

'CUTTING' COSTS

You get what you pay
for with cutting boards

BRC

Key changes to
requirements in issue 6

A-Z

Alphabetical food
for thought

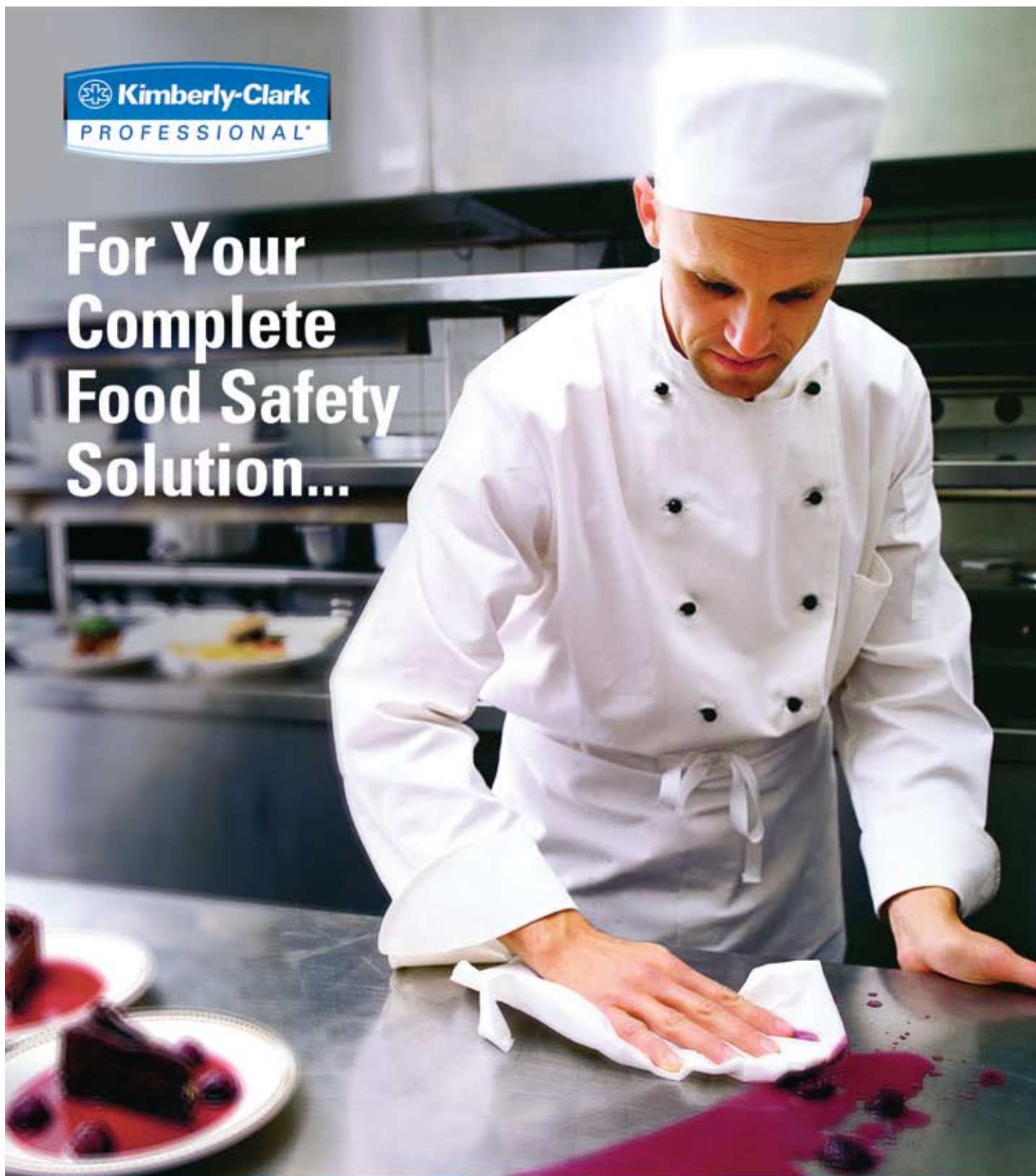
E. coli

Fear vs reality

*Tomkin*TM



For Your Complete Food Safety Solution...



Kimberly-Clark Professional's range of HACCP approved Food Safety Solutions includes:

The most hygienic hand washing
and drying systems on the market

Colour-coded wiping systems to
prevent cross-contamination

Single and extended use wiper
solutions that replace tea towels



For more information: www.kcprofessional.com.au

© Registered Trademarks/** Trademarks Kimberly-Clark Worldwide, Inc. © KCWW, 2012

Welcome

to the 16th HACCP Australia Food Safety Bulletin.

I thought I might use this introduction page to give readers some more information about our organisation and its resources. Since its establishment, some 13 years ago, HACCP Australia has become one of the largest, dedicated food science organisations in Australia and its activities now extend across many fields and countries.

In terms of activities, I would like to focus on one of our certification schemes for non-food products and services and the alignment this scheme has with the world's leading food safety standards.

Contamination risks in food handling come from three main sources – the environment, the ingredients and the equipment and materials used in the process. The last one is the focus of our certification scheme. Products that have incidental food contact or significant impact on food safety are often the least considered. Most HACCP based food safety programmes address the first two very well, however the latter category can get less attention and sometimes gets ignored. Recently, GFSI endorsed food safety schemes have addressed this – now looking for auditable, due diligence processes in the selection of materials, consumables and equipment that present such a risk and our certification scheme is designed to meet precise requirement.

Products such as gloves, cutting boards and cleaning consumables have significant food contact and risk profiles. A well made, well designed and food safe cutting board, for example, may cost a few cents more than other less appropriate competing products but, as with most things in life, you get what you pay for. The articles on pages 5 and 8 are well worth a read in explaining what we look for in evaluating products as part of our certification process.

“As with most things in life - you get what you pay for”

Similarly, in cleaning or pest control activities, food businesses are, to a greater extent, actually sub contracting the performance of part of their HACCP programme. Service providers that carry our mark have been audited and evaluated in close detail in terms of competence, HACCP awareness, food safety training, material selection, reporting and on site operations giving confidence to the buyer and seller alike as to their ability to deliver a compatible service. Service providers that do not demonstrate a real commitment to providing a high standard of food safety capability generally fail to meet the certification requirements.

In recent months, we have been very active in event participation both here and overseas. Earlier this year, we worked closely with the BRC at their annual London convention, exhibited at the FHA conference in Singapore, undertook educational seminars for 'Yum' group in China and BRI Camden in the UK. Other general seminars were run in Australia, Singapore and Hong Kong. In the next few weeks, we will once again sponsor the Food Magazine awards in Australia (see below).

A number of truly excellent products have gone through our evaluation process offering effective solutions and products to the food industry, (the pest control devices on page 25 for example) and I urge you to consider those listed in the index on pages 28 and 29 all of which are food safe and compatible with food industry needs.

As I mentioned at the beginning, our growth over the years has seen us establish an enviable food science brain pool (self excluded) and I do encourage anyone who has any questions or is looking for advice or a techno chat to give us a call. Thanks for subscribing. Let us know if there is a topic you would like featured in forthcoming issues. ■



Clive Withinshaw, HACCP Australia



For more information on any article in this magazine or to submit editorial or a comment, please email to : fsb@haccp.com.au

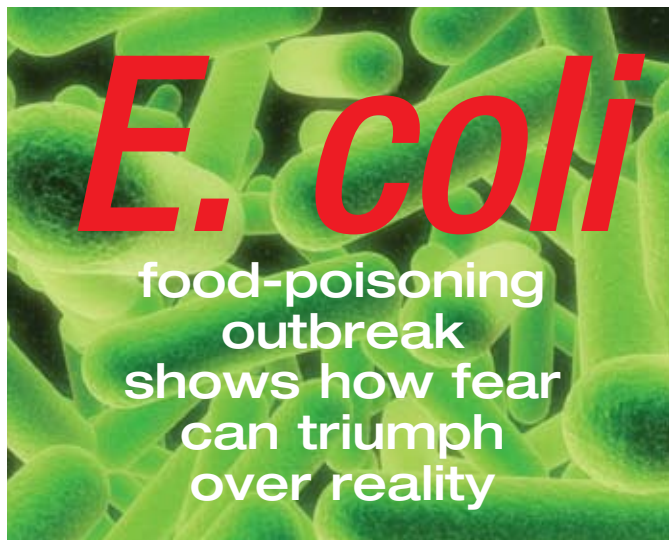
For more information on HACCP Australia's range of services, please visit www.haccp.com.au

The Food Magazine Awards were established by Food Magazine in 2004 to recognise and reward best practice and innovation in food and beverage processing in Australia and New Zealand.

This year, HACCP Australia will again sponsor the Food Safety & Innovation in Non-Food award. This category specifically recognises non-food suppliers to the food industry and the major impact this sector has on food safety. Subscribers to this magazine will already understand the importance of non-food material, equipment and services in regard to the integrity and safety of food. It is hoped that these awards will further raise the profile of these issues and assist the food industry in recognising the benefits of true food safe design and characteristics.

The winner of the FOOD SAFETY and INNOVATION IN NON-FOOD award will be announced at the 2012 FOOD MAGAZINE AWARDS gala dinner at Doltone House, Sydney.





The gulf between our fears and the facts of this *E. coli* story may put us in greater danger, says risk consultant, David Ropeik.

Last year's major outbreak of foodborne disease in Europe offers an interesting lesson in the psychology of risk perception. To be sure, the danger from such an outbreak is real. It killed 18 people and infected more than 2,000, hundreds of whom may suffer lifelong kidney damage. Cases have been recorded in 10 countries, but all were infected in northern Germany. In addition, this appears to be a new and more dangerous strain, a reminder of the constant battle medicine and public health must wage against the phenomenal ability of germs to mutate to resist our controls.

Certainly this risk is far more real than, say, the hypothesised human health risks from GM foods, or the disproved risk that vaccines can cause autism – other threats that demonstrate how our response to risk is more emotional than evidence-based. The number of dead and ill from this foodborne disease outbreak is already higher than the likely long-term mortality and morbidity caused by the Fukushima nuclear power plant accident in Japan, based on what we know so far about the dosages of radiation released (though that event is still unfolding).

But the actual danger for any vegetable-eating European, even in Hamburg or other places where the cases have been concentrated, is low. Statistically. Scientifically. But then, we don't just use scientific evidence or statistical probabilities to figure out what's dangerous. Risk perception is a mix of facts and feelings, intellect and instinct, reason and gut reaction. And in many cases, the feelings/instinct/gut have the greater influence.

This is neither right nor wrong, smart or stupid, rational or irrational. It's simply the reality of how we go about protecting ourselves, using the few facts we have, and applying a set of instinctive risk perception "fear factors" that help us gauge, quickly and subconsciously, how scary those few hints and clues feel.

The problem is, as good a job as this instinctive system has done during human evolution, it can make mistakes. Dangerous mistakes. We can fear too much (vaccines), or too little (particulate pollution from coal-burning power plants), despite the available evidence, and our perceptions can create risks all by themselves. Excessive fear of vaccines is allowing diseases that had almost been eradicated to spread once more. Conversely, inadequate concern about coal-burning power stations has meant coal has been favoured over scarier nuclear

power, risking sickness and death for thousands of people from particulate air pollution. Fukushima is now playing a powerful part in this retreat from nuclear power.

So watching this foodborne *E. coli* outbreak unfold has been instructive. Why, if the actual risk for any given person is so low, does it feel so scary to so many? The study of risk perception has found that uncertainty raises fear. We are uncertain about this risk for two reasons. First, science doesn't have all the answers, about which foods are risky, where they came from and so on. Second, any invisible/odourless/tasteless risk like this that we can't detect with our own senses is scary because we don't know all we need to know to protect ourselves. And in this case there is great uncertainty because of the unknown nature of the organism, and the difficulty in tracking down where it originated. That's a lot of unknowns, which make the risk scarier.

If you think a risk can happen to you, it doesn't matter what the numbers say. Many risk communication experts work hard to find clearer ways to help people understand risk numbers, as though that will make us think about those numbers more rationally, but if a risk is only, say, one in a million, but you think you could be the one, you are likely to worry at least a little, because your job is to keep yourself alive, not the other 999,999.

High awareness also increases fear. Subconsciously, the danger-detection systems in the brain give extra weight to information that's coming in all the time, or that can be readily recalled. This "availability heuristic" then feeds on itself in a positive feedback loop. We pay more attention to information that could mean we are at risk, and the media, in fierce competition with each other to bring us the information we want, feed this appetite, and feed our fears.

