

UNITY AND STRENGTH FOR WORKERS

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Comments of United Steelworkers to the April 9, 2013 Cal/OSHA Advisory Meeting on the Globally Harmonized System (GHS) Update to Section 5194, Hazard Communication

Thank you for the opportunity to submit these comments on Cal/OSHA's proposed adoption of a revised Hazard Communication Standard compliant with the provisions of the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). The United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union (USW) represents 23,000 California workers and another 800,000 across North America. We are the predominant union in the chemical and oil industries, and the largest union in manufacturing generally. Many of our members make chemicals; many others use them daily in their work. The right-to-know is critical to USW members in every industry.

The USW and its predecessor unions have been involved in the right-to-know effort for many years – first through collective bargaining in the 1960's, later in OSHA's first attempt to promulgate a standard in the late 1970's, in the effort to gain state right-to-know laws in the early 1980's, in the rulemaking that established the 1983 federal Hazard Communication Standard, in the subsequent litigation, and most recently in last year's revised federal standard based on the GHS. Our Canadian members were active in the effort to establish that country's Workplace Hazardous Materials Information System (WHMIS).

I was personally involved in much of this work. I was also the Chair of the Workers Group in the 2-year discussion at the U.N.'s International Labour Organization leading to the International Convention on Safety in the Use of Chemicals at Work, where the idea of a globally harmonized system first emerged. Subsequently, I was one of two labor representatives on the international coordinating group that oversaw the development of the GHS; I also worked on the GHS's rules for labels and safety data sheets, and on the mixtures rule.

The GHS is a significant improvement in worker protection worldwide. The existence of a globally harmonized system makes it possible for workers everywhere to gain the right-to-know. In the United States, the new standard will for the first time



require standardized hazard warnings, a standardized format, and pictograms, making labels and safety data sheets far more comprehensible. It is essential that the California regulation be compliant with the new federal standard based on the GHS. We believe California can accomplish this, while retaining important features in its current standard that are more protective than those in the revised federal standard.

The GHS itself recognizes that competent authorities need the ability to protect elements of existing systems that go beyond the requirements of the GHS, while not conflicting with those requirements:

1.1.1.6 (a) the level of protection offered to workers, consumers, the general public and the environment should not be reduced as a result of harmonizing the classification and labeling systems;¹

This was, in fact, the very first principle of harmonization agreed by the Coordinating Group and adopted by the United Nations. It is arguably the most important.

Of course, standards adopted by OSHA-approved state plans must also be “at least as effective” as the corresponding federal standard, and, for products in interstate commerce, be required by compelling local conditions and not place an undue burden on interstate commerce. We believe that the Cal/OSHA draft language for Section 5194 meets these criteria. The current California requirements under discussion are “at least as effective” as the federal requirements in that they provide additional protection to California workers and to California businesses using chemicals. The “compelling local circumstances” arise from the fact that those requirements have been in place for many years. Eliminating them would lower the level of protection. And since they have not been an undue burden on interstate commerce in the past, they are unlikely to be an undue burden in the future.

The remainder of these comments will focus specifically on four specific issues – the “one positive study” approach to classification, reference lists, time limits for updating information on labels, and testing.

One Positive Study

The original federal standard required that a chemical be classified as hazardous based on “evidence which is statistically significant and which is based on at least one positive study conducted in accord with established scientific principles.” The revised

¹ *Globally Harmonized System of Classification and Labeling of Chemicals (GHS)*, Fourth Revised Edition, United Nations, New York and Geneva, 2011. This will be referred to in these comments as the “GHS Document.”

federal standard replaces this criterion with the “weight of the evidence” approach used in the GHS.

We believe that the two approaches will yield similar results when the classification is done by competent, independent scientists. Unfortunately, the classification may be performed by persons with a significant conflict of interest. For example, in the face of strong evidence to the contrary, chemical industry trade associations have recently argued that formaldehyde and styrene should be excluded from the National Toxicology Program’s (NTP) list of carcinogens, and have attempted to accomplish this end through legislation and through a federal lawsuit. (In the interest of full disclosure, the USW has intervened in that suit on behalf of NTP.)

