

Summary of responses to FSANZ's industry packaging survey

On-line surveys were developed to gather industry information on materials and articles used in food packaging in Australia and New Zealand, approaches to legislative requirements and associated quality assurance and control processes. Two surveys were developed to target both packaging manufacturers and the food industry. The surveys were developed with input from the FSANZ Industry Advisory Group on Food Packaging Materials and were distributed through the respective Australian and New Zealand Food and Grocery Councils and packaging councils. Twenty-nine responses were received in total, nineteen from the food industry and ten from manufacturers. The responses below (Table 1) are conclusions drawn from respondents to the surveys and are indicative only of an overall packaging supply chain response.

Table 1: Summary of food packaging manufacturers and food industry survey (N.B. information reflects survey responses only)

Material type and specification	
Packing materials used/manufactured and their sources.	<p>A variety of paper-based, plastic forms, metal, glass and ceramic packaging materials are used in food packaging.</p> <p>The packaging materials that are most used by the food industry are aluminium, carton board (folding), plastic laminates, cardboard/paper (recycled), plastic mono-layers, cardboard/paper (virgin) and rigid plastic. Composite packaging, co-extruded plastic, ceramic and steel materials are least used by the food industry. The packaging industry mostly manufactures plastic mono-layers, co-extruded plastic, rigid plastic, plastic multi-layers, cardboard/paper (virgin) and carton board (folding). Glass, ceramic and steel packaging are the least manufactured packaging materials.</p> <p>Packaging materials are mainly sourced or manufactured in Australia or New Zealand. For plastic-based materials, approximately 50% are manufactured in Australia or New Zealand using imported materials. The majority of recycled cardboard/paper packaging is manufactured and sourced within Australia or New Zealand, whereas more than 50% of virgin cardboard/paper packaging is imported or manufactured/ sourced in Australia or New Zealand using imported materials. Imported materials are sourced from multiple countries including China, Europe, Japan, Korea, Scandinavia, Singapore, Slovenia, South America, South Africa, Taiwan, Thailand and USA.</p> <p>On the whole, supplier traceability for packaging material is good and full documentation on materials is supplied. Some companies have poor or inadequate trace back though, for example, a company may not necessarily know where recycled content in packaging materials is sourced from.</p>
Future trends	
Changes in packaging technology and approach to nanotechnology	<p>Approximately half of the companies surveyed anticipate that there will be changes to the types of packaging materials used in the next 5 years. Active packaging technology is already being employed in some instances and increased use of barrier and scavenger materials to extend shelf life is an area of growing demand. Post-consumer recycled material in plastic films or films from renewable sources and oxygen scavengers in films were identified as possible uses in addition to fast moving consumer good packaging that utilises inks to create electronic circuitry on labels.</p> <p>Some companies are maintaining a watching brief on nanotechnology and food packaging, whilst others are actively investigating potential future uses.</p>

