



April 21, 2017

Ms. Maureen Ruskin
Deputy Director, Directorate of Standards & Guidance
U.S. Department of Labor
Occupational Safety & Health Administration
200 Constitution Avenue, NW
Washington, DC 20210

VIA Email

**Re: Comments Supplementing a Petition Submitted to OSHA on May 24, 2016
Requesting a Revision of Paragraph (f)(11) of 29 CFR 1910.1200.**

Dear Ms. Ruskin:

CPDA submits these comments in response to your request during OSHA's November 16, 2016 stakeholder meeting that we evaluate the regulatory ramifications of our petition to amend paragraph (f)(11) of the Hazard Communication Standard (HCS 2012) by substituting the word "manufactured" for the word "shipped" in the first sentence of the paragraph.¹ We are also providing requested information regarding the significant costs associated with relabeling products in warehouses due to OSHA's use of the word "shipped" instead of "manufactured" in paragraph (f)(11).² We trust this supplemental information is helpful in light of OSHA's acknowledgement during the meeting that the Agency is contemplating "regulatory actions that might need to be considered for labeling."

CPDA is the preeminent U.S.-based trade association representing the interests of the agrotechnology products industry including manufacturers, suppliers, formulators and distributors of adjuvants, pesticide inert ingredients, post patent pesticides and other agrotechnology products throughout the United States. CPDA member companies range in size from small businesses to large, publicly traded companies. More than 10 million non-pesticide agrotechnology product containers such as tank-mix adjuvants and plant nutritionals are manufactured and distributed annually, so small, medium and large businesses involved in this distribution system are directly impacted by the compliance requirements of HCS 2012.

As we have noted previously, the adverse effects of the paragraph (f)(11) requirement that manufacturers, importers, formulators and distributors relabel sealed hazardous chemical containers in their custody, in on-site or off-site warehouses, are not immediately obvious.

¹ CPDA "Petition to Revise HCS 2012 to Clarify Application of the Sealed Container Exception." May 24, 2016.

² OSHA denied the petition on December 9, 2016 for reasons unrelated to the merits of substituting the word "manufactured" for the word "shipped" in paragraph (f)(11).

The triggering event (hazard determination) for relabeling such containers under HCS 1994 was exceedingly rare due to the standard's non-prescriptive label language, unlike the much more frequent triggering event (hazard classification or reclassification) under HCS 2012 and its very prescriptive label language. Hazard reclassification may only apply to select products, but other required label language changes that may result from rulemaking would affect all hazardous chemical manufacturing, importing, formulating and distributing entities.

Hazard reclassification is expected to be much more common than rulemaking, rendering the relabeling requirement in paragraph (f)(11) a “dynamic” (i.e., recurring) and costly compliance requirement. Consequently, OSHA’s switch from a “hazard determination” to a “hazard classification” basis for possible relabeling results in a vast change in scope of paragraph (f)(11). This relabeling requirement now applies to an unpredictable number of products manufactured, labeled, and shipped in compliance with HCS 1994 and HCS 2012, and to virtually every firm in the supply chain prior to retail at any point in time.

As you are aware, we emphasized in our petition that use of the word “manufactured” instead of “shipped” in the first sentence of paragraph (f)(11) is needed to avoid having to relabel products in warehouses which are not equipped for such activity and would involve unwarranted safety, health, and ergonomic risks to warehouse workers. We also proposed regulatory language that would clarify how downstream manufacturers, importers, distributors, or employers that handle products only in sealed containers, that are not opened under normal conditions of handling, may comply with paragraph (f)(11). This would be by ensuring that one updated label, either in paper or electronic, print-ready format, is provided at the time those containers are shipped, as is done for updated safety data sheets (SDSs) under 29 CFR1910.1200(g)(7). This would provide updated label information to employers throughout the distribution system, and allow products properly labeled, when initially manufactured, to continue moving safely through the stream of commerce, thus avoiding the significant economic burdens associated with unsafe relabeling activities. This proposed regulatory change from “shipped” to “manufactured” would also resolve the conflict between paragraph (f)(11), which requires the relabeling of products that become non-compliant with HCS 2012 after manufacture, and the requirement of paragraph (b)(4)(i), which prohibits warehouse employees from defacing or removing labels from sealed containers.

