Managing Full Material Disclosures in the Global Supply Chain

There has been a worldwide increase in chemical regulations. Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) Regulation, Restriction of Hazardous Substances (RoHS) Directive in the European Union (EU), and now the emergence of the Waste Framework Directive (SCIP database) have led the way for other areas of the world to adopt chemical regulations at a rapid pace (e.g. China REACH, China RoHS, China Waste Electrical & Electronic Equipment (WEEE), Korea REACH, California Proposition 65, US Conflict Minerals).

Many of these regulations restrict and require reporting of chemical substances found in materials from which our parts, components, sub-assemblies and whole goods are manufactured. In order to comply with these legal requirements, and ensure market access, our industry including our supply chains, must work in a coordinated manner to provide full material disclosure (FMD). The regulatory challenges have become more complicated over the last decade due to increased product complexity, deeper global supply chains, with growing numbers and expanding scope of regulations.

Many data formats and various levels of material declarations currently exist to demonstrate compliance with these regulations. However, variability in data collection approach have created a large amount of overlapping, activities throughout the supply chain. This results in incremental and repetitive data collection activities that increase the cost of our products. AEM and our OEMs and suppliers believe the most efficient way to comply with these (and future) legal requirements is through full material disclosure (FMD) – which provides detailed information about all of the chemical substances contained in a part, component or other good. We are also utilizing industry experts to create a Declarable Substance List (based upon GADSL) which must be reported for all applicable Substance regulations. Part of this process will be an allowance for non-disclosure of confidential business information substances up to 10% by material weight threshold as long as they are not a regulated substance.

The AEM recommended material data system is the Compliance Data Exchange system also known as CDX. CDX was created by DXC Technology. This system interfaces well with various industry reporting standards such as IPC-1752, IPC-1754, IEC 62474 and IMDS. Adoption across the OEMs and their tier one suppliers has already begun with more planning to roll out within the coming months. The faster we can implement a single solution the easier data sharing and collection will become.
To initiate the materials data collection process, many OEMs have begun collecting data as part of their PPAP program. Rolling this requirement into PPAP or similar part approval programs is a way to slowly acclimate the supply chain to this data collection process for newly requested components and materials. This will be an integral and enforceable topic of the approval process. This practice will also prepare the supply chain to be more educated in the process for providing data on historical and existing supplied parts that pose a risk of non-compliance to the final products in the marketed regions. It is recommended that AEM members and their suppliers adopt PPAP or other similar part approval process for their supply chains in preparation for providing this material data upstream.

AEM and our Regulatory Compliance Steering Committee strongly encourages companies across all our supply chains to be aware of these regulations, embrace our recommendations and immediately start taking actions. Further information about tools and educational resources can be found at https://www.aem.org/safety-and-technical/.

AEM Regulatory Compliance Steering Committee