

NEWS *from* NEOGEN

FOR THE MILLING, GRAIN
AND ETHANOL INDUSTRIES

NEOGEN CORPORATION
a Leader in Food Safety Solutions

Food Safety Auditing

Neogen chats with Judi Lazaro

Director of Customer Relations for AIB International



Neogen: What is an audit, and why is auditing important?

Judi Lazaro: First, I think it is important that the terms auditing and inspecting be defined. Although these words are used interchangeably, they do not mean the same thing to those of us that audit and inspect in the food industry. An inspection is a moment or snapshot in time and it involves an inspector

climbing, crawling and physically evaluating the site. The audit is a systematic review of the site's programs and documents, where most of the time is spent in a meeting room reviewing the site's written procedures. Both the process of auditing and inspection are very beneficial and essential to be done together. The process of auditing and inspecting complement each other. For instance, relying exclusively on inspections without an emphasis on auditing may create deficiencies in documented processes and these tend to be highlighted during management and leadership changes. In contrast, over-reliance on auditing without a similar emphasis on inspection may create poor execution of documented processes.

Neogen: What are the current trends in auditing, and have they changed from the past?

Lazaro: With the arrival of the GFSI audit schemes, the shift has moved more toward the "audit" to accommodate these schemes. That is, these audits are not intensely physical and to satisfy the demands of these audits, some sites are focusing more on the audit and less on the inspection. Some of our AIB inspectors have noticed a decline in some sites. A written record/program and the execution of that written record/program are not always the same thing. However, some of our auditors have also noticed a more balanced food safety program with many of our clients.

Neogen: What are the biggest successes of audits, and what are the biggest challenges?

Lazaro: There have been many successes if the audits are used correctly. I do not wish to sound as if the inspection is always better than the audit and vice versa. Both yield excellent results if used correctly. Some sites have relied exclusively on the inspections for many years and have not developed strong written programs. Once management and leadership change, the success of the site can diminish as there were no written words to keep systems in place. The audits have forced the food industry to create written words and thus create written food safety programs.

The challenge, as I have said, is trusting only one over the other. If you only trust your audits, you may find that your execution is weak. If you only trust your inspections, you may find that personnel perform because they are told and trained to perform, but without the systems to ensure this continues, this too may fail.

Neogen: How is onsite monitoring of food safety part of the auditing process and what do auditors expect to see?

Lazaro: Monitoring is the process of making sure a limit is set and recording that the activity occurred. So with regards to food safety, we monitor many different things; HACCP, cleaning processes, cleaning chemicals and so on. Auditors and inspectors expect to see that the monitoring steps in a plant are defined and also being verified. With cleaning as an example, the site should know how they will clean the equipment, when, chemicals needed and so on — but also how they will evaluate that it is clean.

Neogen: What do you foresee in future auditing trends?

Lazaro: With the Food Safety Modernization Act, it is clear that there will be an increase in regulatory inspections at the sites. Remember, the FDA inspector is that, an "inspector." They are not auditors and do rely on the physical inspection of a site to determine regulatory compliance. Although they will have greater

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access to records, they will still rely greatly on the physical inspection. Because of this and also because many sites that have adopted the “audit” format almost exclusively have seen some decline in their sites, I expect the physical inspection will be the future trend.

For more information:

- AIB International, www.aibinternational.com
- Article: Congress Passes the FDA Food Safety Modernization Act, www.goo.gl/3Y2WX
- Global Food Safety Initiative, an organization that pursues continuous improvement in food safety management systems, cost efficiency in the supply chain and safe food for consumers worldwide, www.mygfsi.com

AIB International has been providing Food Safety Audit and Education Services worldwide to the food manufacturing and distribution industry and its suppliers, (including finished foods and beverages products, ingredients, fresh produce, packaging production, and distribution facilities) for over 60 years. Audit Services include AIB's

GMP inspection, Accredited Certification Body for BRC, SQF 2000 and FSSC 2000, HACCP Accreditation, OSHA, AIB Gold Standard, Customer, and Quality System Audits. At present, AIB International conducts over 10,000 audits a year across the entire food industry in more than 120 countries.