EPA’s “Released for Shipment” Precedent for Pesticide Container Labeling

In 2006, the U.S. Environmental Protection Agency (EPA) recognized that the increased risk of worker exposure as a result of relabeling pesticide containers would not be offset by the benefits of an updated label. EPA developed the “Released for Shipment” concept when it amended its pesticide container and containment final rule (C&C Rule)³ to identify the point in time that a product first enters commerce and becomes subject to label compliance enforcement. This is when it leaves the production line for storage, sale or distribution, and is packaged and labeled in a manner in which it will be distributed, sold or stored.

³ 71 Fed. Reg. 47330 (August 16, 2006).

Thus the production unit is “Released for Shipment” only once and retains that status (including its label compliance status) until it dissipates in commerce. The effect of this change is to allow compliantly labeled FIFRA-regulated products to be warehoused, distributed or sold, one or more times, for the life of the product, without the need to relabel the containers. CPDA believes that OSHA’s adoption of this “Released for Shipment” concept would effectively address the current relabeling problem with HCS 2012 for our member companies⁴ and the chemical industry in general.

Ramifications of Changing the Word Shipped to Manufactured in Paragraph (f)(11)

A. Use of the Word “Manufactured”

Although the word “manufactured” is used in both HCS 2012 and its Enforcement Directive,⁵ these documents do not define the word. The only use of the word “manufactured” in HCS 2012 is in the definition of “Article” in paragraph (c), where the phrase “Article means a manufactured item...” is used. The word “manufactured” appears four times in the Enforcement Directive, once in the definition of “Article,” which is identical to the “Article” definition in HCS 2012, twice in the phrase “manufactured item” in sections B.3.c and B.3.d, and once in section G.1.k in the statement “SDSs must be obtained or developed for each hazardous chemical manufactured or imported.” Each of these uses of “manufactured” is consistent with the common definition of this word (the past tense of producing something) and is unlikely to be interpreted or used interchangeably with the word “shipped” (the past tense of sending or transporting something). CPDA does not believe that substituting the word “manufactured” for the word “shipped” in the first sentence of paragraph (f)(11) would have any negative ramifications or cause any confusion about OSHA’s intended purpose of this section of HCS 2012 (timely revision of labels based on new hazard information). Instead, it would simply identify a completed activity (“manufactured”) that occurs prior to a product being shipped as the activity that triggers the obligation to label a product container with the most recent hazard information within six months of becoming aware of the information or implementation of rulemaking.

B. Use of the Word “Shipped”

CPDA also examined OSHA’s use of the word “shipped” in HCS 2012 and the Enforcement Directive to determine whether those uses would be impacted adversely by changing “shipped” to “manufactured” in the first sentence of paragraph (f)(11). The word “shipped” is used eight times in HCS 2012: twice in the phrases “chemicals being shipped” and “chemical is shipped” (paragraphs (a)(2) and (f)(11)), five times as an adjective in the phrase “shipped containers,”⁶ and once in the phrase “hazardous chemicals shipped”

⁴ CPDA’s “Request for a Letter of Interpretation that Clarifies the Container Label for a Category of Non-Pesticide Agrichemical Products, labeled in Accordance with the HCS When Initially Shipped from the Manufacturer/Importer, as Compliant with HCS 2012 for the Life of the Product.” December 11, 2014.

⁵ OSHA Instruction Directive Number CPL 02-02-079: Inspection Procedures for the Hazard Communication Standard (HCS 2012); Effective Date July 9, 2015. (“Enforcement Directive”)

⁶ See paragraphs (f)(1), (f)(6)(i), (g)(6)(ii), (g)(7)(ii), and (h)(3)(iv).

(paragraph (f)(11)), which is the phrase that CPDA proposes be changed to “hazardous chemicals manufactured.” None of these other uses of the word “shipped” in HCS 2012 would be affected by the proposed change to paragraph (f)(11). Instead, each use of the word “shipped” clearly focuses on the movement of a chemical product that has been “manufactured.” Our proposed use of the word “manufactured” in paragraph (f)(11) would simply identify the earliest point in time that the most current label based on new hazard information must appear on a manufactured chemical product.

