



ENVIRONMENTAL COMPLIANCE FOR HIGH-TECH MANUFACTURERS

Simplifying Environmental Compliance Across the Supply Chain

As demand for environmentally friendly electronic products grows, manufacturers must comply with a dizzying array of new regulations governing the use and disposal of hazardous substances. The SAP® solution for environmental product compliance integrates all compliance processes and takes the work – and the worry – out of regulatory compliance. The solution fosters collaboration with customers, suppliers, and government bodies; enables swift responses to changing regulations; and minimizes business risk.

Electronics manufacturers face a growing number of new and complex regulations governing the usage and disposal of hazardous substances used in electronic products. The European Union (EU), for example, is enacting two new stringent environmental regulations that impact all products sold in the EU. The first, the Waste from Electrical and Electronic Equipment directive effective August 13, 2005, establishes criteria for electronic waste and requires manufacturers to finance the treatment and recovery of discarded electronic goods. The second, Restriction of Hazardous Substances, limits the amount of hazardous substances used in products and includes stringent restrictions on banned substances. Manufacturers must be in compliance with this legislation by July 1, 2006 to sell and ship products to EU members, many of which are enacting additional country-specific regulations as well.

One thing is clear: the regulatory landscape is growing more complex every day, and companies have little time left to reach compliance. And noncompliance is not an option, because violations can carry fines into the millions of dollars.

While these regulations represent huge strides toward more environmentally friendly products, they also present tremendous challenges for the electronics industry. As a consequence, all participants in the electronics supply chain – not just manufacturers, but their customers and suppliers, as well – are required to redesign complex processes and systems, often quickly. Firms need to rapidly gain the ability to manage compliance across complex supply chains – from component suppliers to contract manufacturers – that contribute up to hundreds of thousands of components used to manufacture goods.

High-tech manufacturers must be able to diligently and proactively identify violations and risks, manage and report on enormous amounts of data, and collaborate seamlessly across departments and with partners and customers. And as the regulatory environment evolves, companies need ways to continuously update compliance lists to reflect new requirements. Such far-reaching changes come with a steep price tag, but they must be made to avoid fines, lost sales, and diminished brand value.

A Comprehensive, Flexible Solution for Environmental Product Compliance

The SAP® solution for environmental product compliance simplifies the process of complying with today's constantly evolving environmental regulations. A powerful tool for managing the full scope of global regulatory requirements, this joint solution from SAP and TechniData supports and tightly integrates all business processes associated with internal, customer, and supplier compliance management and reporting. And by automating manual compliance tasks and enabling end-to-end supply chain collaboration, it increases efficiency and ensures data accuracy.

The solution combines the SAP Environment, Health & Safety application with TechniData's Compliance for Products™ application, enabling it to support business processes such as sustainability reporting, compliant product design, labeling, dangerous goods management, centralized master data management, and business-to-business collaboration. With preconfigured integration into back-end systems and full integration with the mySAP™ ERP solution, customers can quickly move toward compliance without having to build costly system interfaces. The solution's integrated approach to environmental compliance enables organizations to realize lower total cost of ownership, increased efficiency, and unsurpassed data accuracy.

The SAP solution for environmental product compliance supports the following business process areas:

- Compliance management
- Customer compliance management
- Supplier compliance management
- Compliance reporting

Compliance Management

The SAP solution for environmental product compliance includes a management cockpit that places all relevant compliance information at the fingertips of authorized employees. In addition to providing access to a central database for managing and controlling environmental product compliance, the cockpit allows compliance managers to develop material-level composition lists needed to analyze individual products for environmental risks. Employees can generate a comprehensive list of parts, constituent materials, and pure substances used as products progress through development. They can then compare this data to a list of banned substances and materials, thereby ensuring compliance throughout the development process.

The solution also accommodates processes for both new-product development and introduction and engineering change by seamlessly integrating supplier and customer information. Partner-supplied product structures are easily incorporated into the solution via sophisticated data exchange capabilities enabled by the underlying SAP NetWeaver™ platform. In addition, seamless integration into mySAP ERP offers the most flexible, functionally complete environmental compliance management solution at the lowest total cost of ownership.

The result is enhanced productivity and a significantly lower risk of noncompliance. In addition, companies can minimize the number of design iterations required for full compliance by enabling design engineers, sourcing professionals, and product managers to manage compliance data throughout development.

Customer Compliance Management

The SAP solution for environmental product compliance helps high-tech manufacturers manage compliance-related customer interactions efficiently, while adhering to the latest legislation. With support for multiple data-exchange formats, including NEMI, RosettaNet, and IMDS, the solution enables efficient communication and collaboration with customers to support ongoing product compliance. Companies can also quickly generate material data sheets and manage all necessary product properties and component specifications. Based on this data, they can generate detailed product documentation for distribution to customers for compliance control purposes.