These are just three among many specific components of our instinctive risk perception system that can lead to the "perception gap": the gap between our fears and the facts. This gap presents its own, very real risks. In this case there are a lot of people who aren't eating vegetables – any vegetables. That's not good for their health. Hundreds of thousands of people are more worried than necessary, and more worried than normal, and chronic worry produces the myriad damaging health effects of stress (including a weakened immune system, which makes us more vulnerable to the very bacterial infections about which people are worried in the first place).

In addition, this outbreak will have cost a huge amount of money, and damage to the livelihoods and lives of thousands of people engaged in the produce and food industries across Europe.

I am not criticising people for being irrational about risk. Science has taught us just how inescapably instinctive and emotional the system is. But it is valuable to observe that the way we perceive and respond to risk can itself put us at risk. Understanding that, and understanding the specific elements that make a given risk more or less frightening than the facts alone suggest, is the first step toward avoiding the dangers of the "perception gap", and making healthier choices for ourselves and for society. ■

David Ropeik is an instructor in the Harvard University Extension School and author of *How Risky Is It, Really? Why Our Fears Don't Match the Facts*.

**First published by The Guardian Friday 3 June 2011.
guardian.co.uk**



By Karen Constable - HACCP Australia

Every home has one or two, commercial kitchens may have ten or twenty, industrial food processors sometimes have hundreds; cutting boards are one of the most common pieces of equipment in food preparation.

What makes a good cutting board? A good cutting board is first and foremost a good surface for cutting, chopping and dicing food. It is solid and firm enough to resist a knife's pressure without being so hard as to dull the blade of the knife. Many materials make great surfaces for cutting, but not all materials are suitable for use in commercial food preparation. Wooden cutting boards have porous surfaces which can remain damp, are difficult to sanitise and which have been shown to harbour bacteria. For this reason, most food safety authorities, including auditors and government inspectors, disallow the use of wooden cutting boards in commercial food handling premises.

Glass cutting boards are also unsuitable for commercial kitchens, despite being popular in homes for their aesthetic appeal and heat-resistant properties.

A better alternative for commercial kitchens are polymer (plastic) cutting boards. Polymer cutting boards are impervious, non-absorbent and non-contaminating. In addition, they can easily be cleaned and sanitised.

Polypropylene and polyethylene are the polymers most commonly used to make cutting boards, but it is also possible to purchase rubber, nylon and silicon cutting products.

When choosing a cutting board, shape and size are important. A cutting board which fits in the dishwasher is much easier to clean and sanitise. The shape is important because cutting boards with unusual shapes, such as 'built-in' hooks, ridges or patterns can be more difficult to clean than simpler shapes. Cutting boards which are made from a single contiguous piece of material are best, since boards which are laminated, veneered, inlaid or have handles or hooks attached can be too difficult to clean.

Polymer cutting boards can be made in a huge range of colours. However, some pigments used to colour plastics are toxic and could contaminate food that come into contact with coloured boards. Not all coloured boards are equal in this respect.

Coloured boards provide a great tool for controlling cross-contamination in a commercial environment. Colour-coding of cutting boards and other utensils designates specific colours to particular food types which can prevent bacteria from raw foods contaminating cooked foods. It also minimises incidences of food tainting, in which strong flavours, such as fish are transferred to more delicately flavoured foods.

There is no formalised standard for colour coding of food preparation equipment. HACCP Australia recommends the following colour codes which are widely accepted in Australian kitchens:

Green	Vegetables and Fruit
White	Bakery and Dairy
Yellow	Poultry
Red	Raw meat
Brown	Cooked meat
Blue	Seafood

Another tool to improve hygiene is the incorporation of anti-microbial additives into polymer cutting boards. A number of antimicrobials have been used for this purpose, the most popular being silver-based technologies including silver-zeolite and nano-silver and triclosan. A number of effects are claimed for cutting boards containing antimicrobials, however, for some of these claims, the scientific evidence can be scarce. Again, not all antimicrobials are equal. They are particularly unlikely to have any germicidal or growth-inhibiting affects on surfaces which are soiled with food particles. Proper cleaning of the cutting board is still the number one defence against micro-organisms.

Cleaning and maintaining a cutting board is simple. First remove large pieces of food from the surface by scraping or wiping. Next, scrub all surfaces with a firm-bristled brush under

CONTINUED ON PAGE 06

warm running water with detergent. Inspect the surface to make sure there are no signs of food materials, fats or oils. Finally, sanitise the cutting board by putting it through the longest cycle of a commercial dishwasher or by immersing it in a mild bleach solution for 30 minutes. Inspect the cutting board regularly for chips, cracks and rough edges. Discard the cutting board if it is chipped, cracked or when it becomes heavily scored and/or stained.

“We have evaluated a number of cutting boards against our standard and, to date, only Tomkin’s Australia’s Chef Inox colour coded cutting boards have been certified as conforming to HACCP Australia’s standard. They definitely represent the best in terms of hygienic design and materials.”

HACCP Australia has developed a standard to assist designers, manufacturers, purchasers and users of cutting boards for use in food preparation in commercial premises.

The purpose of the standard is to define and to describe best practice with respect to the food safety aspects of cutting boards specifically for commercial use. Design, materials of construction, suitable colourants, heat resistance, impact resistance, microbial inhibitors, marketing and labelling requirements are specified.

Clive Withinshaw of HACCP Australia says, “We have evaluated a number of cutting boards against our standard and, to date, only Tomkin Australia’s Chef Inox Colour Coded Cutting boards have been certified as conforming to the HACCP Australia Standard. They definitely represent the best in terms of hygienic design and materials”

The Chef Inox Colour Coded boards are manufactured using hygienic, tough polypropylene. Polypropylene provides an autoclavable product with high chemical, stain and aroma resistance. These cutting boards will do not dull knives, chip, splinter nor warp. They are colour coded, dishwasher safe, non-absorbent and have a temperature range of 20°C to 105°C. They represent the high standard that busy commercial food handlers demand – especially those which need to meet the exacting standards of modern food safety standards – particularly important for such products that have frequent food contact. ■

For more information please contact Tomkin 02 8665 4675 or visit www.tomkin.com.au

HACCP APPROVED COLOUR CODED KITCHENWARE By

Tomkin

A U S T R A L I A

Food Safe
Non Toxic
Hygienic
Easy to clean
call TOMKIN75
for Stockists



HACCP APPROVED
NSF, UNI EN ISO 9001, 9002 & CE 0123





Sourcing, assessing and developing safe people

Chandler Macleod's extensive experience in FMCG enables us to source, assess, develop and manage permanent, casual, on-hire, and limited tenure employees at all levels of the sector – from research and production through to sales, distribution and management. With over 50 years experience, a national network of offices and an extensive database, Chandler Macleod is the first choice recruitment partner of some of Australia's best recognised FMCG brands. Through our advanced rostering capability, workforce planning, sourcing and retention strategies, and outstanding Safety record, Chandler Macleod provides a true end-to-end solution to enhance productivity, and profitability for our FMCG clients.

For more information contact: Chris Bird - National Sector Manager
tel: 0438 196 989 | chris.bird@chandlermacleod.com



CHANDLER MACLEOD
UNLEASHING POTENTIAL

WORKFORCE

RECRUITMENT

CONSULTING

www.chandlermacleod.com



HOW CAN YOU RAISE HYGIENE AND SAFETY STANDARDS?



Poor hygiene & safety conditions can do serious damage to the health of any food handling environment. Altro safety floors & hygienic walls enable you to take preventative action. Easy to clean and very durable, Altro is the only safety flooring and wall cladding supplier with global HACCP endorsement.

For more reasons to choose Altro, email us on info@asf.com.au or call 1800 673 441

the future is safer with altro

The **A - Z** of supplying to the food industry

By Karen Constable - HACCP Australia

A is for apple pies. Should 'Simple Simon' want to sell his wares to a large chain of stores, that chain of stores, in the interests of customer safety and brand protection will require the manufacturer to have a HACCP-based food safety programme. The manufacturer's HACCP programme requires him to purchase safe ingredients, so he, in turn, will require his ingredient suppliers to have their own HACCP programs. In this way, food safety becomes integrated all the way from 'farm to fork'.

But - if the food manufacturer is required to buy ingredients which are safe, what about the goods and services he purchases which are not food ingredients? How does the food manufacturer know that they are safe and suitable? He can perform his own evaluation or rely on declarations from the supplier of a product or service. Alternatively he can seek evidence of an independent assessment. HACCP Australia offers certification for products and services that are food-safe and suitable for use in food businesses that operate a HACCP-based food safety programme.

C is for chemical hazards to food safety. Chemical hazards include cleaning chemical residues, pesticide residues, and machinery lubricants. If these chemicals get into food, they can cause illness and injury.

D is for direct food contact. Equipment which comes into direct contact with food includes; conveyor belts, magnetic separation devices, utensils and pans. Equipment for direct contact has the potential to contaminate food. It must be made from suitable materials, be clean and cleanable and be free from parts and pieces which could break off and contaminate food.



Enmin's certified vibratory equipment

Evaluating products and services for the food industry is what HACCP Australia's Endorsement and Certification Programme is all about. All evaluations are performed using a risk-based methodology, based on the principles of HACCP as codified by the Codex Alimentarius of the World Health Organisation. Hazards to food safety which could arise from the use of the product or service in a food handling facility are identified, and methods of controlling hazards are analysed.

F is for food-safe. Food-safe products are free from chemical, physical and microbial hazards which could cause injury or illness if they got into food.

G is for good manufacturing practices, an essential requirement for manufacturers of items that will come into contact with food.

Hygienic design is very important for equipment and machinery used in food handling areas. There have been a number of high profile outbreaks of food-borne illness associated with microbial growth within machinery. A camp full of children was sickened from a pudding contaminated with Salmonella which came from inside a blender with a damaged shaft seal in 2009. Last year thirty people died from eating cantaloupes (rock melons) contaminated with Listeria from an unclean and un-cleanable produce-washing tank. Others have been sickened and died from contamination of cold sliced meats from unclean slicing equipment.

I is for icemakers, soft serve machines and ice vending units. HACCP Australia certifies a number of these machines that are well-designed, made from suitable materials and easy to keep clean.

J is for Julian date codes, which are commonly used for identifying batches or lots of product in the food industry. Traceability is an important characteristic for many non-food items as well, particularly high risk products such as cleaning chemicals.

K is for killing germs. In the food industry it is known as 'sanitising'. Sanitising reduces the number of micro-organisms on a surface. It can be done with chemical agents, such as bleach, or with hot water. Disinfection also means killing germs, but is usually more rigorously defined and typically refers to a greater reduction in microbial load than 'sanitising'.

Lighting can be a source of hazards in a food handling environment, the most obvious being broken glass from a shattered light bulb or tube. Proper lighting is also crucial for cleaning processes, since many cleaning processes rely on visual inspection.



A Thorn certified light fitting

Microbial hazards to food safety include bacteria, viruses, moulds and their toxins.

Nis for non-conformance. All certified food-safety programmes require regular audits to verify conformance to the requirements of the programme. Unsuitable fit-outs, fittings and contracted services are common sources of non-conformances from food safety auditors. Typical examples are; unfinished (raw) concrete floors in cool-rooms, uncovered or unsuitable lighting and sub-standard pest control services.

Orange coloured bags, bins, tubs and cloths are sometimes coloured with pigments containing heavy metals such as cadmium and barium. These colourants can pose a risk if they migrate into food.

Pis for physical hazards, which include fragments of glass, pieces of metal and rigid plastic, stones and wood. Common sources of physical hazards in food handling areas are; broken equipment, loose screws and wooden pallets.

Questions about food-safe products and services? Call HACCP Australia 02 9956 6911 or email info@haccp.com.au.

Reduce the risk. Difficult-to-clean equipment which provides a harbourage for dangerous bacteria can significantly increase the risk of contamination in a food handling environment. Choosing equipment made from smooth, impervious, corrosion-resistant materials which that can be easily cleaned or dismantled will reduce the risk.

Service providers including providers of cleaning services, pest control services and specialist consulting services such as compressed air consultants and kitchen designers are among the many businesses certified by HACCP Australia.

Tis for temperature. Temperature monitoring is part of almost every food safety programme. Product temperatures are very common critical limits in food safety programmes. Thermometers, sensors, data loggers and refrigeration control devices all play important roles in food safety.



A Testo certified thermometer

Ultraviolet light is commonly used in the food industry. The lamps in insect control units emit ultraviolet light which attracts some flying insects. Ultraviolet light is also used for sanitising and disinfecting, particularly in water treatment plants.