Similarly, the word “shipped” is used in the Enforcement Directive 29 times, either alone (five times)⁷ or in the phrases “shipped container(s)” (19 times),⁸ “container(s) shipped” (three times, F.2.h), “shipped small containers” (one time, F.5.c), and “hazardous chemical shipped” (one time, F.2.h). A “shipped container” is defined in section C.21 as “any container leaving the workplace.”⁹ Thus, the word “shipped” in this document is linked only to containers leaving a specific geographical location (i.e., a workplace). Changing “shipped” to “manufactured” in paragraph (f)(11) would simply identify the specific location (the workplace) in which newly manufactured containers of hazardous chemicals subject to OSHA’s labeling requirements must bear labels containing the product’s most current hazard information before leaving a manufacturing workplace after the six-month period allowed for updating labels. To be consistent with the change in paragraph (f)(11) of HCS 2012, only the word “shipped” in the fourth sentence of paragraph 2 of section F.2.h of the Enforcement Directive would have to be changed to “manufactured.”

Costs Associated with Relabeling Warehoused Containers

CPDA member companies range from small businesses to very large corporations. These companies may manufacture and label pesticide products, import or manufacture related non-pesticide agricultural chemical (ag chem) products (e.g., inert ingredients, adjuvants), formulate and distribute their own branded product (e.g., fertilizers, adjuvants, plant nutritionals) or distribute ag chem products manufactured by other companies. These products virtually all have shelf lives in excess of five years and, therefore, the vast majority are not manufactured “on demand.” The immediate containers of these hazardous chemical products are mostly plastic jugs for liquid products and plastic bags for dry product. Plastic jug and tote containers range in size from 1 pint to 250 gallons each. Containers are labeled before being placed on the production line or as production occurs. These labeled sealed containers are immediately boxed, taped and palletized or stacked, palletized and shrink-wrapped during production. They are then shipped without further packaging or labeling. Any individual chemical ingredient in a manufacturer’s/formulator’s formulated product may also be a component of many of the firm’s other products. In addition, a single product line may be shipped to many different warehouses either on-site or off-site for storage. No further work with the hazardous chemicals occurs in a warehouse, regardless of where the warehouse is located. This procedure for packaging

⁷ See sections C.5, F.3.e, F.5.a, and F.5.b.

⁸ See sections C.21, E.4.e, F.2, F.2.d, F.5.b & c, F.6.f, F.7.d, g, & i, H.1.e, H.4.c, J.6.b and c.

⁹ Paragraph (c) of HCS 2012 defines “Workplace” as “an establishment, job site, or project, at one geographical location containing one or more work areas.”

and labeling ag chem products is not unique to these products and these basic packaging procedures are used by other chemical industry sectors.

Below are survey results from CPDA member companies questioned about the costs and options associated with the potential need to relabel product that was compliantly labeled when manufactured. The results cannot be aggregated to the industry level, but do provide significant information on what the costs of relabeling containers in a warehouse can be, based on container types and the effects these costs can have on the profitability of affected products. For the agrotechnology product industry alone, if revision of HCS 2012 does not exempt HCS 2012-compliantly labeled warehoused products from the requirement to be relabeled given reclassification or rulemaking, all individual “end-use” product containers could need to be relabeled. A very conservative estimate of the number of agrotechnology product containers that would have to be relabeled by distributors would be approximately 1,250,000 containers on 13,500 pallets.¹⁰

Costs Associated with Relabeling Compliantly Labeled Product - Industry Survey Results

There are a variety of costs and expenses associated with relabeling manufactured product containers, including labor, non-labor (e.g., shipping, packaging/containers, labels, etc.) and opportunity costs.

An example of non-labor costs for firms that cannot relabel individual chemical containers in the warehouse (i.e., product that cannot be relabeled) are the shipping costs to move the product to someplace where each individual container can be opened safely and the contents transferred to new, compliantly-labeled containers. These compliantly relabeled containers must then be shipped back to the warehouse for distribution. Shipping costs are high for heavy product, which usually has the lowest profit margin. One large member company indicated that if their product was shipped to be transferred into new compliantly-labeled containers, the cost just for shipping would be \$500 per ton. This may not sound excessive, but for this company, this equates to 1,000-12,500 tons of product that would need to be shipped from, and then back to, the distribution warehouse each time a label needs to be updated.