	<p>Companies identified that they are investigating barrier improvements (e.g. UV blocker) delivered through nanotechnology, but are taking a cautious approach due to public perception concerns and potential food safety, and occupational health and safety concerns. As with any innovative technology, industry will assess the risks against the commercial benefits of investing in nanotechnology. This activity is being investigated by larger companies' global development teams.</p>
<p>Legislative requirements and compliance</p>	
<p>Current Code requirements for packaging</p>	<p>Whilst it was recognised that Australia and New Zealand have regulations for mandating the production and supply of safe and quality food products in the market, the majority of respondents (60 – 80%) indicated that the current requirements for packaging in the Code are inadequate ('minimalistic at best') or not suitably specific for them to manage risks and do not meet the requirements of their customers.</p> <p>Several respondents indicated that they understand that by meeting EU and/or US legislative requirements for FCMs they 'by default' meet Australia New Zealand standards (through the Codes' reference to the Australian Standard AS2070). Meeting EU and/or US legislative requirements was generally accepted as reasonable evidence of compliance. It was also stated that 'Australia is viewed as not having any legislation for packaging in contact with food' and that by meeting the EU and US regulations, the standards in the Code are 'largely irrelevant' and do not assist exporters as the level of requirement is significantly lower than those of export markets. Larger companies also expressed concerns that local manufacturers of packaging may be unaware of the requirements of EU or US legislation, or indeed the Code.</p> <p>The current wording in the Code is thought to be dated and needs clarification. One respondent stated, 'there is no stated requirement that manufacturers or retailers need to have evidence that shows food contact packaging is compliant with pertinent regulations/directives.'</p> <p>Concerns were also expressed regarding:</p> <ul style="list-style-type: none"> • enforceability of current standards • clarification of the process for confirming compliance to regulations for new packaging formats, such as functional packaging. • Lack of legislative requirements regarding the safety of unknown, new and emerging packaging materials. • the need for a better understanding of chemical migration into food, especially with highly recycled content in paper. • the implications of the increased use of recycled materials and their regulatory impact: guidance on this for packaging suppliers would be welcomed. • the importation of cheap packaging materials which cannot be verified as safe.
<p>Reference to overseas packaging legislation</p>	<p>All packaging manufacturers refer to the EU plastics regulations (EU 10/2011) and, in the majority of cases, also to the US FDA regulations (21 CFR 170-199).</p> <p>Other international FCM legislative requirements referred to include those from: Canada, China, Germany, Gulf States, Indonesia, Japan, Korea, Russia, Switzerland, Thailand and Vietnam.</p>

Compliance activities	<p>For packaging manufactures, compliance activities and testing are mainly based on meeting overseas standards. Many companies issue a product guarantee letter (eg. Supplier Certificates of Conformance, material constituent analysis and final packaging migration testing) to customers confirming product complies with relevant Australia/New Zealand, EU and or US legislation. Converters (of packaging materials) responded that they rely on their customers to identify what specifications they are required to meet.</p> <p>Concerns regarding compliance were also expressed regarding:</p> <ul style="list-style-type: none"> • Identifying laboratories in Australia/New Zealand to carry out analytical tests and migration studies to substantiate (raw) material declarations • receipt of satisfactory compliance documentation detailing raw material components and confirming that the materials meet the standards • obtaining translations of supplier assurance documentation from overseas • lack of official translations of some international standards <p>Food industry brand owners differed in their response regarding whether they are solely responsible for regulatory compliance of materials used. Some companies, whilst accepting that they are responsible for placing a product on the market, require supplier assurance (via declaration) from the converter and their suppliers. Other companies accept all responsibility for regulatory compliance.</p> <p>Of those food businesses that request certificates of compliance or analysis (approximately 70% of respondents), the majority obtain certification for all materials used. In some cases, a Certificate of Analysis (CoA) is available upon request if needed. The CoAs all state that materials comply with Australia/New Zealand and/or specific overseas requirements (China, US or EU). However, some companies stated that there were problems obtaining compliance information to meet EU or US regulations.</p> <p>The majority of food businesses who sell products to end users do not ask for, or keep a record of, the end use of the packaging.</p>
Quality assurance and quality control	<p>Responses from the manufacturing and food industry sectors demonstrated that they implement a range of general food safety systems (eg. AIB, BRC, ISO 9001, ISO 22000, SQF 2000, FSSC 22000 and HACCP-based systems) which document the processes and quality checks required to manage all quality and food safety risks/hazards related to the use and manufacture of packaging.</p> <p>In addition, depending upon the type of material produced, some manufacturers refer to specific packaging codes of practice, for example: CEPI¹, EuPIA², PAS 223³, REACH⁴ or their own global companies' specific standards.</p>
Specific concerns regarding food safety	<p>One respondent raised concerns with mineral oil contamination of recycled carton board which had restricted the sourcing of board stock, they "are currently only using recycled board that has been certified and virgin board for food contact paperboard."</p>

¹ Confederation of European Paper Industries

² European Printing Ink Association

³ Publicly Available Specification (PAS) 223: Managing Food Safety for Packaging

⁴ Registration, Evaluation, Authorisation and Restriction of Chemical substances (EC 1907/2006)