Verification is one of the seven principles of HACCP. Verification processes are used to check that the food safety programme is working properly.

Wis for ware-washers, which include dish-washers and glass-washers. Ware-washers are often identified as a critical control point in food safety programmes for businesses which cater to vulnerable populations, such as Aged Care Facilities. Many ware-washers do not meet best practice in terms of hot rinse times and temperatures.



An Eswood certified dishwasher

Xensive recalls can be avoided by reducing the risk to food from materials, equipment and services used during food manufacturing processes.

Yersinia enterocolitica is a bacterium which causes food-borne illness, especially from undercooked pork products. It can be carried into food facilities by rodents, which are also carriers of Yersinia pestis, the pathogen responsible for bubonic plague. Rodent control is a key role for pest control providers to the food industry.

Zoom in, zoom out. A great food safety programme is one that has been with attention to detail; 'zooming in'. An example is a HACCP programme which acknowledges that compressed air comes into contact with food packaging, and controls the hazards that could arise from contaminated air. Zooming out is also important: all food manufacturers aim to make safe food and that takes an integrated approach. ■



**ONLINE
TRAINING**

Convenient and Cost Effective

www.haccp.com.au

- Food Safety Supervisor
- Allergen Awareness
- Food Safety for Food Handlers

The main changes to requirements in issue 6 of the BRC Global Standard for Food Safety

PART 2

An article by Richard Mallett, European Director at HACCP International, with information kindly provided by David Brackston of the BRC.



Richard Mallett, European Director of HACCP International



David Brackston, Senior Technical Services Manager

Audits against Issue 6 of the BRC Global Standard for Food Safety commenced in January of this year. Whilst, in the words of the BRC, the changes made represent an evolution rather than revolution over the requirements of Issue 5, there are some potential pitfalls if the Standard is not read through properly and a serious gap analysis performed. We hope that this overall summary of the some of the key changes will help you.

Section 1 - Senior Management Commitment

- The section has been reorganised and now includes some requirements previously in section 3. For instance, *Organisational structure* (1.2) and *quality policy statement* (1.1.1). The link between a company's policy statement, the setting of objectives and targets to achieve the policy, measurement of results and review through the management review process is made through requirements 1.1 - 1.3. Setting Quality Objectives was always part of the requirements of Issue 5. Now there is a requirement to document clear targets / measures of success, to monitor progress against the objectives and to report at least quarterly to senior management. The key word here is 'measurable'. Pick objectives that will lead to improvements and can be measured in some way. Think of these as just a few examples: Training of x% of staff in y months. An

improvement in hygiene audit score from 80 to 85% within 6 months. An improvement in surface swab results so that at least 90% are within target of x. Reduction in damages reported from 3% to 1.5% within 1 year. Above all, make sure the objectives have some advantage to the operation..

- The company shall have a demonstrable meeting programme (i.e. evidence will be required) whereby quality, food safety and legal issues to be brought to the attention of senior management at least monthly. Perhaps set up a simple agenda (Production quality issues, hygiene audit results and issues, non conformances and complaints for the last month, resources etc) and set in stone that the meeting, involving x,y and z, being conducted on the last Friday of each month, with minutes circulated to senior management, or better still, senior management involved.
- The company's senior management shall ensure that the root causes of non conformances identified at the previous BRC audit have been identified and addressed. It is worth starting to get used to the idea of root cause analysis now. When we review the clauses on corrective action this term will crop up again! A non conformance has occurred. Why and how did it happen? What root factors allowed or caused this to happen? An example: Cleaning chemicals are routinely left out, close to food / food areas. The corrective action is not just "ask the staff to put them away". It is now an investigation – why does this happen? Have we got sufficient lockable storage areas? Are they appropriately sited? Do we have appropriate key-holders?

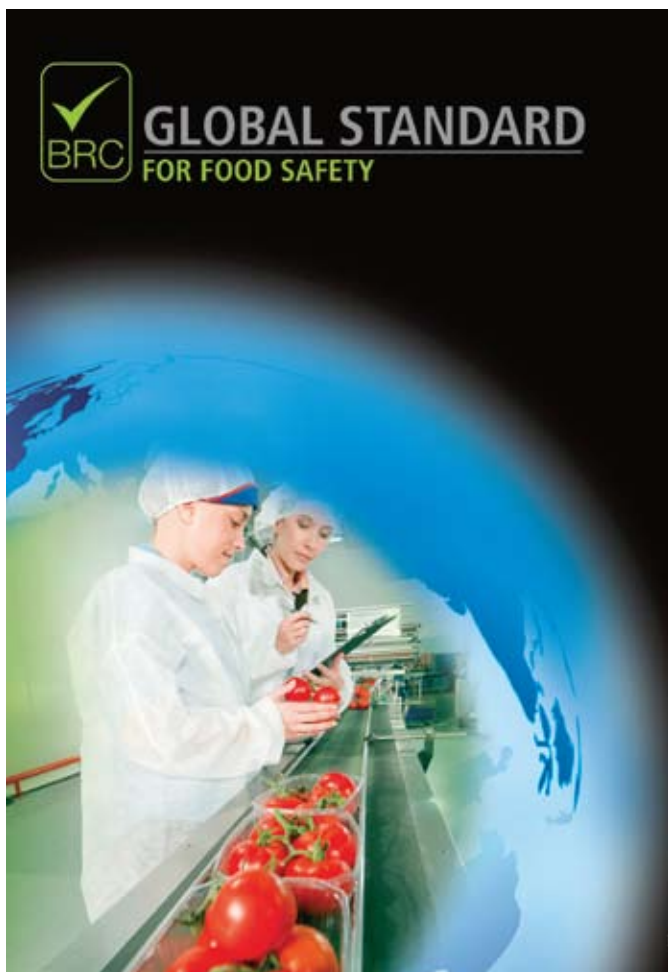
Section 2 - The Food Safety Management System – HACCP

The mandatory requirements have been expanded somewhat over Issue 5. There are revised clauses on managing the pre-requisite programmes, a change that brings the Standard in keeping with the level of detail given to pre-requisites in ISO 22000.

In summary, section 2 on HACCP in Issue 6 places a greater emphasis on the implementation and validation of the pre-requisite programmes. It states that the pre-requisite control measures must be clearly documented and included in the development and review of the HACCP programme. So what does this mean in practice? What is a pre-requisite programme? Try to think of it as a "site-wide" or "covering all process steps" control, as opposed to a process specific control. Now thinking of some examples becomes easy:

- Pest control is a site wide control – the management of pests is crucial over all areas of the factory and loss of control could affect any process step.
- Cleaning and sanitation falls under the same definition – it's no good concentrating on some areas and leaving others dirty – the potential for cross contamination from these dirty areas renders the HACCP plan ineffective. The list goes on of course in much the same way including (but not exclusively):
 - Staff training
 - Personal hygiene rules
 - Maintenance

That is quite different to a process specific control. These exert control at one or few places in the overall process. Think for instance of:



- Pasteurisation at a pasteuriser
- Metal detection
- A thermal processing step applied to food
- A specific packaging gas mixture used at a packaging machine
- A deliberate “at process” check such as a specific goods inspection or analysis following a defined instruction.

Issue 6 of the BRC Global Food Safety Standard requires that:-

- You document clearly the pre-requisites. This means a proper cross reference (perhaps a separate table?) within the HACCP Plan showing which pre-requisite controls manage which site-wide potential hazards. Include references to the SOP numbers or the Quality Manual containing these procedures.
- You validate these pre-requisites and include them in HACCP development and review. You should be able to manage this through an internal audit programme. But beware that validate means “check that they are effective at reducing the hazard” – constant pest issues recorded means that the pest control programme cannot be validated as effective and thus will put at risk the HACCP Plan. Cleaning and sanitation can be validated by visual checks and a programme of rapid or conventional microbiological swabs – this is scientific and ultimately tells us we’re doing a good job. But just swabbing one area all the time doesn’t validate!
- And your HACCP review audit or meeting checklist (yes it should be this formal) should require an examination of your pre-requisite programmes. Are they effective or do we need to do more?

Section 3 - Food Safety and Quality Management System

Although much of the actual content of this section remains similar to Issue 5, it has been re-organised with the transfer of some clauses to section 1, the removal of customer focus entirely and inclusion of *control of non conforming products* (3.8) which was formerly in section 4 of Issue 5.

The *internal audit* (3.4) requirements have been extended to include process/environment inspections, often carried out as part of a “hygiene audit” check, and require that this check is carried out at with a minimum frequency of monthly. This is both an example of the greater GMP focus of Issue 6 and of the appearance of some mandatory procedural frequencies. This is a sensible move forward in ensuring that fabrication, equipment or housekeeping issues can be dealt with in a timely fashion – something that would not really be possible with, for instance, quarterly audits in certain circumstances.

Greater emphasis has been placed on *Supplier and Raw Material approval and performance monitoring* (3.5). This now requires a documented risk assessment of raw materials (3.5.1.1) as the basis for establishing raw material supplier approval and sampling regimes. You will need to consider each raw material or raw material group, the credible hazards that could arise from them and the level of control you can or cannot exercise in eliminating these hazards. Your approval, testing and inspection criteria should be clearly based on this. Within section 3.5 requirements for suppliers of raw materials (3.5.2) have been separated from the management of suppliers of services (3.5.3). A new section has been included to cover the *management of outsourced processing* (3.5.4). This covers intermediate parts of a process which may be undertaken at another site e.g. Agglomeration of powders or maturation of cheese and ensures transparency to customers.

Requirements for *corrective actions* (3.7) and *complaint handling* (3.10) both now include requirements to ensure the root cause of the Issue is addressed.

The only change to the requirements for *Traceability* (3.9) is the inclusion of guidelines for the time, 4 hours, to retrieve records. This has been introduced to ensure information can be produced quickly in case of a recall. In practice, however, auditors will use the traceability exercise to undertake a review of processing records associated with the products chosen for the trace exercise.

Product recall now includes the requirement (3.11.4) to notify the Certification Body within 3 days of a recall being undertaken. This ensures that any incident can be reviewed and customers can have full confidence in certificates Issued.

Section 4 - Site Standards

Site security has attained greater significance with the global spread of the Standard and particularly where products are exported to the United States. A documented risk assessment of security arrangements is now included (4.2.1) to ensure security risks are adequately addressed. In practice this means you must consider each area of your facility, externally and internally, access and movement routes and areas in which food products, equipment, plant and chemicals are stored. Consider how easy it would be for an intruder to gain access to these areas. What current safeguards do you have – Is the actual site secured by

means of fences/gates? Are all appropriate doors locked? Is signage apparent? Are monitoring systems, such as CCTV, used? Are areas always manned or are they empty for periods of a time?

High risk/high care – The Standard has attempted to clarify where high risk and/or high care areas are required by introducing a decision tree and new guideline. The intention is to ensure a consistent interpretation. The requirements for high risk areas were always strict of course, but the requirements for high care areas have been increased particularly in respect to changing facilities (4.8.4) and segregation between high care and low risk areas (4.3.5). This reflects the protection which needs to be provided to high care products to control the risk from pathogens. In both cases, risk assessment forms an integral part of satisfying the clauses. For high risk areas clause 4.4.13 requires that they shall be provided with sufficient changes of filtered air, with filter specification and frequency of air changes documented.

Allergens (5.2) continue to be the cause of a significant number of product recalls in both North America and Europe.

The *lay out product flow and segregation* (4.3) section has been extended with a requirement for a site plan showing different risk zones (4.3.1) and incorporation of process and staff flows (4.3.2). There should be clearly identified risk zones for enclosed product, low risk product, high care product and high risk product. This assists the organisation of process flow, identification of potential cross contamination points and appropriate levels of processing environment control. It should dictate and direct the implementation of pre-requisite programmes and the level at which they need to be implemented. Clearly, the cleaning of a high care area with open product should be at more depth and more frequent than the cleaning of an enclosed product storage / warehouse area.

Building Fabric (4.4) has been condensed but the expectation of sites is unchanged from Issue 5.

In recognition of the risk that water contamination can play in product safety a plan of the water system is now required (4.5.2). This is to be used in defining water sampling points and identifying areas where water may require treatment. A plan of water drainage is also required for high care or high risk areas to verify that there is no risk from drainage flow.

Within *Staff Facilities* (4.8) the requirements for both high care (4.8.4) and high risk (4.8.5) changing facilities are now more detailed to ensure a consistent approach and reflect established industry best practise.