An example of an opportunity cost to a typical company having to relabel in the warehouse is the value to the firm of the quantity of space (in square feet) in its highest-valued use, set aside to relabel product. In the case of CPDA member companies, the estimated ranges were from \$0.50-\$1.50 per square foot for the 345-500 square feet of space needed to relabel a product in each warehouse. Moreover, there can be several warehouses for one product type based on the size of the company. The general consensus was that it could take up to four months to relabel products. One member company estimated that the use

¹⁰ CPDA comments submitted to OIRA on July 30, 2015 regarding "Agency Information Collection Activities; Submission for OMB Review; Comment Request; Hazard Communication Standard; Notice. (OMB Control No. 1218-0072); 80 FR 36856 (June 26, 2015)."

of 500 square feet in 100 warehouses for four months could mean as much as \$1,000,000 in opportunity costs. The values are based on the amount of product that would have been stored in that warehouse space.

Formulator and distributor member companies estimated that additional costs associated with purchasing new safety equipment could be as much as \$100 per employee. Training and supervision of internal or external employees doing the relabeling would cost \$50 per hour for two employees per warehouse and for two hours per warehouse. Fully-loaded labor rates for the relabeling event itself would cost approximately \$50 per hour. There is no industry standard or fixed number of labor hours per relabeling event. Additionally, even for one product, the time to relabel small containers versus large ones is significantly greater and doesn't necessarily follow a standard approach to relabeling. The ergonomic risks can be significant for these packages as well, due to the need to use existing packaging. CPDA outlined the ergonomic and safety risks of relabeling in our May 24, 2016 petition, explaining the significant injuries that can arise from the tasks required to relabel products, including breaking down pallets, slicing open boxes, removing old labels, hand-affixing new labels, re-boxing and re-palletizing, manually shrink-wrapping containers, etc.

Our member companies were asked whether they would or could switch to substitute packaging to reduce relabeling costs. In some cases, relabeling may be less costly if different packaging were used for future product. None of our members indicated they would alter packaging types.

Relabeling Product in Bags

One company noted that it could completely redo product packaging for bags but at great expense. Without knowing how often relabeling would be needed, they could not consider it financially. These new bags could have sleeves on the side for placement of the label. If relabeling were needed, the bag would not need to be changed, but all the manual labor associated with breaking down pallets and re-palletizing and hand shrink-wrapping would still need to be done in the warehouse, with the possibility that accidents could happen. The member companies found it hard to determine how a break-even point could even occur in this situation.

Relabeling Product in Jugs

Jugs are made of plastic, as are bags, and there are limits to changing the composition of the plastics in these to ease relabeling. Labeled plastic jugs, regardless of the industry sector, cost about \$1.50 each with additional costs for disposal. For most CPDA member companies, the only viable alternative for relabeling jugs would be to manually swap the product out of the original jugs into correctly labeled jugs, with the accompanying costs for disposal of the old and purchase of the new containers.

One member company reported the cost to relabel each 2.5-gallon jug at \$4.00 per jug. All 200 product types of this particular company are packaged this way. Pouring the product into new jugs (on-site, not shipped) would raise the cost to \$6.00 per jug. Another member company indicated that relabeling jugs was simply not an option and workers would have to transfer product into new jugs. If products need to be shipped back and forth to accomplish the transfer process, the costs increase significantly.

Changing the Product's Packaging Size

One member company indicated they had an option to pour the contents of smaller units in the warehouse into a much larger one that would be compliantly labeled. The problem is that this new, bigger container would not be purchased by the same customers that wanted the smaller ones and the value of the product is less than when it was in the smaller containers.

Automated relabeling systems are available for some packaging types. However, the consensus among our member companies on the use of automated relabeling technology in a warehouse was that this is not an option for variable sized and packaged product, and therefore not an option for most member companies with warehoused product. Such technology would apply only for uniformly packaged product such as 2.5-gallon jugs. For these containers, the cost of automated technology is about \$150,000 per warehouse, making it of limited usefulness. Moreover, this is only the cost of the machinery and not any of the other costs associated with relabeling, including costs of breaking down packaging to get to the immediate chemical container where the label must be affixed. An automated system is a possible option only for warehouses with little to no variety in packaging and container types.

