Global Feed Forum

The III Global Feed Forum held in Cancun, Mexico April 21-23, 2010 featured speakers from Africa, Asia, Canada, Europe, Latin America, and the United States. The final day of the conference focused on Global Regulatory Equivalency. Dr. Herrman delivered the concluding presentation titled “I’m Your Feed Regulator Here to Help You.” His presentation focused on the essential role the regulator provides to market confidence, which he dubbed the “Currency of Confidence.”

In this presentation, he described how the value proposition offered by sound regulatory oversight is built upon a science-based approach to risk management. Risk management includes weighing policy alternatives in consultation with all interested parties, considering risk assessment and other factors relevant for the health protection of consumers and for the promotion of fair trade practices, and if needed, selecting appropriate prevention and control options. The adoption of a science-based approach to risk management enables the Office of the Texas State Chemist (OTSC) to focus resources on firms with high violation rates.

State feed control officials traditionally spend as much time on ensuring equitable trade practices as they do ensuring the product is safe for the animal to consume and present no human food safety issue. There is a popular concept involving one health, articulated by Michael Polin in the Omnivore’s Dilemma: “At either end of any food chain you find a biological system—a patch of soil, a human body—and the health of one is connected—literally—to the health of the other. In the animal protein food production system, one health begins with the production of cereals, oilseeds, and other feed ingredients. One health includes animal feed, animal health, human health, and market health. In such a scenario, consumer protection and maintaining a level playing field does not have to be an either/or proposition. OTSC attempts to capture this dynamic in this mission statement “Protecting consumers and enhancing agribusiness through its regulatory compliance program, surveillance and monitoring of animal-human health and environmental hazards, and preparedness planning.”

The Office adopted a science-based approach to risk management in 2007. Among the activities identified with this strategy include analyzing the previous three years of analytical data and developing performance clusters for the feed and fertilizer industry. Firms in the top performing cluster receive 70% less oversight compared to firms with the worst performance history, adjusted for tonnage. The OTSC management information system enables field investigators to quickly assess a firm’s violation rate and work with firms to implement corrective actions.

In 2008, the Office engaged in a re-engineering exercise to reduce turn around time of violative samples. The impact of this activity is described later in the newsletter. In 2009, the Office applied a balanced scorecard approach to better align resources with the Office mission and to develop performance measures. These performance measures will enable the Office to quantify how well they meet customer-based goals.

The Office will continue to pursue these technologies to improve the regulated communities’ conformance with state and federal regulatory standards. Pending federal legislation and regulations positions the Office in a unique role of equipping Texas feed and fertilizer firms with the ability to maneuver and thrive in this new and more regulated business environment.
The 45th Annual Association of American Feed Control Officials Administrators Seminar was held April 20-22, 2010 in McCormick, SC. Ricky Schroeder represented OTSC, giving presentations on Texas Mycotoxin Regulations, Feed Labeling Issues and Medicated Feed Calculations. Additional topics at the meeting included International Feed Regulations, Association of Food and Drug Officials Goals, Federal Feed Regulations (Food and Drug Administration Amendments Act, Animal Feed Safety System, Food Protection Plan, Reportable Food Registry, House Bill HR 2749, Senate Bill S. 510, Partnership for Food Protection and Integrated Food Safety System), Labeling of Enzymes, Process Options for Feed Enforcement Issues for States, Reorganization of AAFCO Committees and The Future of Feed Labeling Guarantees.

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The re-engineering exercise begun by the Office in 2008 targeted reducing turn-around time for violative samples in the lab. One of the principle drivers for this activity stemmed from the steep increase in the cost of feed and fertilizer. A reduction in time from sample collection to release of lab results should enable the feed or fertilizer firm and producer to implement corrective action during a critical growth stage of the animal or plant to address a nutrient deficiency. As an outcome of re-engineering laboratory operations, the average turn around time for violative samples was reduced by 50%.

The re-engineering team discussions prompted the creation of several new reports used for planning the analysis work schedule and focusing resources on bottlenecks. Among these reports were “Analytes to be Tested” which provides the lab prior notice of samples in transit from the field, “Average Days by Analyte” which shows the turn-around time on violative results that highlight those exerting the greatest impact on turn around time, and a “Time Analysis” which identifies bottlenecks in lab methodology.

Redundant activities were identified and subsequently eliminated without compromising the quality of laboratory results. One workflow change involved running a duplicate sample analysis in the same set as the original run. Prior to re-engineering, the second analysis for violative samples were performed in a separate set at a later date. Since all violative results require two runs before reporting out, violative samples tend to have longer turn-around times. Where practical, many analysts now run the duplicate analysis in the same set. This practice increases the amount of work per set of samples, but can reduce the turn around of violative samples by 7 days or more.

Other changes include more frequent managerial review of sample results, the laboratory information management system (LIMS) error logs and investigation into old samples.