Judi Lazaro began her career in the food industry with Frito-Lay manufacturing then joined the AIB staff in 1990. With a BS Degree and a U.S. Army Officer Commission, the food industry appealed to her due to the fast pace and ever-changing requirements and regulations. As a food safety auditor for AIB International, Judi audited and trained in a variety of manufacturing plants and distribution centers. In 2001, she began working in the management side of AIB International as Head of Audit Services, North America. In 2006, she moved to her present position as Director of Customer Relations for AIB International. Her present position allows her to develop and manage the business needs for AIB International on a global level while meeting the needs of the individual companies that use the services of AIB International.

Killer rodenticides available from Neogen

Neogen makes it easy for you to protect your business from costly and potentially dangerous damage caused by rats and mice, who consume and contaminate grains, spread diseases, weaken facilities by burrowing and damage electrical wires.

A simple baiting inspection will let you know where to place your bait in your facilities, as baiting randomly is ineffective. Common places for inspection include outside of buildings near the foundation, inside of insulated walls, underneath scales and in attics. If you see nests, “grease marks,” burrows or other evidence of rodent

Not sure where to start? Neogen's free Rodenticide Catalog and 4-Step Rodent Control Program provide concise explanations and product suggestions to counter just about any rodent control problem that you may be experiencing.

For more information about our rodenticides, visit our website www.neogen.com/AnimalSafety/AS_R_index.html, or call us at 800/621-8829.



infestations near these places at dusk and dawn, those are the locations to start baiting. If you see rodents during daylight hours, you likely have a severe infestation.

Neogen's rodenticide research and production operations in Wisconsin are continually improving our products to better serve our varied customers' needs and more effectively control evolving rodent problems.

Rat & Mouse Facts

- A young rat can squeeze through a hole the size of a quarter.
- Rodent hairs carry bacteria.
- Rat burrows are usually 8-18" below the surface of the ground.
- A mouse can squeeze through holes 1/4" (6 mm) in diameter.
- A female mouse can produce 30-35 offspring per year.
- A single mouse produces 50 or more droppings per day.
- One pair of mice can produce 18,000 droppings in 6 months.



Winter 2011 grain crop summary and quality perspective

Everyone that is involved in the grain, feed, milling and ethanol business is well aware of this year's volatile commodity markets and the supply and demand challenges we are facing. To recap, here are some of the highlights reported in the USDA Crop Production Report:

- **Total U.S. corn production** is down 5 percent from 2009 record levels. Yields per acre were down about 11.9 bu./acre and total corn production was 12.4 billion bushels. The crop reached full maturity and was harvested early (vs. 2009 late wet crop). Pockets of aflatoxin concern were evident in Texas, Tennessee, Missouri and southern Illinois.
- **Corn used in ethanol production** has reached a level of nearly 40 percent of U.S. corn production. Correspondingly, the supply of DDGS is a key commodity ration for the U.S. livestock industry and is expanding to fill a growing export demand. Maintaining a quality DDGS product for livestock feed is critical in the supply/demand balance sheet especially in this tight year.
- Current year **wheat production** is down 1 percent from the 2009 crop year with total production at 2.21 billion bushels of all wheat classes. Winter wheat production was 1.49 billion bushels—down 3 percent—due to 8 percent fewer acres planted. Spring wheat production was up 5 percent over 2009 production that was the 3rd highest on record. Durum wheat production was off 2 percent with fewer acres planted and further reduced by 2.5 bushel/acre lower yield. Pockets of DON in soft winter wheat were found in Ohio and Illinois this year.

- **Soybean production** was 3.33 billion bushels which was 1 percent lower than 2009 crop harvest. Again the favorable growing season resulted in the earliest harvest since 1975 with good protein and oil content.

World grain markets are under great pressure as the high commodity prices demonstrate the concerns about supply. Major weather issues from droughts to floods have hurt global grain production for corn, beans and wheat. U.S. supply is estimated as adequate but at one of the lowest days to use ratio on record.