The management of the risks to products of *chemical and physical contamination* (4.9) and *methods for detection and removal of foreign material* (4.10) has always had a high priority within the Standard. Within Issue 6 these requirements have been extended considerably to try to ensure a consistent approach. In particular the clauses reflect the management of risks from different materials and the different technologies available for removal of contamination. Included now are specific sections

on managing products packaged into brittle containers. The controls demanded are in place to prevent physical contamination of product from glass and brittle materials caused by breakage, and consequent clean down of production lines in which brittle containers are used. There are also clauses in place for the management of filters and sieves, X ray detection equipment, magnets and optical sorters as detection devices. The clauses require, where appropriate to the system employed, procedures for verifying operating effectiveness, integrity and inspection checks. Depending on the type of production undertaken, some requirements may not apply.

Housekeeping and Hygiene (4.11) is an area that was identified from the initial consultation as requiring greater emphasis and an area where most variability occurred on customer audits of certificated sites. Accordingly, audits will generally incorporate observation of line-change cleaning and may require dismantling of equipment for inspection where this does not adversely affect production. Cleaning standards are now required to be defined and validated to be appropriate for the particular risk (4.11.2). The new clause 4.11.3 expects resources and the planning of cleaning to take account of the cleaning of equipment which is only acceptable outside of production periods. New more detailed requirements have also been introduced to cover Cleaning in Place (CIP) systems (4.11.6) where these are used in liquid processing plants e.g. Dairies.

In recognition of increasing legal requirements on the use of "waste" food for animal feed, a new requirement (4.12.3) has been added to ensure products for animal feed are handled correctly.

The *Pest control* section has been revised to provide greater clarity on the expectations of a site where pest control is undertaken by the site (4.13.2). There is a new requirement for in depth pest control surveys (4.13.8) typically quarterly in addition to the routine pest control measures to provide an overview of the pest control programme.

The requirements for *Storage* (4.14) and for *Dispatch and Transport* (4.15) have been separated into two sections and more details have been added to the management of dispatch and vehicle checks. Off-site storage facilities owned by the company must now be included in the audit or specifically excluded where these are within 50 Km of the main site. This is to ensure products are not at risk when stored.

Section 5 - Product Control

Product design and development (5.1) has been slightly revised to ensure that the development process does not unwittingly introduce new hazards to the production facility e.g. allergens without this being properly considered. Guidelines on products for development (5.1.1) and sign off of new products by the HACCP team leader (5.1.2) have been added to ensure new hazards are controlled.

Allergens (5.2) continue to be the cause of a significant number of product recalls in both North America and Europe. This area of the Standard has been revised to ensure that some of the main causes of the Issues are fully addressed. The list of controls to consider in making a risk assessment (5.2.3) and introducing allergen control procedures (5.2.4) have been extended. New clauses have been introduced to cover validation of cleaning methods to remove allergenic materials when changing products (5.2.8) and product change over and

label checks (5.2.10). There is now a need for all production staff to be given a general allergen awareness training (5.2.9) to have an understanding of the Issues. Where it is not possible to prevent cross contamination the use of warning statements on products in line with legislative or industry guidelines has been added (5.2.6).

There are an increasing number of assurance schemes for primary agricultural products which require an assessment of the chain of custody in packing and processing operations to allow a claim to be made on products. To address that need and prevent the need for additional inspections the section on *identity preserved materials* (5.3) has been extended and renamed to specifically cover assurance claims. This includes verification of origin of raw materials (5.3.1), mass balance checks at least 6 monthly (5.3.2) and review of process flows to identify and control risks of product mixing or loss of identity (5.3.3).

The interaction between food and its contact *packaging* (5.4) has been an emerging food safety issue. The new requirement (5.4.1) extends previous requirements concerning certificates of conformity for packaging and obliges the sharing of information on product characteristics and usage to allow the correct packaging to be used.

Section 6 - Process Control

Control of operations (6.1) has been reworded to ensure that the production process is managed through recipes and process specifications to control not only product safety but also consistent quality of the products produced (6.1.1). New clauses have been added to ensure that the production lines are checked before start up and at product changes (6.1.6) and that the correct packaging is used, and packaging changes and coding are carefully controlled (6.1.7) to prevent errors.

There have been no significant changes to requirements for *Quantity control* (6.2) or *Calibration* (6.3)

Section 7 - Personnel

This section of the Standard has been simplified with some rewording. The use of temporary workers, often supplied by Agencies, has been a significant development in recent years and auditors have been asked to ensure that temporary staff have been adequately trained and are aware of site hygiene rules. The *Training* section (7.1) has been extended by the requirement for sites to be able to retrieve training records for agency trained staff (7.1.4).

Requirements for *personal hygiene* (7.2) have been simplified to make these clearer. The wearing of jewellery, other than plain wedding rings or wedding wrist bands, is not permitted in production areas (7.2.1).

Medical screening (7.3) requirements have been reworded to take account of personal privacy laws which are present in some countries (7.3.2).

The requirements for *Protective clothing* (7.4) remain largely unchanged. Auditing of laundries however now only applies to laundries for High care/high risk clothing (7.4.4).

We wish all those food processors going through an audit against Issue 6 of The Standard this year the very best of luck – and take this opportunity to assure you that, with proper consideration of the changes within Issue 6, against what you may have had in place for Issue 5, it is not an onerous task. ■



Guess which coolroom didn't specify COLORBOND® Permagard® steel?



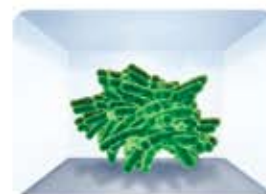
FRESH FRUIT FROM VIC



DAIRY PRODUCE FROM WA



SEAFOOD FROM SA



E-COLI FROM YOUR COOLROOM?

When the health of your business depends on the hygiene in your coolroom, be sure to specify COLORBOND® Permagard® steel with Microban® antibacterial protection.

Certified by HACCP Australia, COLORBOND® Permagard® steel is proven to reduce the risk of cross-contamination, is available in FM Approved panels, complies with Australian Standards and has tested effective against *Staphylococcus aureus* and *Escherichia coli* 0157.

Specify **COLORBOND® Permagard® steel** by name. Anything else could leave your business reputation somewhat on the nose.



For your **FREE** guide to coolrooms:

1800 022 999

colorbond.com/permagard

*Warranty subject to application and eligibility criteria. For full terms and conditions and to determine the eligibility of your project for the warranty visit www.bluescopesteel.com.au/warranties or call BlueScope Steel on 1800 022 999.

Microban® and the Microban symbol are trade marks of the Microban Products Company, Huntersville NC and are used by BlueScope Steel under license. COLORBOND®, Permagard® and BlueScope are registered trade marks of BlueScope Steel Limited. © 2012 BlueScope Steel Limited ABN 16 000 011 068. All rights reserved. HACCP32769C

Hoshizaki

is now internationally
recognised for leading in
food safety as well as
quality clean ice



Hoshizaki is widely considered to be one of the world's leading manufacturers of ice makers. Its ice machines' superior reliability and design ensure customers can depend on their ice machines day in, day out, year after year.

Hoshizaki is the world's number one ice maker with over 60 years of creating the world's best ice. Its product engineering, manufacturing, quality control and quality of internal components now see Hoshizaki ice machines leading the world in terms of industry standards.

Hoshizaki provides industry-specific solutions for the needs of restaurants, bars, fresh produce, food processing, education, healthcare, catering and clinical markets, allowing operators to deliver the very best possible service and solutions to their customers.

Hoshizaki is noted for innovative resource efficient, environmentally friendly, ice makers, adding value to the end user through cost saving and sustainability. Hoshizaki innovates in every sector within which it operates. For example, in the clinical sector, users can choose ice makers that produce different types of ice and sizes. In the hospitality sector, ball ice, flaked ice, cublet ice, square ice and crescent ice are all available, making the difference in quality beverages such as cocktails where the role of the ice is crucial to the quality of the end product. Ice not only chills drinks but, as it melts or is shaken, becomes part

of the drink itself so it needs to be given as much consideration as the other ingredients both in terms of product quality and, of course, food safety.

With the increasing requirement for conformance to hygiene and health and safety guidelines in the food service sector, it is important that food businesses can demonstrate best practice in

minimising the risk of bacterial contamination. Fully compliant for water/ice quality, safety and economy, Hoshizaki's machines help fulfil this significant requirement with hygienic design and by using closed cell ice making system with automatic rinse and flush cycles that ensure that the ice constantly meets the requirements of HACCP based, Food Safety Programmes.



Hoshizaki is noted for innovative resource efficient, environmentally friendly, ice makers, adding value to the end user through cost saving and sustainability.

Hoshizaki's IM, KM, and FM ranges of ice machines provide great flexibility in ice production with a wide capacity range of very high quality ice, 24 hour a day. There is a model to suit the requirements of all sectors and the different volumes within them.

It is no coincidence that venues like Eau de Vin, Ludlow Formation and Green House Restaurant by Joost in Melbourne, Rockpool Bar & Grill and Vung Tao Seafood in Perth, Zaraffa's Coffee, Eaton Hills Hotel, The Wharf Tavern in Queensland and The Oak's Tavern in Sydney, to name a few, have all chosen Hoshizaki ice makers.

Hoshizaki Lancer is proud to have HACCP Australia certification for its range of ice makers, ice dispensers, storage bins, upright and under counter refrigerators, freezers and beer systems - a world first. ■

Hoshizaki can be contacted on 1300 146 744.

email info@hoshizaki.com.au

or visit www.hoshizaki.com.au



MANTOVA



will save you a fortune in time and wages

Give your coolroom, freezer or dry store a makeover and install the latest innovation in shelving.

Our new manufacturing process achieves a huge reduction in carbon emissions and costs, resulting in a shelf system with a 20 year anti-corrosion warranty for an affordable price that benefits both you and the environment.

*An Australian manufacturing company
with an Australian warranty*



MANTOVA

To find a distributor nearest you visit
WWW.MANTOVA.COM.AU

LANCER
BEVERAGE SYSTEMS



Talk to us about a customised solution

T 1300 146 744 **W** lancerbeverage.com
E info@lancerbeverage.com

Beverage and Ice Systems that allow you to serve **the perfect beverage every time.**



Our systems are in some of the
biggest entertainment venues and
organisations in Australia

Complete product set-up from front of
house dispensers through to complete
back of house system set up

Hoshizaki Ice Machines & Refrigerators HACCP Approved
Lancer Beer Systems The world's first & only HACCP approved Draught Beer System

NEWSSTAND

In this section are a few food industry snippets from around the country and overseas that came to our attention in recent months. Keep up to date with trivia as well as news!

From Australia

Airline food never fails to escape the news

By Michelle Ainsworth, Herald Sun

A high profile Australian airline has apologised to a Victorian mum who found maggots crawling through her airline food. Victoria Clevon, 42, was flying home from the US in May when she got a couple of packets of an Australian-made trail mix as a snack. She didn't turn on the overhead light in the darkened plane and had started eating the nuts, raisins and grains before she realised the mix was infested with maggots. "It tasted strange, and I turned the light on and looked at the rest of the packet, and just started seeing maggots coming out of it everywhere," Ms Clevon said. "I couldn't talk. I was nearly throwing up. I was beside myself." Her son, 15, checked another two packets of the mix and found they also had maggots.



The mother of two, who took a photo and video to prove her story, said she had been insulted by her treatment when she asked for compensation. An airline spokeswoman offered her a refund, but later said only about \$400 of the \$1600 flight cost would be refunded. She went on to say that "I got a call from the CEO of the company supplying the product to the airline who was very

apologetic, and I couldn't have asked for anything better from him.

FSANZ looking to increase cost recovery

Food Standards Australia New Zealand (FSANZ) has released a consultation paper on a review of its cost recovery arrangements for applications.

FSANZ Chief Executive Officer Steve McCutcheon said FSANZ had completed a detailed examination of the costs it incurs and how it calculates cost recovery charges. The review had identified that the current charges do not reflect the real cost of the services provided.

"The review focused on current categories of charging; whether

other activities should be subject to charging; and how charges should be structured," Mr McCutcheon said. FSANZ is proposing an increase in its hourly rate from \$115 an hour to \$180 per hour.

Mr McCutcheon said the accuracy of FSANZ's fee structure was critical to ensuring the full cost of processing applications is received, as required by Commonwealth guidelines.

From the UK

'It's Fresh!' goes in-pack at M&S

Marks & Spencer became the first UK retailer to use It's Fresh! ethylene-remover technology inside its strawberry punnets.

The retailer hopes its introduction will help reduce food waste as part of its Plan A sustainability target.



