November 14, 2014

Director William Perry
Directorate of Standards & Guidance
Occupational Safety & Health Administration
U.S. Department of Labor
200 Constitution Ave., NW
Washington, DC 20210

Dear Director Perry,

The National Association of Chemical Distributors (NACD) is writing to your office to ask for a Letter of Interpretation regarding GHS symbols and empty pictogram frames.

NACD is an international association of nearly 440 chemical distributors and supply-chain partners. NACD’s membership comprises businesses representing in total more than 85% of the chemical distribution capacity in the nation and generating 90% of the industry’s gross revenue. NACD members, operating in all 50 states through nearly 1,800 facilities, are responsible for more than 155,000 direct and indirect jobs. NACD members are predominantly small regional businesses, many of which are multi-generational and family owned. The typical chemical distributor has 26 employees and operates under an extremely low margin.

Chemical distributors play a unique and integral role in the supply chain. Manufacturers increasingly rely on chemical distributors to market and sell their products in a variety of packaging sizes to an incredibly varied customer base. Every seven seconds, an NACD member company is moving chemical products to and from their facility. This constant movement of those products results in chemicals being frequently added to and removed from inventory.

In efforts to comply with the revised Hazard Communication Standard, NACD member companies have purchased label stock that includes four pre-printed, empty red frames to accommodate the required GHS symbols. Single color (black) thermal transfer printers are used to print product-specific information on each label, including the required Hazard Communication elements. For products where only a portion of the empty red frames are filled with symbols, the unused frames on the label are currently being completely covered with large, black diamonds, as suggested in your December 20, 2012 Letter of Interpretation to Intercontinental Chemical Corporation.

The black ‘cover up’ diamonds that are being used to conceal the empty red frames on labels have been cause for several concerns. First, they are unsightly and have the potential to cause our member companies and other downstream users to question whether the label has been defaced. Additionally, due to the technological constraints inherent to thermal transfer printers and label design software, the black diamonds are extremely difficult to align on the empty red frame; other ‘in use’ frames are often inadvertently partially covered and, as such, must be discarded. Label makers have also experienced difficulties with thermal transfer ribbons and printer heads. An average label production run can require that over 5,000 labels be printed; due to the larger amount of heat applied to a small portion of
the printer head over the black diamonds, transfer ribbons frequently tear and the useful life of the printer head is significantly reduced.

Attached are the notes from the twenty-fifth session of the United Nations Economic and Social Council’s Sub-Committee of Experts on the Globally Harmonized System of Classification and Labeling of Chemicals. The notes specifically address the issue of empty pictogram frames and discuss the advantages and disadvantages of several solutions to the problem. The committee agrees that single color thermal transfer printers are the predominant printing technology used by the chemical manufacturing industry. They also state that replacing single color thermal transfer printers with multi-color printers is not an economically or environmentally viable solution to the issue.

While it is understood the opinions of the UN Sub-Committee are not necessarily consistent with those of OSHA, the alternatives to empty pictogram frames proposed in the Annex of the Sub-Committee’s notes offer practical solutions to the issue at hand. One of the proposed solutions is to print the words ‘Intentionally Blank,’ ‘No GHS Pictogram,’ or other similarly phrased text in black lettering inside each empty red frame (example below). This phrase would serve as a GHS symbol in the pictogram frame. This is an effective and efficient solution that makes use of existing printing technologies. The UN Sub-Committee states that “[their] experience has shown these methods to be comprehensible and effective in communicating the critical hazard information communicated on the label.”

Please advise if it is acceptable to print ‘Intentionally Blank,’ ‘No GHS pictogram,’ or other similarly phrased text in black lettering inside empty red frames to indicate no additional hazards are associated with a chemical.

If you have questions or require additional information, please do not hesitate to contact me.

Sincerely,

Jennifer C. Gibson
Vice President, Regulatory Affairs
National Association of Chemical Distributors
1560 Wilson Blvd, Suite 1100
Arlington, VA 22209
Practical alternatives to empty pictogram frames

Transmitted by the Dangerous Goods Advisory Council (DGAC)

Introduction

1. GHS generally prescribes in section 1.4.10.4.2.3 that pictograms “should have a black symbol on a white background with a red frame”. Manufacturing and packaging operations for global distribution are often characterized by high output production of continually varying products. In these mass-production scenarios, printers are required which are highly reliable, simple, fast and resistant to chemical environments. The predominant viable printing technology consists of one-color, thermal ribbon printers. The combination of the red frame requirement with the one-color printer infrastructure necessitates the use of pre-printed red frames on label stock. This stock is then custom printed in black ink with applicable hazard symbols inside the frames, plus product identifiers and all other components required for compliant GHS labelling.