Managing risk is a fundamental part of the grain business as any commodity trader knows. What is sometimes overlooked is the quality factor of stored grain and managing that risk. While the 2010 crop had overall good quality, the concern for poor quality grain entering the supply chain is increased. Extremely high prices will draw grain to market (both farm stored and commercial elevators) and “old crop” will be sold. The 2009 crops' mycotoxin levels will have potentially worsened and a quality screening program to monitor levels is important now more than ever. Bins will be swept clean, and grain with potential mold or heat damage can contaminate otherwise good quality corn.

“Quality doesn't cost, it pays.”

For any question about mycotoxins and grain quality please contact Neogen's Milling & Grain Team.

Read the whole report here:

USDA Crop Production 2010 Summary Report

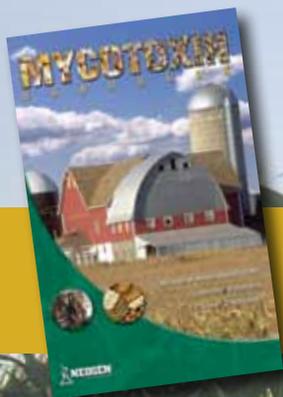
www.grainnet.com/articles/usda_crop_production_2010_summary_report-103597.html

And for even more information:

U.S. Drought Monitor

Created by the National Drought Mitigation Center and released at 8:30 a.m. EST on Thursdays.

<http://drought.unl.edu/dm/monitor.html>



We have your mycotoxin testing solutions

Neogen offers an array of natural toxin test kits to detect aflatoxin, deoxynivalenol (DON), fumonisin, ochratoxin, T-2/HT-2 toxins and zearalenone. Each provides results in minutes, and requires only a minimal amount of training and equipment.

*Our Mycotoxin Handbook is available free of charge. Please contact us today and receive regular updates from the Milling & Grain Team as close and convenient as your inbox: **800/234-5333** or foodsafety@neogen.com.*

GeneSeek offers plant genomic solutions for improved breeding

Whether it is whole genomic DNA or plant tissue of any type, GeneSeek can provide genotyping services for quality control, transgene analysis, whole genome scans or marker assisted selection.

GeneSeek, a Neogen company, has developed new methods and systems for collection, storage, DNA extraction and genotyping from plant samples that allow high throughput genotyping at very low cost. From one or two small leaf disc punches, we are able to analyze your target of interest using standard PCR, real-time PCR, SNPs or microsatellite markers. Our collection devices allow identification, long-term storage and shipping of samples.

For more information, contact GeneSeek representatives at 402/435-0665 or by emailing geneseekinfo@neogen.com.



Neogen makes sampling faster, easier

Sample preparation is now even easier with the new sample divider developed by Neogen for use with the heavy-duty Bunn coffee grinder. The grinder, which is available from Neogen, quickly grinds your samples to the appropriate consistency for accurate mycotoxin testing.



Neogen's new sample divider (Neogen item #9517) is an easy-to-install attachment for the grinder that equally separates two representative samples as you grind.

Reserving a representative sample is recommended for confirmation in case of positive test results in commodities not previously tested before taking action.



GRAINS OF TRUTH

"A positive attitude may not solve all your problems, but it will annoy enough people to make it worth the effort."

—Herm Albright

LINKS for further reading

The USDA decided in February to deregulate genetically modified corn for use in the production of ethanol. The aim of these engineered crops is to increase fuel production while reducing greenhouse gases.

Here are some reports about this landmark decision:

- Possible implications for this new technology:

www.grainnet.com/articles/syngenta_s_high_amylase_enogen_gm_corn_concerns_millers-104529.html

- Industrywide reactions to the USDA's decision:

www.grainnet.com/articles/responses_and_reactions_to_usda_decision_to_deregulate_syngenta_s_enogen_alpha_amylase_corn-104895.html

Upcoming trade shows

Come see our Milling & Grain Team at these upcoming shows:

- **American Association of Grain Inspection and Weighing Agencies**
May 1–3 at Bally's Las Vegas
- **International Association of Operative Millers**
May 2–6 in San Antonio, Texas • Booth No. 200
- **International Fuel Ethanol Workshop & Expo**
June 27–30 in Indianapolis, Indiana • Booth No. 1205



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