

May 2007

# Petfood Industry

WATT90

[www.petfoodindustry.com](http://www.petfoodindustry.com)

## Great brands, great future

Del Monte focuses  
on powerful trends, p. 16

Petfood 2011:  
the global outlook

Recalls: learning from  
a sad and messy crisis

Automating  
petfood safety

Jeff Watters, senior  
vice president of Del  
Monte Pet Products,  
and Nova.



Digital version at [www.petfoodindustry-digital.com](http://www.petfoodindustry-digital.com)

# Automating petfood safety

## How to respond rapidly to minimize the effects of product contamination

BY TIM PHILLIPS, DVM

Ensuring petfood safety has always been important, but now it is in the public spotlight. Given the recent rash of petfood recalls, many pet owners are considering safety before they purchase petfood. Following is a brief overview of automating process control to ensure petfood safety.

### Key questions for managers

"If you can't see it or measure it, then it is very difficult to improve it," notes Ray Bachelor of Bachelor Controls Inc. ([www.bachelorcontrols.com](http://www.bachelorcontrols.com)). He suggests operation managers ask themselves key questions, including:

- Can I prove that the products I'm shipping are safe?
- Can I efficiently track ingredients received through finished goods out?

- What HACCP alerts have occurred during a production shift?
- Is my plant performance consistent?

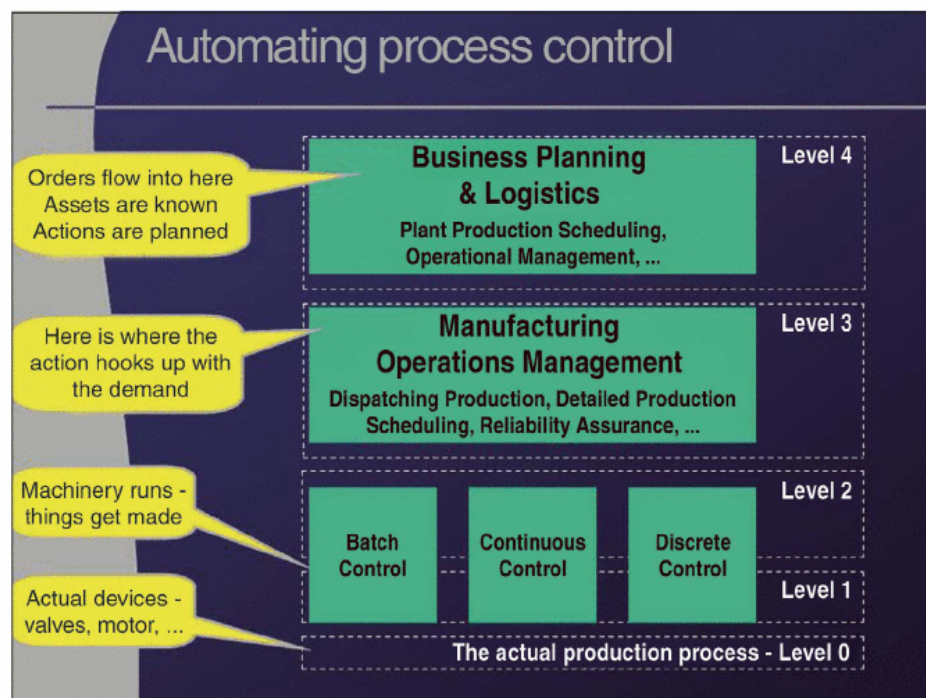
### Rapid response

Traceability systems are recordkeeping procedures that show the path of a particular product or ingredient from supplier(s) through all the intermediate steps that process and combine ingredients into products supplied to customers and ultimately to consumers. Says Julie Lenzer Kirk of Interstates Companies ([www.interstates.com](http://www.interstates.com)), "In the event of a product recall, manufacturers must have the ability to determine what foods are potentially contaminated and to rapidly respond to minimize the health, economic and other effects of such contamination." The speed at which this can be accomplished and the amount of product impacted again depends on the traceability systems in place.