2. The foregoing scenario is addressed by the use of label stock with multiple red pictogram frames, for example four red frames. Depending on the product which is being packaged, there may be fewer hazards than the number of pictogram frames. This results in unused pictogram frames which do not have a hazard symbol inside them. GHS does not address the presence of unused frames on a label. National and regional implementations tend to prohibit empty frames. DGAC is concerned by one alternative which is to completely obliterate a frame, with a resulting black diamond the size of the other pictograms. We believe this is unsightly, confusing, and may be misinterpreted that a real hazard has been obscured. Blacking out blank pictograms is especially detrimental for cosmetics, pharmaceuticals, medical supplies, personal care items and food related products for which positive public perception is paramount.

3. DGAC agrees that red frames are beneficial and that they should not be empty. Industry has intermittently solved the issue by printing a text such as “NO GHS SYMBOL,” “INTENTIONALLY BLANK,” or inserting other alternatives, such as waffle screen patterns, to fill in the unused frames, to date without significant issues globally. Other symbols, such as a dash “-” meaning “not applicable”, could be used. The Sub-Committee is invited to consider what solutions would be appropriate.
Discussion

4. DGAC represents many medium sized companies that typically have over 200 one-color printers currently in use for printing labels across global operations. A single physical site may actually have as many as 50 or more printers. Each of these printers would have to be replaced with a colour printer to print pictograms with red frame borders. A review of a typical medium size company has shown that they print 3.275 million labels annually across 4 physical locations (>800,000 labels printed per site). The compliance cost for larger companies is much greater. Based on a range of member companies’ analyses, the estimated initial cost to comply with the new provisions for each company is between $2.4 and $3.6 million. There is also a significant cost to prematurely retire and dispose of tens of thousands of existing one colour printers. Not only would there be a financial and environmental cost associated with the disposal of the printers, there would also be similar costs associated with disposing of the unused inventories of their unique printing supplies such as ink, cartridges, pre-printed label stock, etc., and the related packaging for these supplies.

5. DGAC believes it is not a universally viable option to obtain colour printers to print the red frames on individual labels. Our experience has shown that currently available colour printers have not proven to be durable enough to reliably print a high volume of labels. We have no data to show that reliable printers capable of reasonably meeting this expectation are available that could be effectively relied upon.

6. The most efficient method of providing red frames on labels is to use pre-printed label stocks. This is a common practice for DGAC member companies manufacturing in or shipping into or out of Europe, China, Singapore, Brazil, Taiwan and other countries where these GHS requirements have previously been implemented. The pre-printed label contains a sufficient number of blank red frames to accommodate the maximum number of hazard symbols that may be needed for the variety of substances and mixtures for which the label stock is to be used. When a label is then prepared for a particular commodity, pictogram symbols are printed in black ink within the pre-printed red diamonds. In the case of substances and mixtures which present fewer hazards than the number of blank frames provided, unneeded frames are populated with text such as “Not Applicable” or “No GHS Symbol” or “Intentionally Left Blank” in the language appropriate for the label, or populated with other screening pattern images. This is effective, efficient, and makes use of reliable existing, one-color printers. Our experience has shown these methods to be comprehensible and effective in communicating the critical hazard information communicated on the label.

7. The alternate use of multiple, different label stocks with fewer pictograms is also an inefficient option to eliminate blank pictograms. For every four pictogram label option, five different label stocks would be needed for no pictogram, one pictogram, two pictogram, three pictogram and four pictogram options. Multiple label stocks are more costly to purchase, require additional inventory storage, and cause additional production run set-ups with associated labour. Adding additional printers dedicated to specific label stocks is also extremely costly and increases labour and labour costs. The use of different label stocks and printers to satisfy different numbers of pictograms causes a significant increase in supplies, labour and/or capital investment.

8. We are concerned that in some cases comprehensibility would be adversely impacted by the full obliteration of empty pictograms. This is unsightly and may cause users to speculate as to what information has been covered up. We suggest that in the interest of promoting better comprehension and understanding, a general statement be added to the GHS publication that alternatives to blank pictograms are acceptable,
including a variety of current methods which are viable for existing infrastructure and technology.

Proposal

9. DGAC invites the views of the sub-committee on the following alternatives. Illustrations are given in the Annex.

(a) Obliterated frames.
(b) “Intentionally Blank” or other text.
(c) Symbol understood to convey no hazard.
(d) Partially obliterated frames.