In addition, the “weight of the evidence” approach puts an undue burden on small business. Under the current California standard, small chemical suppliers need only do a literature search. A “weight of the evidence” determination requires substantially more expertise.

The GHS Document itself emphasizes the importance of single positive studies:

1.3.2.4.9.5 Both positive and negative studies are assembled together in the weight of the evidence determination. However, a single positive study performed according to good scientific principles and with statistically and biologically positive results may justify classification.

The California standard could, in essence, retain the “one positive study” approach while remaining consistent with the GHS and the federal standard. For example, through an appendix or compliance directive, the state could make it clear that one positive study establishes a prima facie case for classification. While negative studies could certainly be considered, the appendix or directive could recognize that most “negative” studies are not statistically equivalent to positive studies. To be positive, a study must find a statistically significant effect. Put another way, the study must achieve an appropriate confidence level that the result is not due to chance. A study which does not find a statistically significant effect is called “negative,” but it might better be termed “inconclusive.” A truly negative study would have to show, with the same confidence level as for positive studies, that the lack of an effect is not due to chance. Such studies are rare. Statistically inconclusive studies carry far less weight than statistically significant positive studies.

The folly of allowing “negative” studies to overcome a single positive study is shown by the infamous case of dibromochloropropane (DBCP). DBCP is an effective pesticide against nematodes; it was first produced in the mid-1950s; toxicity tests commissioned by Shell Chemical showed acute toxicity, but found “no indication of

testicular effect.” A 1961 study by Torkelson combined with data from an earlier unpublished study by Hine showed testicular damage in every tested species.² Although Shell, along with Dow Chemical, submitted the study to the federal government as part of the pesticide registration process, they asked that it remain confidential – even though it had been published in the *Journal of Toxicology and Applied Pharmacology*. Shell and Dow apparently concluded that the “weight of the evidence” did not justify warning the workers who made DBCP or applied it to crops.

Occidental Chemical in Lathrop, California, was one of the plants producing DBCP. Workers at that plant were represented by Local 5 of the Oil, Chemical and Atomic Workers, a predecessor union to the USW. In 1977 discussions among male workers in the plant and their wives revealed that none of the men were able to father children. Semen tests arranged by the union revealed that they were functionally sterile. Subsequent surveys found widespread male sterility among workers in other plants where DBCP was manufactured.

Federal OSHA promulgated an occupational health standard and EPA banned the use of the pesticide in the United States (although it continued to be used overseas, and is still used in the United States as a chemical intermediate). DBCP was later revealed to be a potent carcinogen. Had the 1961 study been used to classify the chemical, or disclosed on material safety data sheets, an occupational health tragedy might have been avoided.

California can also require that positive studies be included in the safety data sheet or even on the label. Several entries in the GHS Document make this perfectly clear:

1.4.6.3. Use of non-standardized or supplemental information (labeling)

1.4.6.3.1...Competent authorities may require additional information, or suppliers may choose to add supplementary information on their own initiative... the use of supplementary information should be limited to the following circumstances:

(a) the supplementary information provides further detail and does not contradict or cast doubt on the validity of the standardized hazard information; or

(b) the supplementary information provides information about hazards not yet incorporated into the GHS

1.4.7.2 General guidance on updating of information

1.4.7.2.1 Suppliers should respond to “new and significant” information they receive about a chemical hazard by updating the label and safety data sheet for that chemical...This could include, for example, new information on the potential

² Torkelson TR, Sadek, SE, Rowe VK, Kodama JK, Anderson HH, Loquvam GS, Hine CH (1961). “Toxicologic investigations of 1,2-dibromo-3-chloropropane.” *Toxicol Appl Pharmacol* 3:545-599.

adverse chronic health effects of exposure as a result of a recently published documentation or test results, even if a change in classification may not yet be triggered.

Annex 4 Guidance on the Preparation of Safety Data Sheets (SDS)

A4.2.1 Scope and application

... An SDS is a well-accepted and effective method for the provision of information, and may be used to convey information for substances or mixtures that do not meet or are included in the GHS classification criteria.

A4.3.11.15 Other information

Other relevant information on adverse health effects should be included even when not required by the GHS classification criteria.