The re-engineering activity resulted in a closer collaboration between the Texas Feed and Fertilizer Control Service (FFCS) and the lab in the creation of the annual plan of work and weekly sample analysis schedule. As a result, lab assignments have been concentrated on analyses and products that cause the greatest economic concern or provide the most information, such as mineral, drug and vitamin analysis of premixes as opposed to analysis of the final feed product. With statistical analysis of violation records, specific products can be targeted. Increased use of window sampling concentrates assignments during a peak product availability window and eliminates the inefficiency of running a few random assignments throughout the year. Field sampling and assignments are often scheduled with consideration of available laboratory resources to avoid extended turn around times on time-sensitive samples.

Re-engineering activities and the efforts of individuals in the lab and office have been integral in achieving a faster turn-around on regulatory samples with fewer personnel. In recognition of this accomplishment, a Group Honor Award for Excellence was presented to the re-engineering team and the 3 lab teams in December 2009.
Global Grain Tracing and Recall System

Grain traceability systems have been introduced to the US and other countries to track the flow of grain and grain product attributes in the supply chain. In the US, grain traceability is required as defined in Section 306 of the Bioterror Act of 2002 administered by the Food and Drug Administration (FDA). Specifically, this regulation requires grain traceability one step forward and backward. The OTSC has collaborated with Biological and Agricultural Engineering Department at Texas A&M University and USDA-ARS, Manhattan, KS to develop a grain traceability system in the past few years.

Recently, three types of tracers were manufactured using food-grade substances and coated with two types of coating materials. The test results of tracer morphological, physical, and spectroscopic properties indicated the tracers had an acceptable durability and strength characteristics, sufficient to withstand typical grain handling and storage conditions. The FDA has expressed no objection to insert a food-grade tracer in grain without adulterating the grain.

A tracer sampling test was conducted at different sampling points in the USDA-ARS grain facility to simulate grain transporting and storage in a commercial grain supply chain. The tracer sampling process was designed by applying probability statistics for sampling to ensure a sufficient number of tracers were collected to identify the grain source. The results of this test indicated that tracer concentration conformed to the predicted distribution and that there was no segregation of tracers in the grain. The confidence intervals and sample sizes estimated by statistical methods were empirically proved to be valid, providing better certainty of indentifying all grain sources.

The manuscripts presenting the test results of the two separate experiments have been prepared and will be submitted to scientific journals. The research team has begun to plan reduction-to-practice tests with the intent of commercialization of this technology.

OTSC Field Update

Field staff from around the State convened in College Station April 12-15 for the mid-year investigators’ conference. This meeting provides the opportunity for a face-to-face discussions of significant issues, training, and interaction between OTSC administrators, investigators and lab personnel.

During the conference, investigators updated the OTSC Investigators’ Policies and Procedures manual and re-engineered the sample shipping procedures to reduce overall sample turnaround through examining more efficient ways to get samples from the field to the prep lab.

One topic of significance for discussion included the Texas Commission of Environmental Quality (TCEQ) regulation, Section 321.26. Texas Pollutant Discharge Elimination System General Requirements for Concentrated Animal Feeding Operations (CAFO) vs. the Texas Commercial Fertilizer Control Act, Section 63.002 Commercial Fertilizer. This topic will be discussed during the OTSC Advisory Committee Meeting June 10, 2010 in College Station.

Specific trainings occurred for the new FDA BSE regulation, 589.2001; defensive driving; U.S. Department of Transportation, Title 49 CFR 172.704(a)(1) and the IATA Dangerous Goods Regulation Section 1.5.2.2(a) General Awareness/familiarization of hazardous materials; and reviewing/auditing records.
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Protects consumers & enhances Agri-Business through its Feed & Fertilizer Regulatory Compliance Program, surveillance & monitoring of Animal-Human health & environmental hazards, & preparedness planning.

OTSC Honors Argentina Vindiola

After 30 years with the Texas A&M University System, 24 of those years with OTSC, Argentina Vindiola has officially retired effective April 30, 2010. To celebrate Argentina’s retirement the OTSC honored her with a special reception on Thursday, April 15, 2010. There were close to 100 people in attendance which included many of her family, friends and colleagues.

Argentina received a B.S. in Chemistry and a M.S. in Engineering from the Monterrey Institute of Technology in Monterrey, Mexico. She was a professor of Physics and Chemistry at the Guaymas Campus of the Monterrey Institute of Technology. In 1979 she joined Texas A&M University as a research associate in the Chemical Engineering Department where she was part of a team that published various papers on Coal and Lignite analysis.

Since joining the Office of the Texas State Chemist in 1985 as a Chemist, she was promoted to Laboratory Supervisor in the areas of proximate analysis; antibiotics and drugs; mycotoxins, minerals, heavy metals and contaminants. Prior to her retirement she was the Manager of Special Projects and External Customers for the Office.

In 1994 she was appointed Safety Advisor for the Committee on Natural Toxins and from 1995 to 2009 she was the Chair for the AOAC International Safety Committee and a member of the Official Methods Board. She is also the Secretary/Treasurer of the Association of Southern Feed, Fertilizer and Pesticide Control Officials.

Argentina has taught several courses on safety at Universities in Argentina and Mexico. She received the Advisor of the Year Award (1999 and 2005) and Fellow of AOAC in 2000.

During her retirement Argentina plans on spending lots of time with her six beautiful grandchildren as well as traveling.

OTSC wishes Argentina all the best in her retirement and we’ll miss her greatly.