When asked if the need for reclassification and relabeling can be avoided by minimizing customer returns and/or revising contractual relationships or abandoning product, one member company said that revising contractual arrangements to avoid product remaining in a warehouse for more than six months would require eliminating their "early order program" with customers. This would cost them millions in lost revenue because this is a common business practice for these types of products for at least 50% of their sales. This company would also have to add production lines to do more "on demand" production and buy or rent more warehouse space to hold these products. Another member company said they could not afford to abandon product and would have to pay their customers to get product back, negating all revenues from such sales.

The costs associated with relabeling may or may not be able to be passed along through distribution channels. Unlike the initial classification and labeling requirements of HCS 2012 when implemented, hazardous chemical containers will not all need to be relabeled at one time without significant rulemaking, and neither will a single class of product. This means that unless an ag chem product has no substitute available on the market, the distributor will likely not be able to pass relabeling costs along to customers. Unfortunately, ag chem products are highly substitutable.

Summary of Warehouse Relabeling Costs

After evaluation of the data provided by CPDA member companies, it is apparent that the costs of relabeling or reworking product in the warehouse or reworking the product by shipping and repackaging elsewhere, varies greatly depending on the combination of:

- the product type (liquid versus dry);
- the container type (small jugs, large bulk tanks/totes, plastic bags); and
- the volume and value of the product.

There are no economies of scale in relabeling product so the cost to relabel high volumes of product containers can be crippling. The cost to relabel is the same for each individual container.

The smallest per-unit relabeling cost estimated by one of our member companies was for some 2.5-gallon plastic containers at \$1.50 each, which represents only 1.5% of the value of that particular product. For other companies, however, the per-unit relabeling cost for 2.5-gallon containers generally ranged from \$2.00 up to \$8.00, which represents 20%-60% of the value of that product.

For another product type, it would cost \$27.00 per 2.5-gallon container to relabel, which equates to 77% of the value of the product. The value of the total volume of this product is over \$12 million. The most expensive single container relabeling cost was about \$325, but the cost/value was only 10%-15%. The greatest single cost/value ratio came with relabeling small product packaging at 187%. Unfortunately, this product type can only be discarded at a loss.

The other large cost/value ratios come from relabeling plastic bags. Each bag would need to be opened and the contents poured into a new bag, either on-site or shipped off-site. The most extreme example we have for cost/value data is 204% with an inventory value of over \$6 million for the product.

Conclusion

As discussed above, the requested change to 29 CFR 1910.1200(f)(11) will protect the health and safety of workers who would otherwise be adversely affected by OSHA's current wording of the first sentence of that paragraph. The change cannot be regarded as controversial because its sole purpose, in keeping with OSHA's very own mission, is to protect the health and safety of workers in workplaces. The increased workplace hazards and risks involved in repackaging and relabeling sealed chemical products far outweigh any safety and health benefits of affixing an updated HCS 2012 label to the immediate hazardous chemical container.

As indicated in the December 9, 2016 response to our petition, OSHA has begun the process of updating HCS 2012 to align it with the sixth revision of the GHS. Now is a good time to consider all the unforeseen consequences that have arisen during the current implementation phase. Appropriate and necessary changes should be made to ensure that the intent of the HCS 2012 is upheld in all industry sectors. CPDA appreciates that the Agency has taken note of the points that we raised in our petition for consideration in upcoming HCS update rulemaking. We respectfully request that the Agency also take into consideration the issues we discussed in our December 11, 2014 letter¹¹ regarding EPA's "Released for Shipment" concept.

By submitting all the above supporting information, we demonstrate our commitment to the HCS 2012 update process. We hope this relevant and critical information sheds light on how the relabeling and repackaging process works from the industry perspective for manufacturers, formulators and distributors of warehoused hazardous chemical products. We believe the requested change from "shipped" to "manufactured" in 29 CFR 1910.1200(f)(11) would be a major stride by OSHA to assuring continued worker safety and health at all warehouse facilities.

Sincerely,



Susan Ferenc, DVM, Ph.D.
President

¹¹Supra, note 4.