

22 December 2014

Food Standards Australia and New Zealand,

PO Box 7186

CANBERRA BC, ACT, 2610

Via email: submissions@foodstandards.gov.au

Dear Food Standards Australia New Zealand,

Submission – Proposal P1034

Chemical Migration from Packaging into Food

The Australian Beverages Council (the Beverages Council) is the peak body representing the \$7 billion non-alcoholic beverage industry. The Beverages Council provides a single, united industry voice to a range of stakeholders including government, non-government organisations, media and the general public.

Membership of the Beverages Council comprises over 95% of the non-alcoholic industry's production volume and is comprised of multi-national companies, small and medium business. The Beverages Council has two dedicated category divisions – Fruit Juice Australia and the Australasian Bottled Water Institute, which represents the unique interests of members manufacturing juice and bottled water products respectively.

It is understood that the purpose of Proposal 1034 is to assess whether there are unmanaged public health and safety risks relating to the chemical migration from packaging into food (CMPF).

The Beverages Council notes and agrees that

- The growth of imports of “empty” packaging – which is increasingly an internationally tradable commodity;
- The increasing concentration of the sector – there are just 2 glass packaging manufacturers in Australia, approximately 6 metal can manufacturers and 2 major corrugated box manufacturers, which together account for over 90% of the market;
- Competition from domestic, and increasingly global, manufacturers has increased

with the result that margins are tight;

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- Increasingly, the major users of packaging (both brand owners and retailers) are sourcing their packaging from overseas sources, often at a lower cost;
- The multinational companies now adopt global packaging standards (eg EU or US) which Australian suppliers of packaging must meet

The industry has a high level of market share concentration. The two major packaging manufacturers in Australia (Visy and Orora (previously Amcor)) are Australian owned, as are a substantial proportion of small and medium enterprises.

The Beverages Council's members work closely with these suppliers as an integral of developing their quality assurance programs and have developed close international relationships with such suppliers to ensure that compliant product is utilized throughout the supply chain.

These products include the full gamut of materials used in the manufacture of beverages that includes primary containers, (PET, Glass and Cans), closures, labels, inks, adhesives, cardboard cartons and printed cups. The supply chain in most modern facilities will also extend to encompass all ingredient and contact surfaces that ingredients come in contact with, such as storage containers.

Members have noted that their quality assurance systems have a strong reliance on a fully completed documentation, whereby traceability and certificate of compliance are stringently maintained with product rejected accordingly.

A member has offered a case study of note that involved chemical migration from storage pallet into the package and then into the product. The chemical was identified as 2,4 dibromophenol which had caused a taint in the product. The manufacturer identified 20 potential sources for halophenol contaminants which were systematically eliminated. This shows the complexity of the manufacturing environment and the level of control needed by all manufacturers to ensure a safe product is delivered to the consumer.

The root cause analysis indicated that the pallets or containers were the most likely route to these taint chemicals getting into the plant and as a result we revised the supplier pallet and container requirement to reduce the risk based on AFGC report.

1	QC Lab	Sensory analysis	Revise sensory procedures. Revise sensory procedures to include BEVERAGE
2	QC Lab	Sensory analysis	Recalibrate tasters. Consider sensory procedure. Pre-start sample from the pasteuriser return line to be checked against retained batch sample with the addition of two further testers from panel Team



			Leaders and above. Include start-up check. Reinforce need to attend training with Production co-ordinators
3	Supplier	Chemically treated pallets	Updated supplier requirement on pallet treatment/use of barrier protection Investigate potential for suppliers to use plastic pallets.
4	Supplier	Transportation containers	Updated supplier requirement on container selection and inspection
5	Supplier	Paper used in packaging materials	Check manufacturers take steps to avoid using phenol, halophenols or derivatives. Understand how much recycled content in paperboard.
6	Supplier	Paper used in packaging materials	Monitor level of halophenols in packaging materials
7	Inwards Goods	Chemically treated pallets stored in areas where they could result in contamination through contact with chlorine based chemicals Lots of non Chep pallets in vulnerable locations where they could get wet	Check for presence of non Chep pallets in vulnerable areas. Eliminate if present Lift pallets off floor in areas where contamination might occur Purchasing to follow up with suppliers concerning treatment of the pallets used Inwards Goods to investigate option of raising pallets of the floor to reduce risk
8	Inwards Goods/raw materials & packaging storage	High levels of relative humidity could lead to leaching of taint chemicals from packaging	<ul style="list-style-type: none"> • Measure humidity of storage areas. • Consider options for separate storage areas with controlled environment • Implement test of key areas once hygrometer is purchased. Possibly included as part of GMP audit
9	Plant	Pallets and corrugated boxes in production areas when chlorine based chemicals are in use.	Measure risk and remove from vulnerable areas if appropriate Only Chep pallets used in packing area for QC samples and none used in filling hall
10	Outside storage	Storage conditions of raw materials and packs	Review risk and seek to eliminate need for external storage or improve control if necessary Understood from suppliers that there is little risk but visit need for verification
11	Pipe work	Pipe work & DI Plant	Has any new pipe work, especially HDPE been introduced, particularly if it carries water. Check for taint chemicals
12	Cleaning	Algicides & disinfectants	Are they chlorophenol based? Avoid cleaning with water with phenol and chlorinated chemicals – No they are



		But could they react with anything else to produce them?	not.
13	Chillers & cold stores	<p>Insulation: Stroven Holdings</p> <p>Concern over panel joins or damage which may allow moisture and taint chemicals out.</p>	<p>check materials do not contain phenol and have not been treated with halophenol fungicide</p> <p><u>Sandwich Panels</u> Metalcraft panels (that which Stroevers has installed around the site) Phenol is used in the adhesive to bond the expanded foam together. The expanded foam is sheathed in a metal coating (Colorsteel) which would eliminate the possibility of any leaching Phenol (Triclosan) is also found in Microban, an additive only available in the paint colour Tatiana used on colorsteel.</p>
14	Boiler, pasteurisers	Waste water and heated process water - Spirax	Check boiler chemicals and process water for halophenol content after prolonged periods of use. Process water from tunnel pasteurisers. Send sample for analysis
15	Finished Product (Flavoured Beverage)	Consistency of taint	Taste samples from across the batch and include samples from the start of Flavour which followed Flavour still to be tasted.
16	Raw materials in Flavour batch	Initial tasting did not detect a taint	To be repeated but sensory to be repeated after simulating pasteurisation process.
17	Product flow	Changes have been made to product delivery to filler bowl.	<p>Understand risks/changes associated with product flow alterations</p> <p>Propose engineering alterations to prevent accidental contamination with liquid in dead space</p>
18	Pallet risks	Understand risks associated with pallets.	<p>Visit CHEP</p> <p>Technician. Little contributory knowledge gained</p>
19	Water Supplier	Any risk from cleaning process and chemicals?	Audit on 25/7
20	ACB also produce 2,6 DBP	Fruit residue/reuse of caustic. Should be dumped weekly	Follow up practise and procedures. Send samples of BEVERAGE for Guaiacol as well as 2,6 DBP presence. Take sample of reuse caustic prior to disposal



We thank FSANZ for the opportunity to provide this submission in support of Proposal 1034.
If you wish to discuss any aspect of this correspondence in more detail I invite you to contact me directly on [REDACTED]

Yours sincerely,

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[REDACTED]

Technical and Regulatory Affairs Manager