The small in-pack strip is supplied by UK firm It's Fresh and although the technology has been used in transit packaging by other retailers in the past, M&S is the first to use it 'in-pack'. It means that shoppers will be able to store berries in the fridge for two days longer than previously. Trials carried out by the retailer showed a minimum in-store wastage saving of four per cent during the peak summer strawberry season, which equates to some 40,000 packs. Hugh Mowat, M&S agronomist said that fruit taste will be as good six days after purchase as on the day of purchase. "This new technology is a win-win for our customers – not only will their strawberries taste better for longer, but we really hope it will help them to reduce their food waste as they no longer need to worry about eating their strawberries as soon as they buy them."

The It's Fresh! strip measures just 8cm x 4.5cm and does not affect the recyclability of the packaging. The active ingredient in the strip is a patented mixture of minerals and clay, offering over one hundred times greater ethylene absorption capacity compared with any other known materials. The retailer is now looking to extend the use of It's Fresh! Across all soft-fruit packaging. "This new technology is a very exciting step forward for the fresh fruit industry and we hope that we can extend the use of it into more of our products during 2012," added Mowat.

The patented strip is being manufactured and supplied to M&S by 'It's Fresh!' – a British high tech innovations company focused on delivering comprehensive solutions for food freshness. 'It's Fresh!' have supplied the technology to other UK retailers for transit packaging, however, this is the first time it is being used in packaging for consumer products.

Simon Lee It's Fresh! director said: "Our technology is focused on food freshness designed to increase consumer satisfaction, taste and quality, through simple, safe, sustainable solutions. We are delighted to be pioneering this British technology with M&S on strawberries and are working on other products that will be in-store in the near future."

Mafia grip on Italian food sector putting industry at risk, report

Mafia involvement in the Italian food industry is rife, with revenue from the agriculture and food sector generating 5.6% of the entire organised crime business in the country, finds a new parliamentary report.

The study, prepared by the Italian parliamentary commission of inquiry and released at the end of last week, concludes that the food sector is worth 12.5bn to criminal groups, who are undercutting prices paid to producers, and boosting trade in counterfeit Italian foodstuffs.

The report was informed by hearings over a 12 month period from prominent food industry stakeholders such as the directors of the buffalo mozzarella and balsamic vinegar trade associations.

The parliamentary inquiry, which concluded that organized crime has entered into every aspect of food supply chain from production to transport to supermarkets, also heard from the national anti-Mafia prosecutor, Dr Pietro Grasso and, Sergio Marini, the president of Italy's biggest farmers' group, Coldiretti.



Price control

Coldiretti claims the safety and perceived standard of Italian food is "at risk" due to products such as olive oil and cheese being "passed off" as being of Italian origin and branded 'made in Italy', but in fact obtained with cheaper, imported raw materials often of dubious quality.

The agricultural organisation claims farmers' incomes are being hit and Italian consumers are being overcharged due to the fact that these criminal groups are dictating producer and retail prices.

"The prices of fruit from field to table even triple due to the infiltration of the underworld in the transport business," added Coldiretti.

And Mafia investigator Grasso is calling for legislation to be amended to ensure organised crime's control on the Italian agri-food industry is curtailed.

The parliamentary report calls for greater collaboration among international authorities to control trade in counterfeit goods and also urges more training of all the national bodies involved to hinder the manufacture of fraudulent goods as well as co-operation between the Italian civil and criminal court system in this regard.

A comment from Coldiretti was not forthcoming in time for publication.



<http://www.foodqualitynews.com>

Copyright © 2000/2012 William Reed Business Media.

Reprinted with the permission of FoodQualityNews.com.

This reprint does not constitute or imply any endorsement or sponsorship of any product, service, company or organization.



Earlier this year, the Chinese State Council released a draft proposal of a grain law that establishes legislation restricting research, field trials, production, sale, import and export of genetically modified (GM) grain seeds. The draft stipulates that no organization or person can employ GM technology in any major food product in China. "This is actually the first initiative that deals with GM food legislation at state law level," said Fang Lifeng, the Food and Agriculture campaigner of Greenpeace China. According to a Greenpeace investigation, over the last 20 years, investment in GM technology has been 30 times that on ecological agriculture. "This is a big obstacle for the development of modern sustainable agriculture in China", Fang continued, "China's money must be spent on supporting food that is safe for human consumption and the production of which has taken into account environmental impacts. And GM technology has clearly failed to do either. While China is still only 4.4% of Australia's global wheat export market, the Chinese decision will have a big impact on Australian farmers if GM wheat cultivation is authorised in Australia. The CSIRO are hoping to have GM wheat commercialised in Australia as soon as 2015. Greenpeace Australia Pacific welcomes China's decision to put the interests of the Chinese people before the interest of transnational biotech companies, said Eric Darier, Greenpeace GM campaigner. It is vital the Australian government understands there is no market for GM wheat either nationally or internationally and that the field trials currently underway in NSW and WA risk contaminating the Australian wheat industry. "Australia's wheat exports are worth more than \$4 billion to Australian farmers", said Darier. "Farmers are already under enormous pressure with a high Australian dollar, spiralling costs of inputs and years of drought behind them, they don't need the threat of losing their export markets because Monsanto and Co want to commercialise GM wheat here". ■



AEROBEAM

PROFESSIONAL PEST MANAGEMENT

ABN 46 068 756 098 Member of A.E.P.M.A.

Specialising in Providing an
Integrated Pest Management
Program to Suit your Business

Website: www.aerobeam.com.au
Email: sales@erobeam.com.au

Phone: 02 9636 5840
Fax: 02 9631 7258

New Innovations



Challenger Cleaning together with Kevah Works, have continued to lead the industry in innovation by becoming one of the first companies to adopt and develop a live online HACCP cleaning, sanitation and hygiene reporting and management facility that enables key personnel to monitor and manage all HACCP cleaning and sanitation requirements and activities in **real time**. Challenger is a HACCP quality certified company that has devoted significant resources to ensure that food safety cleaning standards, skills, training and systems are in place to maintain stringent HACCP standards.

Efficient Management of Your HACCP Compliance

Reflecting years of industry experience, Challenger have been able to create an application that will streamline your facilities workflow and effectively track all types of tasks on your site. Easily create periodicals (daily, monthly, weekly, etc.), and track the completion of jobs created with complex frequencies and conditions. Work orders can be created for all the little jobs that happen at facilities and need to be recorded.

Challenger delivers HACCP compliant cleaning, hygiene and sanitary solutions to the food preparation, processing and manufacturing industries. Our experience and industry knowledge together with best practice and legislative requirements ensures a consistently high quality service to your business and its operations. We are driven by the high standards required in the food industry and supply the same high standards throughout our business. We offer our clients a professional, cost-effective, responsive and high quality service through a diverse range of cleaning and HACCP environments. **Our services include: Daily Cleaning and Sanitation; Periodic Plant Cleaning; Commercial Kitchen Cleaning; Kitchen Stewarding; Food Safety Audit Showcase; HACCP Forms and Documentation; HACCP Trained Labour Hire; HACCP Procedural Training; and Waste and Environmental Services; and Sanitary Services**



Real Time HACCP Cleaning, Sanitation and Hygiene Reporting



Sydney Hilton Embraces This New Technology

The use of this online management facility at Sydney Hilton was a key element of Challenger's operation in meeting all food safety standards. It eliminated all paperwork required to manage the contract. By providing shared web-based access to activities on site, resulted in better cooperation, quality control and a stronger sense of team work between Challenger and Sydney Hilton.

"Being a 24 hour operation, the advantages of Challenger introducing this new technology into Sydney Hilton is that it allowed for instant live HACCP reporting. Above all, it created a platform to further develop, implement and maintain new projects, initiatives and efficiencies that would benefit our organisation, both environmentally and commercially. As a direct result, we are continually scoring superior results in all HACCP inspections to date." said Francisco Alvarenga of Sydney Hilton.

Having never failed a HACCP audit, it is Challenger's genuine concern and practical approach towards their clients operation that is rewarded with a mutual growth and respect. This new innovation will deliver results that will far exceed your HACCP compliance expectations.

Real-time Management & Reporting

Challenger's online HACCP management facility delivers live data from the operational floor to any Internet connected device in an instant

- Upload Photos and Attach to Reports
- Reports non-conformance in an instant and sends instant message alerts to key personnel for immediate actioning
- Complete and submit HACCP Audits
- Complete and submit QA and KPI Reports
- Produce greater labour efficiencies which translates into a better level of HACCP compliant service delivery
- Daily real time reporting and monitoring
- Incident and Accident Reporting
- Damage and Condition Reporting
- WH&S Reporting, Manuals and Audits
- Sustainability Reporting and Initiatives
- Daily Time and Accountability Records
- HACCP Training Manuals and Records
- Easily Schedule Recurring Events and Inspections

Call Kris Pantovic on (02) 9993 0562 to book your FREE demonstration



**UltraNite Latex Free
Food Processing Gloves**

**Ultra light
weight
nitrile
flocklined
glove**



**Ideally suited to
high volume
food processing**

**MediNite Free Latex
Examination Gloves**



**MediNite is designed for facility wide use
for medical examination procedures,
lab uses and aged care tasks.
Providing protection against bloodborne
pathogens & liquids.**

**Looking for a LATEX FREE glove
with the fit and feel of latex this
is the glove for you.**



FACTERIA COLIFORMS

By Martin Stone - HACCP Australia

In this edition of facteria we examine not a single species or genus of bacteria, but a group known as coliforms. Various microbiological standards exist with coliforms specified and they are commonly assessed by the food industry to indicate the microbiological quality of food. Today, questions are being asked as to the relevance or usefulness of assessing the coliform levels in food.

Let's start with what they are. Traditionally, coliforms are bacteria capable of fermenting lactose, producing acid and gas. They gram stain negative and are non-spore forming rods. Under this definition, they include genera Escherichia, Enterobacter, Klebsiella and Citrobacter. These 4 types of bacteria can be isolated from the gut of warm blooded animals which is why coliforms are often evaluated.....as an indicator of potential faecal contamination.

A few key points in regard to coliforms;

- Coliforms are not necessarily pathogenic and most coliform species typically will not cause illness.
- Only one coliform species (E. coli) is found exclusively in gut flora. All other coliforms can and do survive in the environment (soil and water)
- Newer tests based on acid production only or on the presence of specific enzymes, enlarge the representative species list with additional species that are primarily environmental.
- Coliforms are tested via a statistical method and results are reported as a MPN – Most Probable Number. Low counts are therefore reported as being less than (<) the limit of detection.

With this in mind, a high coliform count may not indicate faecal contamination and may be safe to consume. A high count is an indicator that unsanitary conditions may exist and the potential for faecal contamination. To confirm faecal contamination it is necessary to do further tests and evaluate for specific bacteria such as E. coli.

Coliforms have traditionally been a quick and easy test to perform relative to specific bacteria tests, however, with modern tests being developed that provide rapid and accurate E. coli evaluation, some are questioning the benefit of coliform analysis for the future. ■



High performance doors for every application.

Albany Door Systems invented the world's first high speed fabric roll up door in 1968. We now have the largest range of High Performance Doors on the Global market with sales and service offices nationally in both Australia and New Zealand, providing customer support to industry nationwide with unparalleled technical and sales back up.

Albany Door Systems
Head Office
No. 9 Mc Ilwraith Street
Wetherill Park 2164
Sydney, NSW
Ph: 1300 666 232
Fx: (02) 9756 4340
sales.ads.au@albint.com
www.albanydoors.com

ALBANY
ASSA ABLOY

Helping You With SAFETY & COMPLIANCE

AMALGAMATED
PEST CONTROL

Serving Australia for Over 50 Years



- HACCP & AQIS Compliance
- OHS & Environmental Compliance
- Resident Entomologist
- Technical Backup and Support
- Fully Licensed & Insured

General Pests

Cockroaches
Ants
Spiders
Silverfish
Fleas
Rodents
Mosquitoes
and more...

Termites

Termite Treatments & Inspections
Pre-Purchase Inspections
Pre-Construction Systems



PestCert
ACCREDITED BUSINESS
Our professionalism ... your security

Amalgamated Pest Control Pty Ltd GBSA 744943



13 19 61

info@amalpest.com.au

The Tricorder

Letter to the Editor from Dan Flynn of Food Safety News

Next to the Star Trek transporter, which could free us from both traffic jams and airport security lines, the Star Fleet tool we most need now is the tricorder.



We all remember the hand-held device that could scan, analyse and record, telling Captain Kirk in seconds about any new substance the Trekkers happened across on a distant planet.

