FOOD SAFETY FOR MAINTENANCE – ESSENTIAL FOR SUCCESS

By Linda Jackson, Food Focus

Food Focus recently hosted a Maintenance and Food Safety Workshop sponsored by CRC Industries, at BMG world in Johannesburg. The focus of this workshop was to bring together maintenance and food safety personnel to allow a better understanding of each other's challenges in ensuring the mutual objective of safe food for the customer.

Why is maintenance so important to food safety?

A food safety management system is a risk management approach to mitigating hazards associated with food and food production. We are all familiar with the concept of risk as we consciously and subconsciously make decisions about the risks that we face on a daily basis. Whether this is wearing a seatbelt to reduce the likelihood of serious injury whilst driving, or arming your alarm when you leave home to deter burglars, we all have risk mitigation plans in place. One of the reasons that maintenance is so important in a food safety management system is that many risk mitigation tools in food safety are maintenance related or have a maintenance component.

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This is where the challenge lies - since maintenance personnel often do not have food safety backgrounds and the paperwork associated with food safety is often a huge barrier to their ownership of food safety. Also, food safety personnel often do not really understand the hazards presented by equipment and maintenance activities and as such cannot competently guide the food safety team in these aspects. An effective food safety team needs the input of a maintenance team that truly understands the risks associated with their area of expertise, and the critical role they play in ensuring the equipment does not cause harm to the customer.

Not just to satisfy the auditors!

At the workshop a number of experts presented information on the hazards that must be controlled from an engineering and maintenance perspective, and we started with the auditor perspective. Rolf Uys of Entecom gave a comprehensive presentation of the hazards he has seen in the hundreds of food safety audits he has carried out in his career. Issues to be aware of include incorrect designs such as dead legs in pipework, excessive vibration on motors and other moving equipment resulting in foreign body production, temporary fixes that were difficult to clean and the list continues.

"Ensuring the facility is well maintained is the top priority to effective pest control and the need for maintenance personnel to have an understanding of pest behavior is vital."

Rolf touched on some of the pest related issues he has come across in his years of auditing, and detailed how these issues could have been averted through better design and maintenance of the facility. The presentation underlined the importance of top management's commitment to food safety which will go a long way in ensuring maintenance buy-in to food safety as a priority.

It's about saving money and time. Andrew Murray of Andrew Murray Consulting, discussed that the foundation of hygienic engineering is facility design, and the wrong design of facility and equipment is often the root cause of food safety issues and despite the best efforts in the world, maintenance activities cannot correct many of these inherent hazards.

"Poor facility design can result in maintenance challenges that impact on the effectiveness of a pest management programme."

Where poor facility design presents maintenance challenges, there may definitely be an impact on the ability to implement an effective pest management programme, and these issues should be addressed with top management before the start of a service contract.

Starting with the correct hygienic design for a process, means customer requirements are met and hygienic design also makes for food safety and savings in energy, chemicals, and time. In addition to hygienic design, Andrew pointed out that hygiene practices are necessary to ensure food safety.

Although cleaning and sanitising are the priority here, hygienic maintenance activities support these PRP's. Andrew advised maintenance personnel to get an in-depth understanding of national and international standards that focus on equipment and design as these assist in ensuring food safety.

These include:

- SANS/ISO 14159
- The Machinery DirectivesSafety Directive 89/392/EEC superseded by 98/37/EC;
- The European Standards BS EN 1672 Part 2 /2005
- The Recommendations of the European Hygienic Equipment Design Group (EHEDG

The devil is in the detail

The workshop also hosted many other speakers who covered maintenance related topics. Louis Munnik of CRC industries, the gold sponsor of the event, elaborated on hygienic maintenance activities and addressed the issue of industrial chemicals used by maintenance in the food industry, including lubricants and other chemicals used for maintenance cleaning. He highlighted the fact that auditors and food companies alike are often unaware of the level of risk associated with these chemicals. Words like "food grade" are bandied about but there is a lack of understanding of exactly what this means and a distinct lack of evidence to support these claims. His informative presentations laid out the requirements that should be met for industrial chemicals to be suitable for use in the food industry.

Other practical presentations included a review of hygienic conveyors, hygienic tool boxes and software to assist with preventive maintenance activities. After all, we can't just talk about the right things that must be done, we need to know how to recognize problems to add practical value to the service provided to the client.

And on that 'practical note', watch out for our upcoming checklist of some of the top pest harborage sites and risk areas resulting from maintenance and facility design issues – we'll give you practical tips of where to look and how to mitigate these risks!

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