Cost Information: Alliance for Chemical Distribution (ACD) E.O. 12866 Teleconference Meeting with OMB on OSHA Update to the Hazard Communication Standard Final Rule (RIN: 1218-AC93)

Examples of Marginal and Incremental Costs for ACD Members to Update Safety Data Sheets (SDS)

During the September 21, 2021, Hazard Communication Standard Informal Public Hearing, ACD was asked to provide examples of marginal and incremental costs for members to update SDSs.

In our written comments to OSHA submitted May 19, 2021, and in our testimony presented September 21, 2021, ACD raised the concern that OSHA's implementation cost estimates were severely underestimated. ACD provided the example of one member who estimated they would need to review 10,000 SDSs and update 4,000 more to comply with the revised standard and that even at OSHA's low estimate of .7 hours per SDS, that equates to **16 months** of dedicated work. ACD also noted that many member companies do not have the staff resources to produce their own SDSs in house, even with software, and must contract with outside authoring companies. These companies typically charge between $400 and $800 to produce an SDS and label for one product. If a company has 150 SDSs to update, which is conservative for many chemical distributors, the cost would be $60,000 to $120,000. This does not even include the time needed on other essential tasks, including working with the vendor on changes, conducting internal review, managing the documentation, and supply chain communication.

ACD hereby submits to OMB these additional details and examples to illustrate these costs further.

ACD Member 1 Example:

One member company outsources generation of all of its SDSs to a well-respected firm that specializes in this area. Like many ACD members, most of whom are small businesses, the company must outsource this task because no one on staff has the time to create SDSs while also managing process safety, training, accident investigations, reporting, and more. This company notes that even with outsourcing, OSHA's estimate of 0.5 hours for each SDS is far too low. Once the SDS is generated, the company's regulatory manager spends at least one hour reviewing each of these documents line-by-line.

Many ACD members must also spend staff hours working with their suppliers to verify information for the SDSs. During the 2012 final rule implementation, a staff member at the same company spent two hours per week working on this project, and it still took a full year to complete the work. Staff time costs can quickly accumulate. While a $20 per hour clerk can track down missing items, a $50 per hour or higher manager or someone with knowledge must review each SDS.

ACD Member 2 Example:

Another ACD member, also a small business, reports that when they updated their SDSs to comply with the 2012 HCS revisions, the flat rate from their vendor to update/create an SDS was $450 per copy. This price was actually a discounted rate because of a long-term relationship the company had with the authoring service. On top of that fee, were the costs of company staff/management time spent reviewing each initial SDS for compliance, explaining to all foreign and some domestic suppliers the reason for the change, revising product warning labels, training, and record keeping.

This ACD member estimates that today's cost for an outside authoring service would be $750 per SDS. This company further estimates another $250 per SDS for staff/management time spent reviewing the initial document to determine compliance and then review and approve the revised document and maintain appropriate records. The company further estimates a cost of $250 per SDS for staff/management time spent on extensive communications with the foreign supplier to make the changes on their behalf, updating product labels and training. This brings the cost to $1250 USD per SDS for imported products. This company imports 45 substances, making the total cost $56,250. This figure does not include the costs for domestically sourced products. The company estimates an additional $25,000 to update 20 SDSs from domestic suppliers of imported materials for which the SDS is not compliant.

On the fully domestic side, the company anticipates handling another 275 SDSs from assorted domestic suppliers. Based on past experience, the company estimates that approximately 225 of these will be fine and that document review, approval, and maintenance, followed by label revisions and training will cost $125 per document, or $28,125 total. The company estimates that about 50 of the domestic SDSs will require some form of revision with an estimated additional cost of $75.00 per document for a total of $3,750.

The total estimated cost for all of these items is $113,125, which is significant for a small business. These costs will accelerate if there is any impact on Emergency Planning and Community Right to Know reporting, as this would entail software changes.

ACD Member 3 Example:

Another ACD member will need to update SDSs and labels for approximately 700 products. This company has a Regulatory Analyst on staff who is the primary SDS/label author and two other staff members who have other job roles but can serve as backup. The company also works with an outside software company to help produce the SDSs and labels. This company anticipates spending more than $1.1 million in direct and indirect costs for training, software, SDS and label implementation, label purchase, and relabeling. The company also anticipates it will take almost two years to implement the changes fully as illustrated below.

	Item	Number of employees	Number of Hours per person	Cost per hour, $	Total cost , $	Materials Cost per employee, $	Total Material Cost, $	Total cost
DIRECT COSTS								
	SDS Author Training	5	16	75	6,000	850	4,250	10,250
	Training for employees	500	2	45	45,000	0		45,000
	Software Implementation	5	160	75	60,000	0		60,000
	SDS and Label Implementation	1	2000	75	150,000	0		150,000
	Label Purchase	1	40	75	3,000		7,000	10,000
	Re-labeling containers	30	80	45	108,000			108,000
							Direct Cost Grand total, $	**383,250**
TIME								
	SDS Author Training	2 days					Indirect Cost Estimated 3x Direct Cost , $	**$ 1,149,750.00**
	Company Training	1 month						
	Software Co. Full Implementation	7 month						
	SDS/Label Preparation	8.5 month						
	(for about 700 SDSs alone)							
	Label Purchase	2 month						
	Re-Labeling Containers	3 month						
	TOTAL TIME	**~ 22 months**						

These examples represent the costs for only three of ACD's chemical distribution industry members, but all chemical distributors will face the same costs and challenges, resulting in direct and indirect costs well into the tens of millions of dollars for this one industry segment.