The very name of the device came from

its three primary scanning functions - geological, meteorological and biological.

There were even medical and engineering upgrades to the standard tricorder.

The X Prize Foundation is offering a \$10 million prize to anyone who invents a real life version of the tricorder, the Huffington Post reported late last month.

Huffpo quoted Dr. Peter H. Diamandis, chairman and CEO of the X-Prize, as saying such a device would "empower the consumer."

It certainly would empower the consumer when it comes to food safety, would it not?

All those parents hyped up about arsenic in apple juice could just run a sample from their own bottle under the scanner and find out if it contains less than 10 parts per billion (ppb) of arsenic or not.

As long as it was not any bigger than a large microwave, we'd readily accept a larger box version of the tricorder just to get started. TV crime labs must already have working models of these devices, printing out reports on stomach contents or the results from environmental swabs.

We want our tricorder to be able to tell if the food we are testing really is organic or if it contains any ingredients from genetically modified organisms. Used widely, this device would change what we eat and it would dramatically change the food industry.

Until the X-Prize is awarded, we will have to manage to get along without it. It is inevitable, however, that technology will be developed to tell us what we really want to know.

People want to know what they are eating and drinking, and we all pretty much know that right now we do not know enough. Yes, you can read nutrition and ingredient labels, but then what?

How can parents not be confused when they read about arsenic, lead and orange juice chemicals from Brazil? They are told 10 ppb is the limit for arsenic in drinking water, 5 ppb for bottled water, but 23 ppb is OK for apple juice. Excuse me?

Almost everyone in the West has consumed more arsenic from water than the presently allowed levels. In the decade since EPA lowered the limit from 50 ppb to 10 ppb, and came through with a boatload of federal money for communities to improve water treatment, our exposure in many cases has been cut to zero.

So while I might be among those who don't worry about a little arsenic, I understand why many others do. They do not want to hear someone from FDA say something that can cause harm is "generally safe." They want to know how to avoid it. Period.

So whether it is arsenic or lead or various chemicals, the faster we empower consumers to do their own testing the better.

That day might be far in the future, but if I were in the food industry, I'd plan on it happening tomorrow and adjust my transparency practices accordingly. We are watching you now and we are only going to get better. ■

"So, while I might be among those who don't worry about a little arsenic, I understand why many others do!"

With one of these devices in every kitchen, we could take a half dozen hamburger patties and run them through a test for all strains of pathogenic *E. coli*. If they test positive, we could mail them to the American Meat Institute for further analysis.

"Food safety misconceptions?"

Recently the Technical Coordinator of Hoshizaki, global manufacturer of ice machines, featured elsewhere in this bulletin, came face to face with a common misconception regarding 'fitness for purpose' for food handling. We found this interesting as it supports our efforts in establishing HACCP International/Australia Certification as a global tool for eliminating risk from non food products and services used by the food industry.

Says Roy Bates of Hoshizaki, "Recently, I had cause to be part of an email conversation from end-user, through supplier, through company salesman and the equipment manufacturer, entitled "Pseudomonas bacteria". This was a conversation which originated from a UK, NHS facility rightly concerned about contamination and health.



Roy Bates of Hoshizaki

The end-user was demanding a piece of evidence to prove that ice from our machines protected patients from bacterial infection. The evidence he demanded actually had nothing to do with microbiological protection of the consumer, but was in fact a demand for evidence of compliance with a voluntary standard, called WRAS (Water Regulations Advisory Scheme) - designed to protect the interests of the water authorities. From the WRAS website you can find some of the aims of the scheme listed as:

- To develop criteria for testing materials and fittings to assess their compliance with the Regulators' Specifications for approved products in accordance with the Water Regulations.
- To assess the results of the testing of materials and fittings to determine their compliance with the Regulators' Specifications and to publish up-to-date lists of satisfactory materials and fittings in the Scheme's Water Fittings and Materials Directory.

The code of practice is primarily designed to ensure that precautions are in place to prevent contamination of mains drinking water from, for instance, materials or backflow into the supply point.

This set me thinking – how widespread is the misunderstanding of these various “compliances” and if the manufacturer had proved compliance as demanded – would the end user be satisfied and install the equipment? I am not suggesting the equipment was in any way unsafe, but a certificate to prove that the equipment can be safely connected to a water supply has very little to do with what comes out of the dispensing nozzle of an ice making machine!

It is a little worrying if my assumption is fact. Could outbreaks of bacterial epidemics be more prevalent because of a widespread misunderstanding of the safety “certificates”, or is this an isolated incident?

After reading and digesting HSE information sheet “Hygienic design of machinery in the food and drink industry”, I found no mention of this particular “certificate” being a requirement – or even desirable, but what I did find is guidelines and requirements which exactly matched what HACCP International/Australia could offer through their assessment and certification scheme.

I sincerely believe the some customers can be misinformed or misguided and need the expert support and advice of someone like HACCP International/Australia, to ensure that real food-grade standards are achieved and upheld. ■

RUN YOUR PLANT WITH CONFIDENCE



With our commitment to Service Excellence, Ecolab inspires confidence your business is protected from pests, so you can focus on your business.

- ▲ Proactively eliminate the pests you are concerned about
- ▲ Understand your business and care about your success
- ▲ Educate your staff to prevent pest problems before they occur
- ▲ Communicate with you regularly, providing information you need

Call now for an obligation free survey and assessment of your current Pest Prevention program **13 62 33**

FOOD SAFETY BY SAFE WORKING PEOPLE

Companies can invest a considerable amount of time and resources into creating a safe work environment, developing food safety working practices and processes, but what about the people who work in these environments on a day to day basis? At Chandler Macleod, we believe that safety is a mindset and hiring people with a propensity for safe working can have a flow on effect to the safety of employees, safe food manufacturing and productivity.

For our FMCG manufacturing clients, our holistic approach of sourcing, assessing and developing people, teams and organisations is geared around safety. We believe the conventional way of hiring new employees or contractors by resume, interview and reference check is not enough information to determine whether or not they are likely to be safe workers and a good fit with the role and company. Chandler Macleod helps mitigate company risks by adopting our BestFit™ methodology, our commitment to facilitating the best match between the person, job, work environment and organisational culture. Part of the BestFit™ methodology is psychometric testing, which for the FMCG employees assesses a range of behavioural attributes and skill sets including problem solving, task focus and

attitudes towards service and teamwork. Backed by a 50 year history in psychometric testing, these assessments are researched and developed by trained psychologists and are tailored to match the criteria required by the role and company.

Utilising our BestFit™ methodology first hand, Chandler Macleod also offer FMCG companies managed workforce solutions. We understand the peaks and troughs of the FMCG industry, and the importance of having a dynamic workforce in order to keep up with the demands of the fast paced marketplace.

Chandler Macleod goes beyond just sourcing and supplying staff that have a propensity for safe working, we develop them. We offer HACCP awareness programs with our accredited HACCP awareness trainers and also have capabilities in facilitating safety induction training that is tailored to suit FMCG's manufacturers.

For further information on Chandler Macleod's specialist FMCG holistic workforce, recruitment and HR advisory services contact Chris Bird, National Sector Manager on 0438 196 989 or email chris.bird@chandlermacleod.com ■

CHANDLER MACLEOD
UNLEASHING POTENTIAL



BAIT STATIONS & RODENTICIDES





CONTRAC®



DITRAC®

PROTECTA® Bait Stations

THE WORLD LEADER IN RODENT CONTROL TECHNOLOGY
www.belllabs.com



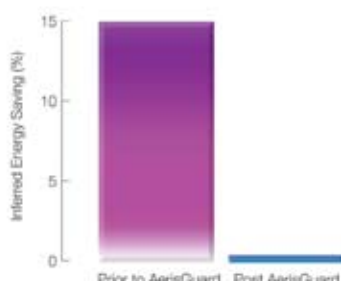
COOL ROOM PERFORMANCE SOLUTIONS

Aeris Hygiene
Services
Cool Room Performance Solutions

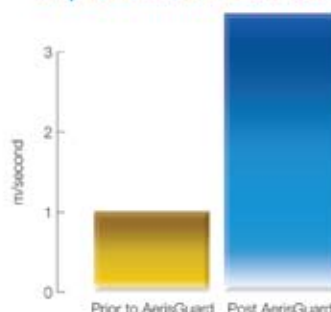


RESULTS WHICH SPEAK FOR THEMSELVES

Up to 15% reduction in
Cool Room electricity



Up to 250%
improvement in airflow



Benefits of Aeris Hygiene Services

A complete remediation and preventative treatment by Aeris Hygiene Services can:

1. Reduce electricity usage by up to 15%
2. Improve shelf life of produce and reduce spoilage
3. Improve airflow by up to 250%, resulting in improved temperature control and consistent temperature throughout room
4. Restore the indoor air quality of the refrigerated space

Call +611300 790 895 for a quotation

The safest way to manage pests is to keep them out in the first place...

Often pests gain entry into the wall cavity through weepholes in brickwork, then inside through plumbing and electrical access points.

Weepa Products have a patented, HACCP endorsed range of vermin exclusion devices for weepholes.

For installation during construction or for retrofitting.

weepa
Perfect weepholes every time!

Available through good hardware and building supply companies Australia wide.

For an information pack including samples contact Weepa Products



Phone (07) 3844 3744 • Fax (07) 3844 9844 • enquiries@weepa.com.au • www.weepa.com.au

A look at two effective and economic pest control devices ideal for the food industry.

BaitSafe™ is a pest control product like no other. A cleverly designed rodent bait-station, it can easily be installed within a food facility particularly in areas that are difficult to access. BaitSafe™ can be fitted to ceilings, eaves, external stud walls, lean too's, sub floors, virtually anywhere that rats and mice live and breed. BaitSafe's™ patented locking system prevents accidental opening of the bait station thus denying access to the poisons located within. The only way a BaitSafe™ bait station can be opened is by use of the BaitSafe™ tool."

BaitSafe™ is MakeSafe's™ first product in a line of innovation. Referred to as the "Next Generation in Bait Station Technology," BaitSafe™ has under gone 2 years of extensive field testing preparing for the product launch at the FAOPMA Conference at the Adelaide Convention Centre on July 11.

Prior to the product's release, BaitSafe™ has already proven to be a winner amongst its peers. Gary McMahon CEO and Co-Inventor said "The Collison Award and HACCP Australia Certification for use in the Food Industry add depth and credibility to BaitSafe™. We are not just telling people how unique and safe BaitSafe™ is, we're proving it."



Some examples of BaitSafe's™ uses other than commercial food applications are, homes, Apartments, Aged Care Facility's, Child Care Centres, Schools and Hospitals just to name a few.

As the team at MakeSafe™ say "If you must bait for rodents, think food safety, think environment, think BaitSafe™". ■ BaitSafe™ can be contacted on 1300 065 467 or email info@baitsafe.com.au or visit www.baitsafe.com.au

Pest control problems in food premises starts at the design and building stage.

Make sure your builders cover this.

The challenge to keep food preparations areas vermin free is not always simple. No matter how conscientious and professional the treatments maybe, if vermin have continual access, via the wall cavity, the problem will not be solved.

The search for a solution to this problem began in a 'food' environment (actually a family barbeque!) when a mouse was seen escaping from a weep hole. John Flint, Product Development Manager at Weepa Products said "The challenge was to create a barrier that would still allow adequate ventilation. Blocking weepholes can lead to a range of disastrous outcomes down the track."

The outcome was a range of pest control products for installation either during or after construction which are easy to install and, being HACCP Australia certified, provide a conforming and food-safe solution.

Says Vikki Baker of HACCP Australia "All facility managers at food premises should take a few minutes to review their buildings – this simple step could make a big difference to controlling pests and the associated risks. We love a simple and safe solution and Weepa certainly has one with these products." ■



For more information, contact Weepa on 07 3844 3744 or visit www.weepa.com.au.





HOT LINKS

Bad Bug book 2nd edition

<http://www.fda.gov/Food/FoodSafety/FoodborneIllness/FoodborneIllnessFoodbornePathogensNaturalToxins/BadBugBook/default.htm>

The 2nd edition is here and we are excited! This document is brilliant and provides information on all that we worry about in regard to food poisoning agents. Technically robust with excellent 'consumer' sections also, this is a must download for all interested in food safety.

Take tasty photos

<http://www.photoble.com/photography-tips-tricks/10-food-photography-tips-to-make-it-look-tasty>

Food photography is an art form that many have not mastered. Here are some tips for those interested in food photography as either a hobby or if you want to make DIY brochures for your products.