Businesses can also manage multiple customer requirements simultaneously by leveraging the solution's abilities to support customer- and country-specific lists of regulations, declarations, and prohibitions and to track recycling indices and disposal certificates required for compliance. In addition, the solution maintains customer shipment records for comparison against as-shipped bills of material, enabling efficient due diligence while simultaneously providing the transparency required for handling audits and researching erroneous shipments. Ultimately, organizations can execute and track all necessary tasks required to maintain full compliance – and perform these tasks more efficiently for increased competitive advantage.

Supplier Compliance Management

Because today's high-tech supply chains are so complex, many companies struggle to manage and track their supplier base regarding compliance with the latest environmental regulations. Without an efficient way to communicate with suppliers and to adapt supply chain processes as regulations change, businesses risk the consequences of noncompliance.

The SAP solution for environmental product compliance empowers organizations to manage supplier interactions proactively to ensure full compliance. Supplier self-services simplify collaborative processes such as uploading substance lists or maintaining the status of open compliance requests, resulting in increased efficiency and improved collaboration. The solution also automates distribution of all compliance-related product information and allows companies to work with suppliers to organize and monitor the exchange of material data and purchase agreements. Companies can also fully integrate waste disposal partners into logistical processes as well as track supplier activities and rate compliance performance using scorecard functionality. As a result, organizations can ensure compliance, reduce costs, and make life easier for their suppliers – which can greatly improve supplier relationships.

Compliance Reporting

The SAP solution for environmental product compliance supports flexible compliance reporting so that companies can quickly generate reports in the formats required by regulatory authorities. Organizations can generate predefined standard reports for review purposes or build customized reports to meet regulatory requirements as well as analyze data by using business intelligence functions provided by SAP NetWeaver. Using data selection options and controls, organizations can have confidence that final reports submitted to authorities are presented in the proper format and contain exactly the right information.

An Adaptive Solution

Because environmental regulations are changing so rapidly, the SAP solution for environmental product compliance has been designed from the ground up to accommodate change. As new compliance regulations are introduced around the globe, new compliance lists can be added, and the solution can handle the compliance tracking. If an existing list changes, updates can be made quickly and easily. As lists are added or changed, the solution can generate reports on products to determine their compliance. Suppliers can then be contacted to determine whether any of the materials they supply contain a newly regulated substance, and, if so, a manufacturer-to-supplier data exchange can be triggered automatically through the solution's collaborative capabilities.

The Key to Competitive Advantage

The SAP solution for environmental product compliance integrates all pertinent processes and takes the work out of regulatory compliance. As a result, customers gain the following advantages:

- Increased productivity via tight integration of compliance measures with core product development and manufacturing processes. As a result, compliance becomes an integral part of the way companies do business rather than an ad hoc process requiring manual intervention.
- Reduced compliance costs through automation. Data is automatically collected in a central repository where it is made available for analysis and reporting – and is always at employees' fingertips.
- Minimized business risk through meticulous attention to detail. Because regulatory requirements are linked to development and manufacturing processes to ensure full compliance, businesses can operate with confidence, even as regulations change.

At the same time, the SAP solution for environmental product compliance is critical for executing on business strategy. Compliance has become a boardroom topic. The fact is, all manufacturers face the same regulatory pressures. To survive, companies need to differentiate themselves from the pack by complying with regulations more quickly and efficiently. By streamlining compliance and integrating it into core product development and manufacturing processes, manufacturers can focus on what they do best. As a result, they can get products to market faster and more effectively than competitors relying on manual, error-prone compliance processes.

Take the Next Step

For more information about how SAP and TechniData can help your company ensure compliance with environmental requirements and avoid costly consequences of noncompliance, visit www.sap.com/industries/hightech.

Powered by SAP NetWeaver

The SAP solution for environmental product compliance is powered by the SAP NetWeaver platform, the open integration and application platform that enables change. SAP NetWeaver helps companies align IT with their business. It allows companies to obtain more business value from existing IT investments and to deploy a services-oriented architecture. SAP NetWeaver reduces total cost of ownership and complexity across the entire IT landscape.

SAP NetWeaver powers the mySAP Business Suite family of business solutions, SAP xApps™ packaged composite applications, and partner solutions. It provides the best way to integrate all systems running SAP or non-SAP software. SAP NetWeaver unifies integration technologies into a single platform and is preintegrated with business applications, reducing the need for custom integration.