3.6.2.6 It is realized that some regulatory authorities may need flexibility beyond that developed in the hazard classification scheme. For inclusion into Safety Data Sheets, positive results in any carcinogenicity study performed according to good scientific principles with statistically significant results may be considered.

(Although this last provision appears in the GHS Document's chapter on carcinogenicity, the principle is applicable to any health effect.)

Clearly, California can require that the information provided to users include the results of any well-conducted statistically significant positive study for any health effect. While this is not a requirement of the GHS, it is certainly permitted by the GHS. Inclusion on a safety data sheet is not as good as classification, since the pictogram, signal word and warning will not be present. But it is far better than denying users this critical information altogether.

Reference Lists

The original federal Hazard Communication Standard required the use of reference lists in hazard determinations. California should maintain this requirement in its updated standard.

The appropriate lists include Subpart Z of the federal OSHA standards; the ACGIH's Threshold Limit Values; the lists of carcinogens published by the International Agency for Research on Cancer (IARC) and the U.S. National Toxicology Program; and California's list established under Proposition 65. Chemicals are included on these lists only after a thorough, objective, peer-reviewed process based on the weight of the evidence (or, in the case of OSHA (6)(b) standards, rigorous federal rulemaking). In fact, the criteria for carcinogenicity in the GHS are essentially those of IARC. No chemical supplier could hope to exceed the quality of these hazard determinations, let alone their objectivity.

California could essentially require the use of these reference lists in classification through an appendix or compliance directive stating that inclusion on one or more lists establishes a prima facie case for classification. (However, the converse is not true. The absence of a chemical from the lists does not constitute evidence against classification. Most chemicals have never been considered by organizations responsible for the lists. New information may be available for chemicals which were considered but not listed.)

In addition, as described above, California could require that inclusion on a reference list be noted on the safety data sheet.

Time Limits for Updating Labels

The federal Hazard Communication Standard (as revised in 1994) required that chemical suppliers update their labels and safety data sheets within three months of receiving significant new information. The new federal standard retains the three month deadline for safety data sheets, but changes it to 6 months for labels. Cal/OSHA has proposed to retain the three month limit for both.

The GHS Document does not specify a time limit:

1.4.7.2.1 Suppliers should respond to "new and significant" information they receive about a chemical hazard by updating the label and safety data sheet for that chemical...

1.4.7.2.2 Updating should be carried out promptly on receipt of the information that necessitates the revision. The competent authority may choose to specify a time limit within which the information should be revised...

Clearly, California's proposal to retain the three month limit for labels is compliant with the GHS. In fact, it could be argued that the federal six month limit is not compliant, since it is hardly prompt.

It is important to understand the history of this issue on the federal level. The three month deadline was added to the federal standard in 1994, but it was administratively stayed almost immediately. The stay was never lifted and the deadline was never enforced. It will not be enforced until the December 1, 2015 effective date of the new labeling provisions. Thus, the six month deadline in the new federal standard is actually an improvement over the current situation in states subject to the federal standard.

However, it is not an improvement in California, where the three month deadline is currently in force, and where chemical suppliers presumably are meeting it. There is no reason for the state to diminish its standard.

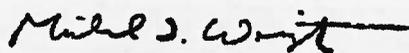
Testing

The GHS is a system for classifying and labeling chemicals based on existing information. There is no requirement the GHS or in either the old or revised federal standards for chemical testing. It is not clear that OSHA even has such authority, since testing is covered under other federal statutes, particularly the Toxic Substances Control Act.

Yet if the GHS does not require testing, it certainly does not prohibit a country or a state from requiring testing. Federal OSHA may not have the authority to require testing, but it certainly does not have the authority to block a state from doing so. In Europe, the GHS is closely linked to REACH (Registration, Evaluation, Authorization and Restriction of Chemical Substances), a regulation requiring widespread testing.

We believe that all chemicals to which workers or the public are exposed should be extensively tested, both for physical hazards and for toxicity. The United States lags far behind Europe and other industrial countries in this regard, and states could decide to fill this gap. The nature and extent of possible California testing requirements are beyond the scope of these comments. But testing would be fully congruent with the GHS and with the purposes of the federal Occupational Safety and Health Act.

Respectfully submitted,



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