Even tastier photos

<http://www.learnfoodphotography.com/>

This site provides the masterclass of food photography with blogs and articles from leading photographers and stylists. Follow this page and watch your snaps improve!

Can I still eat this?

http://www.foodsafety.govt.nz/elibrary/industry/guide_calculating-contains_background.pdf

The food industry has a duty to declare shelf life on packaged foods and this guide gives an overview of how it all works. Shelf life determination is very important.... Don't get it wrong!

US food illness outbreaks

<http://www.foodsafetynews.com/sections/foodborne-illness-outbreaks/>

Absolutely frightening information where details of outbreaks are listed in the USA. Multiple deaths and hundreds ill are certainly not rare occurrences reported. With over 75,000,000 illness events leading to some 5000 deaths in 1999, this site tracks current events as they unfold across the US. To compare population apples with apples for Australia, simply divide by 14.

The mother of all graveyards

<http://www.famaker.com.au/>

With over 10 acres of food equipment, F. A. Maker is one of the largest dealers in 2nd hand processing equipment in the Southern Hemisphere. An excellent option when building a pilot operation and plenty of possibilities when scaling up your facility. ■

Dedicated Skin Care Range for the Food Industry



The Deb Food Industry Skin Safety Programme is specifically developed for food handling and manufacturing environments.

The programme is designed to:

- Raise the level of employees compliance with hand hygiene protocols
- Improve skin condition
- Reduce the potential for cross-contamination to safe levels

For more information and your free site audit, contact Deb Australia on 1800 090 330 www.debgroup.com

CAREL

High Efficiency Solutions.

RETROFIT

RS485 Modbus

PairWatchPRO

Wireless Monitoring and Temperature Controlling for Alarm management and HACCP Compliance

CAREL Australia PTY LTD
PO BOX 6809, Silverwater Bus. Ctr. N.S.W. 1811
Unit 37, 11-21 Underwood Rd Homebush N.S.W. 2140
Tel. (+61) 2 8762 9200 - Fax (+61) 2 9764 6933 - sales@carel.com.au

carel.com

Ecowize is a leading international supplier of specialist outsourced cleaning services to the food industry.

Trust us to deliver:

- Cleaning management system developed specifically for the food industry
- Extensive expertise and management experience on an international level
- Cost and resource efficiencies
- More time for you to focus on your business.

For more information please call Ecowize Australia on 02 9805 9200 or visit www.ecowize.com.au

ecowize



- Premium Nylon Scouring Pad 230x150mm Code: KWSLP
- Premium Green Scouring Sponge 150x115mm Code: KWSSP
- Premium White Scouring Sponge 150x115mm Code: KWSSPW
- Pot & Pan Scourer 120x90mm Code: KWSPNP

Premium performance for everyday cleaning.



Website: www.bunzl.com.au

“These products are food safe”



An introduction to HACCP Australia's certification and endorsement process for products and services supporting the food industry can be found on page 30.
Below, please find a list of companies supplying products or services certified by HACCP Australia

CATERING EQUIPMENT	ESWOOD AUSTRALIA MACKIES ASIA PACIFIC TOMKIN AUSTRALIA	Manufacturers of industrial dish and glass washers Food safe bread loaf pans and bakery trays Food safe kitchen equipment	1800 013 123 02 9708 2177 02 8665 4675
CLEANING EQUIPMENT	BAXX AUSTRALIA EDCO (EDGAR EDMONDSON) ED OATES PTY LTD SABCO STEAMASTER	Equipment for the elimination of airborne pathogens Cleaning aids and equipment Full range of food grade cleaning equipment Scourers, sponges, cloths and cleaning aids Hot and cold water pressure cleaners	02 9939 4900 02 9557 4411 1800 791 099 1800 066 522 02 9796 3433
CLEANING CHEMICALS	3M AUST STEAM CLEANING & MAINTENANCE SYS. DEB AUSTRALIA ECOCLEAN AVANTI CHEMICALS SEJ SOLUTIONS	Scotch-Brite™ anti-bacterial cleaner All purpose cleaning & disinfectant products Skin care and hand cleaning soaps for food handlers Cleaning chemicals for food and agri. businesses "Shining Armour" stainless steel cleaner & rejuvenator	136 136 07 5599 8410 1800 090 330 07 5549 3666 1300 055 818
CLEANING AND MAINTENANCE SERVICES TO THE FOOD INDUSTRY	ACE FILTERS AERIS HYGIENE BORG CLEANING CHALLENGER CLEANING SERVICES ECOWIZE FASTKIL HEALTH & HYGIENE SERVICES (FIJI) ICE CLEAN INDUSTRIES INTEGRATED PREMISES SERVICES P/L ISS HYGIENE SERVICES MAGIC TANK METROPOLITAN FILTERS OZ TANK PINK HYGIENE SERVICES TOTAL EXHAUST CLEANING CONTRACTORS WASH IT AUSTRALIA	Food grade cooking oil filters Specialist cool room and cool room motor cleaning services Specialist contract cleaning services for food premises Specialist contract cleaning services for food premises Hygiene and sanitation service providers to the food industry Hygiene and sanitation service providers to the food industry Residual free dry ice cleaning Specialist contract cleaning services for food premises Washroom services for the food industry and premises Soak tank & cleaning solution for catering equipment Filters and filter services for range hoods and food facilities SS deep cleaning tanks and systems for pans and trays Bathroom services for the food industry and premises Specialist cool room, hoods and kitchen cleaning services Food transport vehicle cleaning & sanitation services	1300 555 204 1300 790 895 03 9463 1300 02 9993 0562 02 9805 9200 (679) 3100047 02 8796 3008 1800 651 729 1300 656 531 0421 669 915 1300 653 536 1300 668 866 1300 731 234 0418 192 025 1300 927 448
CLEANING MATERIALS	3M BUNZL CARLISLE FOOD SERVICE PRODUCTS CLOROX AUSTRALIA CONCEPT LABORATORIES PTY LTD DEB AUSTRALIA DOUBLE – E ENVCLEAN EDCO (EDGAR EDMONDSON) ED OATES PTY LTD ITW POLYMERS AND FLUIDS LALAN GLOVES SAFETY CARE MEDIVAC PALL MALL SABCO SCA HYGIENE AUSTRALASIA	Scotch-Brite™, Cleaning Chemicals, Scourers and sponges Kwikmaster range of scourers Food safe brush ware Chux™, Oso™ and Glad™ range of materials Suppliers of sanitising hand gel and sanitising wipes Disposable cleaning wipes Food safe absorbent material for spills Disposable cleaning wipes Full range of kitchen cleaning materials Food safe aerosol cleaner Food grade cleaning materials Disposable cleaning wipes for the food industry Scourers and floor pads Scourers, sponges, cloths and cleaning aids Tork premium colour coded specialist cloths	136 136 03 9590 3000 0433 946 363 02 9794 9500 07 5493 8433 1800 090 330 1800 043 280 02 9557 4411 1800 791 099 02 9757 8800 03 9706 5609 03 5436 1100 02 9584 8644 1800 066 522 1800 234 613
CLOTHING - DISPOSABLE GLOVES AND PROTECTIVE WEAR	EMLOTTE PTY LTD KIMBERLY – CLARK PROFESSIONAL LALAN GLOVES SAFETY CARE LIVINGSTONE INTERNATIONAL MEDIIRTE AUSTRALIA PARAMOUNT SAFETY PRODUCTS RCR INTERNATIONAL STEELDRILL HEALTH AND SAFETY PTY LTD SCA HYGIENE AUSTRALASIA YAP TRADING COMPANY	Waterproof finger cots for dressings & bandages Disposable gloves for the food industry Disposable gloves for the food industry Disposable gloves for the food industry Disposable and re-usable gloves for the food industry Disposable gloves for the food industry Gloves and disposable protective wear Disposable gloves for the food industry Tork premium disposable non woven cloths Disposable gloves for the food industry	02 4773 8171 02 9963 8858 03 9706 5609 02 8344 7252 02 9676 8113 03 9762 2500 03 9558 2020 03 9790 6411 03 9550 2999 02 9826 8299
FACILITY FIXTURES AND FIT OUT	ALBANY ASSA ABLOY CARONA GROUP DYSON APPLIANCES HALTON INTERNATIONAL MANTOVA PHILIPS LIGHTING PHOENIX THORN LIGHTING UNIVERSAL FOOD SERVICE DESIGN PTY LTD	Automatic rapid close doors Coldshield's PVC flexible doors for food premises Suppliers of food safe hand dryer Suppliers of extraction hoods & ventilation devices Food grade shelving and storage solutions Food safe light fittings for food handling facilities Suppliers of Hidria Gif ventilation systems Food safe lighting and fit out solutions for food handling facilities Consultant and designer of food handling facilities	1300 666 232 1800 462 233 02 9540 0400 0412 702 145 02 9632 9853 02 9947 0000 1300 405 404 1300 139 965 02 4329 0630
FLOORING WALLS AND MATTING	3M ALTRO SAFETY FLOORING AND WALLING BASF CONSTRUCTION CHEMICALS BETHELL FLOORING BLUESCOPE STEEL DEFLECTA CRETE SEALS GENERAL MAT COMPANY (THE) PALL MALL MANUFACTURING ROXSET AUSTRALIA	Specialist safety matting for food and beverage areas Specialist food premises flooring & wall panels UCRETE Flooring System Supplier and installers of specialist food premises flooring Colorbond® Anti-bacterial Coolroom Panelling Products (quote 2222) Anti-bacterial flooring product and services Specialist safety matting for food and beverage areas Specialist safety matting for food and beverage areas Supplier and Installers of specialist food premises flooring	136 136 1800 673 441 1800 333 048 07 3865 3255 1800 022 999 03 9318 9315 1800 625 388 1300 676 807 02 9988 4822
FOOD SERVICE EQUIPMENT AND UTENSILS	AACLAIM QUALITY SALES KENCAN AUSTRALASIA LANCER BEVERAGE SYSTEMS SKANISCO SPM DRINK SYSTEMS TOMKIN AUSTRALIA	Food service and food storage light equipment Suppliers of Moooi and Cool Blue disposable piping bags Draught beer dispensing system Supplier of Kee-seal™ disposable piping bags Soft serve dispenser machine Colour coded catering utensils, catering equipment and piping bags	02 9525 1049 07 3273 8111 08 8268 1388 07 32793358 0438 837 246 02 8665 4675
FOREIGN BODY IDENTIFICATION	SMITH DETECTION WJB ENGINEERING	X-ray inspection and foreign object detection equipment Magnetic separation technology and services	02 8338 9722 1800 835 858