Traceability systems have been shown to be weak or absent during a number of recent human food safety incidents. They were proven to be slow or simply unable to assure consumers of food safety. There is a wide range of traceability systems in place today from paper-based to information technology (IT) enabled. "These systems are critically reliant on the accurate recording of information," says Kirk. As a result, handwritten or printed labels are being replaced or supplemented by more effective systems that use machine-readable identification (e.g., bar codes and radio frequency tags).

### Make it a true priority

Petfood manufacturers cannot afford to ignore the traceability issue, even if they have been lucky enough



A well-designed plant network architecture integrates several systems into one automated system. Source: Leveraging production information, Ray Bachelor, Petfood Forum 2006 Proceedings.

## Critical control points

Critical control points (CCPs) are used in manufacturing to eliminate and/or reduce the possibility of a petfood safety hazard. They can take many forms, and a thorough analysis of potential hazards is an important first step in the control of these hazards.

CCPs are defined as process steps that are controllable and where food safety hazards may be prevented, eliminated or reduced to an acceptable level. Loss of control of a CCP likely leads to the high food safety risk of an unacceptable health hazard. Conversely, loss of control of a non-critical control point indicates a low food safety risk.

Although these points might be controlled for quality reasons, they are not mandated as part of a hazard analysis CCP plan (HACCP). The bottom line: If there is a food safety hazard that is reasonably likely to occur, it must be analyzed and the point at which that hazard could be introduced must be monitored and controlled. The seven HACCP principals are:

- Conduct a hazard analysis.
- Identify CCPs.
- Establish critical limits for CCPs.
- Establish procedures to monitor CCPs.
- Establish corrective actions.
- Establish procedures for effective recordkeeping.
- Establish procedures to verify that the system is working properly.

HACCP is a scientific approach to controlling hazards in production. It involves the monitoring and control of potential biological, chemical and physical hazards. Intended to be a preventive system, HACCP applies to all processes,

to avoid a high-profile contamination incident. Regardless of the regulations, since trust is the foundation for acquiring and keeping customers, making food safety and traceability a well-documented priority is an important way to increase and keep a loyal customer base.

**"If you can't see it or measure it, then it is very difficult to improve it."**

Adopting strict standards and ensuring that enterprise and supply chain systems support the full range of food safety and traceability requirements will protect companies from a potential disaster or additional cost incurred by non-compli-

ance with new regulations. Automating traceability is just one step in this process. It requires that quality control and lot traceability be integrated into processing and warehousing systems. These capabilities are an integral and intuitive part of operations and should be reflected as such in the systems that support operations.

## Code power

Traceability is greatly enhanced through the use of bar codes for automated data collection. When supplier lot numbers are associated with a product bar code as that product is received and then scanned as it is introduced into the manufacturing process, the information can be easily traced when needed. Likewise, capturing the lot number of bulk products at receipt and usage, although prone to more uncertainty based on products mixing in a bin, helps quickly pinpoint what lots may have gone into which finished products. In the race against time in a recall or a regulator's request for information, automated systems beat a spreadsheet every time.

## Send a positive message

"Traceability is not a threat," notes Kirk, "but an opportunity—a challenge to send out a positive message." Safety and traceability are integral parts of petfood quality, but they are also subject to a consumer's perception, just as quality is. ●

## We Stand Behind Our Results

*Choose Neogen*



### Spotlight On: Pet Food

Neogen's comprehensive line of unsurpassed rapid pet food safety solutions includes tests for:

- **Mycotoxins.** Neogen's Reveal® lateral flow tests for aflatoxin and DON provide the fastest and most accurate results in as little as 2 minutes. Neogen's Veratox® tests provide fully quantitative rapid mycotoxin results.
- **Pathogens.** Neogen's line of pathogen tests include the AOAC-approved 24-hour GeneQuence® *Salmonella*, which combines ease of use with DNA-level accuracy, and Reveal for *Salmonella*, as easy as it gets for *Salmonella* testing.



800/234-5333 or 517/372-9200  
foodsafety@neogen.com  
www.neogen.com