Specific Information from Software Companies Regarding Timing for Updates to Safety Data Sheets and Labels

During the September 21, 2021, Hazard Communication Standard Informal Public Hearing, ACD also was asked if we had any specific information from software companies regarding timing for updates to SDSs and labels.

One SDS authoring company that works with ACD members anticipates that it will take between five and ten minutes to regenerate each SDS based on the Global Harmonization System (GHS) Version 7 dataset. This firm notes that most of their customers have 1,000 or more products in their databases. The firm has several customers with nearly 5,000 products. Assuming 1,000 products, using the automated software, it would take 83-167 hours for the SDS regeneration.

In addition, this company notes *that if OSHA adopts the proposed change to include downstream reactions in the SDS, this process will become much more complicated, if not impossible*. *This change will render all existing SDS software data sets obsolete, as they are based on ingredient data. It is unclear how this can even be automated as it will remove the empirical evidence that has been gathered over the last 15 years and replace it with a product-by-product evaluation of the hazards, which is contrary to the basic principles of GHS*.

This company's ingredient GHS classifications, and those of several of their competitors with whom they have spoken are based on the data the European Union has been gathering since 2007. This contains consensus classifications of GHS classifications for about 100,000 chemicals. Per the GHS guidelines, the ingredient-based data can then be used to evaluate the hazards for the

mixture product, without the need for additional testing. <u>There is no source for downstream reactions for all products sold, nor are their hazards relevant to the general shipping, storage, or handling of the products being sold</u>.

Once the SDS has been generated, the timeline for labeling depends on the method used. Some SDS authorizing systems have interfaces with label generation systems, which can expedite the process. If a customer is using another third party or creating the labels in house, the process will take longer.

One label provider that works with many ACD member companies reports that it can easily take days per product to set up a label from start to finish because of the review process. It is not the software or the actual set up, but the review and approval process that takes substantial time.

If a company is "lucky," they have one person that can set up a label and do all the reviewing themselves. In this case, a label can be done in 15 minutes to an hour, depending on complexity. However, this is a very best case and is extremely rare; and the larger the company, the longer it takes. For a larger company, it is common that the person creating a new label is setting it only to have it further reviewed by the product development, sales and marketing, regulatory and technical, and transportation staff. If the label is not perfect in the first round of a review by these many experts, a change is made, and another round of reviews takes place. It is not uncommon for there to be three and four rounds and a whole week to get a single product approved. If a critical reviewer is bogged down in meetings or out on travel, the entire process is delayed.

Revisiting ACD Member 1 in the example in the previous section who contracts with the well-respected firm to generate their SDSs – Even though their outside SDS authoring company has extensive experience in this area, it takes them one to two months to turn around an SDS. The ACD member recently worked with the firm to update their SDS for one chemical, and it took the firm two months. This was a stand-alone instance and not part of the intense rush that will take place when everyone is working to comply with the updated HCS. When the ACD member worked with the outside firm to update their SDSs to implement the 2012 HCS changes, it took a full year; and this company handles fewer chemicals than many ACD members.

Revisiting ACD Member 3 in the previous section - Depending on the extent of changes, this company reports it could take a considerable amount of time for their SDS and label software company to update information in their system. For example, when the U.S. Environmental Protection Agency updated their Toxic Substances Control Act list to incorporate the "Active" and "Inactive" chemicals lists, the official update took more than two months for the software company to establish a final product.

Once the software company updates the general software, they then need to implement the software to each customer company. A recent update that this ACD member requested took five months to be implemented in their system, after requesting to be moved up on the list. Once the ACD member does obtain the software update, there would be approximately 600-700 internally produced product SDSs to update with accompanying labels, 1 to 2 labels per product due to printers available across the company accepting different formats/sizes.

In addition, the HCS update will require U.S.-based companies to force suppliers to comply with regulations of having a U.S. location or generating SDSs for them. The faster of the route appears to take on the extra responsibility of authoring imported product SDSs. This would likely double the

SDSs this ACD member would need to author, along with accompanying labels. At approximately 1.5 hours per SDS to update, review, and implement, this would be 2,000 hours or roughly 8.3 months of continuous uninterrupted work to fully complete for a single SDS author. As for just the labels, the company would need a new label purchased from the software company, which would likely be a delayed project by the software company as the new HCS software update would take priority. Once the ACD member receives the label, it would take approximately 20 minutes to complete the label for each product.

Conclusion

ACD urges OMB and OSHA to consider fully the additional resources the regulated community, especially chemical distributors, will need to spend on software updates, review, and supply chain communication to implement HCS changes. This is truly a massive undertaking for these companies.