HAND SOAPS AND BARRIER CREAM	CHEMPACK SUPPLIES CONCEPT LABORATORIES DEB AUSTRALIA KIMBERLY – CLARK PROFESSIONAL	Food grade bathroom paper and dispensers Food grade hand soaps Food grade hand soaps Food grade hand soap, barrier cream and disposable towelling	02 9542 5822 07 5493 8433 1800 090 330 02 9963 8858
ICE MACHINES	HOSHIZAKI LANCER PTY LTD ICE MASTER SYSTEMS KOOLER ICE	Ice machines for hotels, restaurants and catering outlets Ice machines for hotels, restaurants and catering outlets Ice Vending machines	1300 146 744 1800 022 023 1800 247 423
KITCHEN CONSUMABLES	3M CLOROX AUSTRALIA EDCO (EDGAR EDMONDSON) ED OATES PTY LTD LALAN GLOVES SAFETY CARE	Scotch-Brite™, Cleaning Chemicals and Scourers Glad™, Chux™ and Oso™ range of materials Suppliers of food grade kitchen consumables Full range of kitchen consumables Suppliers scourers, sponges and consumables	136 136 02 9794 9500 02 9557 4411 1800 791 099 03 9706 5609
LABELS – FOOD GRADE	LABEL POWER OMEGA LABELS P & I PTY LTD WEDDERBURN	Food safe labels for food products and food retail Beverage packing material & labels Supplying paperboard packaging and labels Food safe labels for food products and food retail	1300 727 202 1800 028 924 02 8707 7109 1300 970 111
LUBRICANTS – FOOD GRADE	LANOTEC AUSTRALIA ITW POLYMERS AND FLUIDS	Suppliers of food grade lubricants Suppliers of food grade lubricants	07 3373 3700 02 9757 8800
MANAGEMENT SYSTEMS	SHADOW ORGANISATION	Audit, compliance and monitoring systems	02 8448 2090
MANUFACTURING EQUIPMENT AND COMPONENTS	AIR & GAS SOLUTIONS ALLIANCE SEALING BSC MOTION TECHNOLOGY COMPAIR AUSTRALASIA LTD ENMIN PTY LTD FCR MOTION LAFERT ELECTRIC MOTORS/ SCORPION SICK PTY LTD SMC PNEUMATICS	Compressed air piping systems in food manufacturing processes Plastic and rubber sealing components for food processing Food grade bearings and housings Servicing and maintenance of compressed air systems Manufacturers of food grade feeder equipment Manufactures of food grade geared motors and inverter Stainless steel electric motors for food processors Food safe switches, sensors & sensor solutions Suppliers of pneumatics and valves for food manufacturing	1300 1300 24 02 9947 9259 03 9560 3222 1300 134 952 03 9800 6777 03 9362 6800 03 9546 7515 1800 334 802 1800 763 862
PACKAGING MATERIAL AND EQUIPMENT	ACHIEVE AUSTRALIA ASTECH PLASTICS DALTON PACKAGING FLEXPACK MICROPAK PTY LTD NETPACK RCR INTERNATIONAL	Repacking of consumables and food products Supplier of food safe pails & lids Manufacturers of paper bags and products for the food industry Manufacturers and printers of film packaging Manufacturers of food grade packaging materials Suppliers of food grade netting to small goods manufacturers Food grade pallet and crate covers	1800 106 661 1300 133 531 02 9774 3233 07 3217 0999 02 9646 3666 02 9604 4950 03 9558 2020
PEST CONTROL EQUIPMENT AND MATERIALS	AGSERV BASF CHEMICALS (BASF) GOLIATH, PHANTOM & STRATAGEM BAYER BELL LABORATORIES EKO RODENT MAKESAFE PEST FREE AUSTRALIA PTY LTD STARKEYS PRODUCTS ULTRA VIOLET PRODUCTS WEEPA PRODUCTS PTY LTD	Suppliers of "Brandenburg" flying insect control Suppliers of Roguard bait stations Suppliers of rodent and insect control materials Suppliers of rodent and insect control materials Suppliers of rodent control materials and stations Distributors of the 'ecomille rodent eradication equipment BaitSafe™ rodent bait-station device Specialist electronic vermin elimination devices Range of insect control devices Insect trapper device Weep hole protection devices for new or retro application	07 3255 5572 1800 006 393 1800 006 393 03 9248 6888 0427 802 844 07 3206 4600 1300 065 467 02 4969 5515 08 9302 2088 1800 081 880 07 3844 3744
PEST CONTROLLERS (FIJI)	AMALGAMATED PEST CONTROL FASTKIL PEST CONTROL SERVICES	Specialist pest control services for the food industry Specialist pest control services for the food industry	(679)6665462 (679)3100047
PEST CONTROLLERS (ALL STATES)	RENTOKIL SCIENTIFIC PEST MANAGEMENT	National pest control services for the food industry National pest control services for the food industry	1300 736 865 1300 139 840
PEST CONTROLLERS (NSW)	AEROBEAM PROFESSIONAL PEST MGMT AMALGAMATED PEST CONTROL ANT – EATER ENVIRONMENTAL SERVICES CPM PEST & HYGIENE SERVICES CORPORATE PEST MANAGEMENT EAGLE PEST CONTROL ECOLAB PTY LTD HACCP PEST MANAGEMENT ISS PEST CONTROL KNOCK OUT PEST CONTROL PTY LTD STOP CREEP PEST CONTROL TERMIMESH PEST MANAGEMENT	Specialist food premises pest management Specialist pest control services for the food industry Specialist pest control services for the food industry Specialist pest control services for the food industry Specialist pest control services for the food industry Specialist pest control services for the food industry Specialist pest control services for the food industry Specialist food premises pest management services Specialist pest control services for the food industry Specialist pest control services for the food industry Regional pest control services for the food industry Specialist pest control services for the food industry	02 9636 5840 13 19 61 1300 551 333 02 9674 5499 02 9311 1234 02 9748 0066 13 62 33 02 9922 3743 13 14 40 02 9545 4455 02 9371 3911 13 73 78
PEST CONTROLLERS (QLD)	AMALGAMATED PEST CONTROL ECOLAB PTY LTD GOODE PEST CONTROL ISS PEST CONTROL	Specialist pest control services for the food industry Specialist pest control services for the food industry Specialist pest control services for the food industry Specialist pest control services for the food industry	13 19 61 13 62 33 1300 13 12 14 13 14 40
PEST CONTROLLERS (VIC)	AMALGAMATED PEST CONTROL DAWSON'S AUSTRALIA ISS PEST CONTROL PESTAWAY AUSTRALIA PTY LTD PROTECH PEST CONTROL STATEWIDE PEST TRAPS PEST CONTROL PTY LTD	Specialist pest control services for the food industry Specialist pest control services for the food industry Specialist pest control services for the food industry Specialist pest control services for the food industry Specialist pest control services for the food industry Specialist pest control services for the food industry Specialist pest control services for the food industry	13 19 61 0411 131 650 13 14 40 1800 33 00 73 1300 780 980 1800 136 200 03 9390 6998
PEST CONTROLLERS (WA)	ISS PEST CONTROL TERMIMESH PEST MANAGEMENT	Specialist pest control services for the food industry Specialist pest control services for the food industry	13 14 40 13 73 78
REFRIGERATION – GOVERNORS, EQUIPMENT AND DATA	CAREL COOLSENSOR DIGINOL ONERGY PTY LTD	Temperature controllers and supervisors for refrigeration eCube Temperature mimicking devices Data loggers and data services for temperature control Distributors of EndoCube,improving temp monitoring and energy use	02 8762 9200 07 3395 4898 07 3206 3079 03 8844 5557
REFRIGERATORS AND REFRIGERATION SERVICES	AERIS HYGIENE SERVICES PTY LTD MELBOURNE REFRIGERATION SERVICES REJUVENATORS (THE)	Specialist cool room and cool room motor cleaning services Refrigeration installation and repair Specialist cool room cleaning and rejuvenation services	1300 790 895 1800 441 718 0407 292 826
STAFF RECRUITMENT	CHANDLER MACLEOD	Specialist HACCP trained workforce solutions for the food industry	0438 196 989
THERMOMETERS AND MEASURING DEVICES	3M TESTO PTY LTD	TL 20 Temperature logger for logistics Specialist thermometers and oil testers for use in the food industry.	136 136 03 8761 6108
TRANSPORT CONTAINERS AND PALLETS	HILLS INDUSTRIES PIPI GROUP SCHUTZ DSL (AUSTRALIA) PTY LTD VIP PACKAGING	Food grade pallets and storage solutions Food safe pallets and freight solutions Food safe storage and transportation palletcons Food grade intermediate bulk containers	07 3212 9588 0433 086 028 1800 336 228 02 9728 8999



Web-Trap



NEW PRODUCT LAUNCH

Starkeys Products have just launched their latest innovation in Glueboard Insect Light Traps. The WebTrap has been designed to look good in any environment and offers the latest technology with energy saving electronic ballast and increased catching rate with the new Phillips "Master" blacklight lamps.

WebTrap uses a "heavy duty" high quality Glueboard that will not sag or run in hot or humid conditions. When combined with the 3 powerful blacklight tubes & special alloy strips, gives an impressive coverage area of 180 sqm.

The modern, lightweight style is designed for easy serviceability & combined with the practicality of a unique 3 way mounting system that allows the unit to be positioned almost anywhere. WebTrap is a quality Starkeys Product that you can buy with confidence knowing it's been made by a company with a 40 year heritage in manufacturing some of the world's leading insect light traps.

STARKEYS PRODUCTS
(Adam Carew-Reid)
Ph (08) 9302 2088
info@starkeys.com.au
www.starkeys.com.au

These products are food safe



The HACCP Australia certificate of conformance (often referred to as a 'CoC') is particularly aimed at those organisations that are required to supply 'food safe', 'compliant' or 'HACCP approved' products and services to their food safety conscious customers. Such products or services are usually those that have incidental food contact or might significantly impact food safety in their application. Food safety schemes, particularly the leading ones which are GFSI endorsed, require food businesses to subject many such products to a 'due diligence' process and the HACCP Australia certification is designed to meet this. This independent assessment and verification of fitness for purpose offers assurance to the buyer or user that HACCP food safety protocols will not be compromised in using such a product or service correctly and that such a product is 'fit for purpose'.

Certified products have been rigorously reviewed by HACCP Australia's food technologists and, in their expert estimation, are manufactured and designed to meet all the appropriate food safety standards. In performing the assessment, they look for 'world's best' in terms of food safety features and characteristics. The food technologists undertaking these reviews all have extensive industry and manufacturing experience. Only products that are assessed as meeting the criteria can carry the mark. Quite often, organisations are required to make modifications to the product, design, delivery, literature or recommendations in order to comply. This process is therefore particularly useful for products that are designed for many industrial applications.

Comfort Flow Mat No. 420

Comfort Flow has the following key features:

1. Perfect for food processing areas, machine shops, kitchens, bars, packing areas and heavy industrial applications.
2. Provides excellent anti-fatigue properties for employee comfort.
3. This mat is light weight for easy handling and is fully launderable.
4. Superior in grease and oil resistance. Anti-microbial treated.
5. Green friendly. 100% nitrile rubber has 10% recycled content.
6. The non-skid backing keeps the mat in place.
7. Its low profile and slip resistant surface reduces slip and fall accidents.



SPECIFICATIONS

Uses:	Wet, dry or greasy environments
Compound:	100% closed cell nitrile rubber
Thickness:	11mm with low profile edges
Warranty:	2 years
Colour:	Black (grease-proof)

Stock Sizes

580mm x 860mm
840mm x 1410mm
840mm x 2700mm
1100mm x 1700mm

For further information contact:

The General Mat Company

Toll Free: 1800 625 388

Email: sales@matting.com.au

www.matting.com.au



**Buy Direct
from the
Manufacturer**

No Orders
Too Small
Save \$\$\$



durapail™

**CHECK
OUT OUR
QUANTITY
BUY PALLET
PRICES**

**FREE
SAMPLES**

STECH Plastics - Pail Opener

OH&S pail manual handling solution, plastic pail opener
made easy, 2 quick steps solves your problems.



Phone or fax for
a free sample,
a quote or to
see a sales
representative.

Phone: 1300 133 531 Fax: 1300 883 302
AUSTRALIA WIDE DELIVERY

STECH
Plastics

**Don't leave hand
protection to chance,
we don't.**



AVAILABLE AT ALL GOOD SAFETY OUTLETS
Contact us safeas@prochoice.com.au for a stockist list

oz-tank
QUEENSLAND
ABN: 51 096 029 113

**NUMBER ONE IN CLEANING
KITCHEN EQUIPMENT**



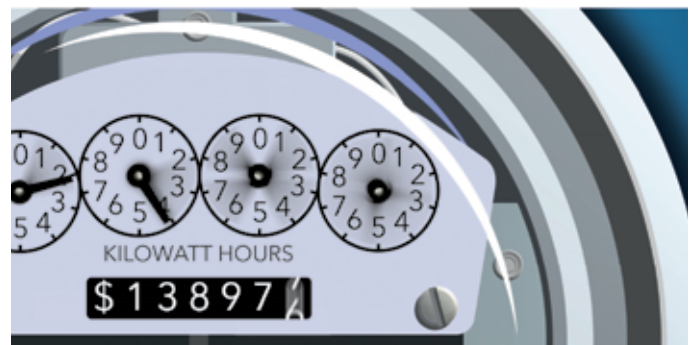
Non caustic
HACCP accredited
soak tank system

Ask us how to save thousands of
dollars per year in your equipment
cleaning cost of chargrills, stove tops,
extraction filters etc.



Oz-Tank Qld
1300 66 88 66
www.oztank.com.au

**Want to reduce your
Carbon Footprint?**



AirAudit

If your business is a user of compressed air, you could be
wasting tens or even hundreds of thousands of dollars a
year in energy costs and contributing thousands of extra
tonnes of CO2 into the atmosphere.

Get the free Air Audit app for an estimate of just how
much money you may be wasting and how much CO2
you could be producing.

www.airaudit.com.au

WHAT ALL THE BEST, FOOD SAFE EQUIPMENT IS WEARING



For more information on the non food product
certification scheme and its benefits
or
to find food safe products, materials and equipment
that best support the food industry, visit:

www.haccp.com.au

or call our Sydney office on:

02 9956 6911



HACCP AUSTRALIA

eliminate the hazard - reduce the risk