



## **Protecting Workers from Hazardous Chemical Exposure in the Electronics Supply Chain**

**July 2015**

### **Background**

Protecting workers and communities from exposure to hazardous chemicals has been a core component of EICC's Code of Conduct and audit program since its inception. Through the efforts of EICC and our member companies, the electronics industry has developed engineering controls, worker health and safety training, and rigorous facility audit programs to ensure that our facilities and those of our suppliers are among the safest across all industries.

To address the ongoing challenge of reducing hazards and protecting workers from hazardous chemicals in the electronics supply chain, the EICC has made chemical management a priority issue in 2015. As an industry, we plan to work collectively to drive chemical awareness and health and safety training even further down into the supply chain, helping facilities develop programs to eliminate worker exposure to harmful chemicals, and ensuring that workers know the potential chemical hazards on the job, and how they can protect themselves from exposure.

### **Where We Stand**

Unsafe worker exposure to hazardous chemicals is unacceptable in the electronics supply chain. As an industry committed to providing our employees with a healthy and safe work environment, we cannot tolerate any instances where workers are not properly trained or protected from on-the-job risks. To ensure our workers are safe, we need to make sure that they understand the hazards associated with chemical use in the workplace and know how to protect themselves and their co-workers from these hazards. We must train facility managers, in our own factories and in our supply chain to reduce potential chemical risks and ensure every worker is adequately protected from day one in working with chemicals. We have a responsibility to review the performance of our factories and our suppliers with periodic third-party audits, using experienced environment, health, and safety (EHS) auditors to identify violations of our code of conduct related to chemical use. Through our programs (awareness, education, assessment, audit, and corrective action) we have a responsibility to properly manage worker exposure to hazardous chemicals, and to remediate any situations that could pose a risk to worker health and safety.

### **EICC's Work on Hazardous Chemical Management – Risk Assessment, Audit, Corrective Action and Closure**

EICC has provided a strong compliance framework around process chemicals since its inception in 2004. In the EICC [Code of Conduct](#), there are provisions to identify, evaluate and control worker exposure to

chemicals; to safely handle, move, store and dispose of hazardous chemicals, to prevent, manage, track and report occupational injury (including chemical exposure), and to encourage workers to share concerns about any working conditions without fear of discrimination, reprisal, intimidation, or harassment.

In 2015 the EICC added an additional Code provision to strengthen health and safety communication, making sure that information on hazards is communicated to all workers in a language they can understand, and clearly posted in the facilities within our members' supply chains.

These Code provisions are enforced through EICC's Validated Audit Process (VAP), and members work with their suppliers to identify and close any serious findings related to chemical management and chemical exposure. When the independent auditors go on site, they request records of industrial hygiene analyses and hazardous chemical inventories for review, and verify what precautionary measures are taken to address the risks identified. The auditors also look to see if the companies in question are following the country and local health and safety laws regarding chemical exposure. This year EICC has also committed to having EHS specialists join VAP audits where a significant chemical risk has been identified through the initial assessment process.

Working with Environmental, Health and Safety (EHS) experts, the EICC conducted a complete review of the EHS component of our audit protocol in 2014, identifying and clarifying dozens of key EHS sub-provisions to validate as auditors look to confirm a facility's EHS management policies, programs and performance.

Since 2011, the EICC has offered annual face-to-face EHS training in Asia for members and suppliers focusing on hazard reductions (including chemical management). This year the EICC also began offering e-learning courses in environment, health and safety through our e-learning Academy, making trainings available to many more facilities online.

### **Going Further – EICC's 2015 Plan for Addressing Chemical Risks**

While the electronics industry has made significant improvements in tracking, reducing, and ultimately eliminating many potentially harmful chemicals in recent years, the EICC recognizes that more can be done to reduce the risk of worker exposure. Research and development to identify safer alternatives for hazardous chemicals needed to build electronics will continue and safer alternatives should be made commercially available. We want to ensure that all process chemicals are handled safely and responsibly and that workers are protected from exposure.

To achieve these aims, in 2015 the EICC launched a chemical management task force, which is developing a program to better identify and properly manage chemical hazards in our supply chains, create training programs and tools to help protect workers from chemical exposure, and identify opportunities to reduce the prevalence of harmful chemicals.

Working with the task force and the EICC Board of Directors, EICC has developed a plan to reduce the risk of chemical exposure for workers in the electronics supply chain. The plan includes the following elements:

1. Continuing to improve our audit protocol to identify chemical hazards in our supply chain: In 2014 the EICC launched a thorough review of its VAP audit protocol, and identified more than a dozen improvement opportunities to strengthen EHS provisions. The EICC has also made EHS audit training a priority in 2015, and is improving auditor chemical management competencies with webinars and face-to-face training. Working across EICC membership on a range of additional risk assessments (beyond the audit) we can identify additional chemical risks in the supply chain.
2. Empowering workers through education and training on chemical management: One of the most important steps in an effective chemical management program is ensuring workers and managers understand the hazards associated with the chemicals they are working with, and that they know how to effectively protect themselves from these hazards. This year EICC will be working with partners to develop industry-wide fact sheets and online training in chemical management for workers and managers. This training will not only be on chemical hazards and appropriate precautions when storing, using, and disposing of chemicals – it will also include developing stronger management systems to reduce risks and improve long-term facility hazard reductions – which in turn will lead to longer-lasting effective chemical management programs.
3. Work to phase out hazardous chemicals and pursue safer alternatives, where feasible. In developing a global chemical management program, the most important first steps are to identify chemical hazards in the manufacturing process and make sure workers are protected from these hazards through engineering controls, PPE, and worker awareness and training. When it is possible to phase out the use of a hazardous chemical from processes or replace it with an equally effective and commercially available alternative that is safer, EICC will encourage its members to take this step.

## **Conclusion**

As the EICC continues to address the issues around chemical management in manufacturing processes, we welcome any feedback on the organization's policies and work plan. This fall (and going forward) the EICC plans to report on the progress of our chemical management efforts.