, all industrialized countries must work together to see that they contain the most reliable and accurate data available. The quality and accuracy of MSDSs is an international one and we should work on international solutions.

Last October it was reported that in the ECLIPS (European Classification and Labelling

Inspections of Preparations) project participating countries evaluated the data of about 900 inspected preparations in about 200 companies. The goal of the project was to inspect companies and their handling and labelling of preparations containing dangerous substances. The emerging results of the ECLIPS project show that only 38% of the labelling and 25% of the safety data sheets were fully correct. There have been similar studies in the US with similar results.

To address the problem we are discussing today, questions need to be asked:

- Can MSDSs be better regulated?

It is in no way clear that additional regulation will improve the accuracy and quality of MSDSs. Events cited as highlighting the problems with MSDSs should first be considered in light of non-compliance with the existing regulations, not the need for new regulations. If the conclusion is drawn that additional regulatory action is needed, full consideration must be given to the Globally Harmonized System (GHS) to avoid possible concerns with international commerce.

- Is the existing Hazard Communication Standard too generic?

AIHA does not believe the hazard communication standard is too generic, but there are areas where it can be improved. AIHA supports the overall goals of both the ANSI Standard on MSDS Preparation Z400.1 and the GHS in that they improve the quality of the MSDS by establishing a structure and providing meaningful recommendations on content. However, caution is warranted because following ANSI guidelines or GHS will still not ensure that information is accurate or reliable.

- Can the competency of MSDS writers be regulated?

The Hazard Communication Standard does not address what qualifications are needed to prepare MSDSs. The disparity in the qualifications of MSDS preparers is one significant reason for the disparity in the quality of MSDSs. There are no degrees in this type of product stewardship work, so experts in label and MSDS requirements usually come from backgrounds such as chemistry and industrial hygiene and receive on-the-job training. There are few recognized courses available for those newly tasked with writing MSDSs.

AIHA believes that the quality, accuracy and usefulness of MSDSs can be improved by increasing the competency of MSDS authors and the development of appropriate and practical guidelines on the preparation and maintenance of MSDSs. It is essential that MSDS authors have both the necessary technical skills to write MSDSs and the tools necessary to ensure that MSDS information is accurate and written in clear and understandable language.

AIHA recommends consideration of a non-mandatory appendix to the Hazard Communication Standard (29 CFR 1910.1200) that addresses training guidelines for MSDS authors. This action, coupled with an aggressive outreach effort by OSHA to develop and provide resources to accomplish such training, seems essential at this point. OSHA recognizes the need for this Compliance Assistance outreach in its recent

document titled “Hazard Communication in the 21st Century”. In that document OSHA speaks of the alliance with the Society for Chemical Hazard Communication. AIHA believes that work with this alliance is not enough. OSHA should work through its alliances with AIHA, the American Society of Safety Engineers, and many others to create a wide recognition of the issues and needs, and the outreach materials that are part of the solution.

Working with the many OSHA alliances with groups representing companies that are a recipient of MSDSs, and who rely on this information, could create a greater “market force” for quality MSDSs. Alliances and partnerships between regulators, professional organizations, universities, educators, and the regulated community to develop best practices and metrics would serve to improve the current situation. Considering the ten years it took to finalize the first hazard communication standard these types of efforts should be much more efficient than new regulation in improving the situation with MSDSs.

This issue also has a significant impact on small business where technical resources may be limited. To address this problem, AIHA believes that outreach assistance on MSDS and hazard communication should be provided to small business. This assistance could be accomplished through combined efforts of experts in the field, perhaps utilizing the existing Small Business Development Centers.

- Should there be different MSDSs for employers and employees?

The AIHA fully supports one MSDS format for all target audiences. The AIHA encourages the use of international standards/guidelines (including recommended phrases and symbols) that allow MSDS preparers to communicate hazards in an understandable way to each of the various MSDS users. The AIHA recognizes that providing information on an MSDS, beyond that required by the OSHA Hazard Communication Standard, is necessary to fulfill needs of the variety of target audiences (e.g., transportation, global inventory status, waste disposal information). Specific formatting and content guidelines or regulations can facilitate this need. One must remember that the MSDS is a reference document meant to be used with education and labeling to communicate hazards. It is not meant to be a stand-alone document.

- How does the existing MSDS system in the United States interact with the United Nations Global Harmonization Standard (GHS)?

Since the US is both a major importer and exporter of chemicals, the manner in which other countries choose to regulate has an impact on the protection of workers in the US as well as on possible barriers to international trade in chemicals, and vice versa. The GHS clearly addresses a number of the issues raised regarding the current Hazard Communication Standard requirements.

The GHS is intended to accomplish a number of objectives. A major goal is to improve the quality and consistency of chemical hazard information. It is also anticipated that the GHS, if implemented, will facilitate international trade in chemicals and provide a recognized framework for those countries without an existing hazard communication

system.

A standardized 16-section format is established for safety data sheets to provide a consistent sequence for presentation of information. With the exception of the order of two headings being reversed, the harmonized data sheets are the same as the ANSI standard. Items of common interest to workers are presented at the front of the document, while more technical information is presented later. Headings for the sections (e.g., First Aid Measures, Handling and Storage) are standardized to facilitate locating information of interest. Thus, with the exception of differences in language, only one label and one data sheet would be necessary for national and international commerce for any given product.

The GHS establishes standardized criteria for determining the health, environmental, and physical hazards associated with chemicals. GHS establishes standardized and more detailed requirements for labels and safety data sheets, including consistent use of pictograms (e.g., skull and crossbones), signal words (e.g., Danger), and harmonized hazard statements (e.g., Fatal if Swallowed). Under this approach, employers would know exactly how to convey the hazards of the chemical once they complete the hazard classification. The harmonized label elements are provided for each hazard category and class within that category.

The details of the elements of the GHS are still being worked out, but the AIHA supports the overall goals of the GHS. However, if the GHS is to be adopted in the United States, it would undoubtedly require federal rulemaking. This federal rulemaking would also likely have to include more than one federal agency. And lastly, prior consideration must be given to the stakeholders involved in the issue. Such a list of stakeholders is extensive (i.e., MSDS preparers, employers, employees, occupational health and safety professionals, emergency response personnel, process engineers, R&D chemists) and should be discussed prior to any movement toward rulemaking.

- What about the science of hazard communication?

OSHA has stated that the original comprehensive approach to hazard communication, training, labels and MSDSs together was based in part on information about communication theory that was identified during the rulemaking. For example, the more information that appears on a label, the less likely it is that someone will read it and use it.

The AIHA suggests that there is a need for a review of the most current science of communication and perhaps new scientific studies that determine the comprehensibility of model language for each target audience. Scientific studies

that demonstrate efficacy of language to the target audiences could greatly improve MSDS effectiveness.

Mr. Chairman, when these questions are addressed, I believe the US will have taken the correct path to ensure that valuable information and guidance is provided to IH

professionals and others that utilize MSDSs to anticipate, recognize, evaluate and control workplace exposures and for those that prepare MSDSs.

AIHA believes that industrial hygiene professionals have a key role in improving the quality and value of information available on a MSDS. We intend to educate our members and others about the current activities related to the preparation and use of MSDSs, including efforts to increase their quality and utility, implementation of a globally harmonized approach to their presentation, and updating the existing voluntary consensus standard that provides guidance for development.

In closing, AIHA stands ready to assist you, Congress, and others in every possible way. Together we can move MSDSs into the 21st century workplace.

Again, I appreciate the opportunity to appear here today and provide some of my experience and knowledge. At this time I would be more than happy to answer any questions you may have.

Thank you.