



OTSC Quarterly Newsletter



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Texas Rapid Response Team (RRT)

The RRT program was created in 2008 to address the need for improved, integrated rapid response to food and feed emergencies. Multiple national initiatives such as the Food and Drug Administration Amendments Act (2007), formation of the President's Food Safety Working Group (2009), and the passage of the Food Safety Modernization Act (2011) all point to the priority of this issue for the Nation.

In Texas, the RRT is comprised of representatives from the Texas Department of State Health Services (DSHS), the Office of the Texas State Chemist



(OTSC), and the U.S. Food and Drug Administration Dallas District Office (FDA DALDO). Collaborative efforts among these agencies have resulted in improvements in communication and coordination and resulted in

various deliverables, exercises, and two activations of the RRT in response to foodborne illness outbreaks since its inception.

The activation of the RRT occurred in response to a multi-state Salmonella Agona foodborne illness outbreak in 2011 and in response to the multi-state Cyclospora parasite foodborne illness outbreak in 2013.

The Office of the Texas State Chemist provides laboratory surge capacity to the Texas Department of State Health Services involving food safety testing for bacterial pathogens and heavy metal contaminants. A memorandum of understanding between the two agencies was first established in 2012.

Other deliverables from the RRT include:

- ◆ Development of a Response Operating Guide (ROG)
- ◆ Ongoing development of Standard Operating Procedures (SOPs) for the ROG
- ◆ Conducting a table top exercise in Spring 2012 with the following objectives:
 - Assess our ability to transition from day to day activities to an emergency response
 - Assess our ability to assess information and make a decision whether a TRRT activation is warranted
 - Assess our ability to implement the ICS structure in the event an activation decision is reached
 - Assess our procedures and our ability to follow them
- ◆ Conducting a functional exercise in Fall 2012, including field teams and local health departments

During 2014, OTSC, DSHS, and FDA will conduct an exercise to assess the RRT capabilities including the following objectives:

- Assess our ability to set up communication channels with Regional and Local Health Departments early on in an outbreak
- Assess our ability to share critical information quickly and effectively
- Assess our ability to use resources across teams in an efficient and effective manner.
- Assess the existence of procedures, informal or written that address communication channels from the state to local and local to state.

OTSC participation in the All Hazards RRT aligns with our mission of "protecting consumers through feed/food safety surveillance and preparedness planning."

Time to Prepare for the 2014 Corn Harvest

The One Sample Strategy utilizes a preventative approach to food safety through the adoption of best practices by the grain elevator and feed industry involving aflatoxin measurement. It promotes the use of standardized sampling and testing equipment and methods to analyze corn for aflatoxin. The scope of the program continues to expand as new firms from different sectors of the Texas grain industry adopt the voluntary program to manage food safety and economic risk.



At the program's outset, the One Sample Strategy was primarily intended to allow participating grain elevators to issue official results for crop insurance purposes; and the USDA Risk Management Agency (RMA) continues to recognize One Sample Strategy firms as "approved laboratories for corn aflatoxin testing for crop insurance purposes."

As new firms joined, OTSC realized that the principal focus for many firms involved the reduction in the variability of aflatoxin testing results that improved their confidence in purchasing and marketing and legal certainty involving OTSC regulatory oversight. In 2013, 50% of One Sample Strategy firms chose not to issue official results for insurance pur-

poses.

As preparations for the 2014 harvest season get underway, all firms licensed to distribute corn over 20 parts per billion (ppb) aflatoxin are encouraged to submit a customized One Sample Strategy sampling and testing plan to OTSC.

Each firm can create a sampling and testing plan tailored to their individual operation. For example, firms decide if they want to issue official results for crop insurance; control sampling frequency (e.g., test some or all incoming truckloads, test only outbound loads, or follow a composite sampling scheme); and choose the USDA Grain Inspection, Packers, and Stockyards (GIPSA) equipment and methods that work best for their operation.

As you prepare for this year's corn crop, include the One Sample Strategy in your plan to manage aflatoxin risk. Get an early start by submitting your customized Sampling and Testing Plan in advance of the harvest season rush.

More information and forms are available at <http://otscweb.tamu.edu/risk/OneSample>.

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Regulatory Science Graduate Online Program

A graduate certificate program titled: "Regulatory Science in Food Systems" is offered by Texas A&M University and is the first of its kind, online graduate distance learning program. Course instructors are faculty members from multiple academic departments including Agricultural Economics, Soil and Crop Science, Veterinary Pathobiology, Veterinary Pharmacology and Physiology and Toxicology.

The relevance of the Regulatory Science in Food Systems graduate certificate continues to expand as the Food Safety Modernization Act rules are finalized. Since spring 2012, five online courses have been offered a total of 12 times to serve 71 students representing 15 majors.

The Laboratory Quality Systems online course was

offered for continuing education in collaboration with the Food and Agriculture Organization (FAO). A total of 29 professionals from 24 countries successfully completed the course.

The Office of the Texas State Chemist assists this distance learning program through course lectures and several OTSC employees participate as students as we prepare next generation leaders in the field of Regulatory Science.



For information about the graduate online program "Regulatory Science in Food Systems" visit the website: <http://regsci.tamu.edu/>

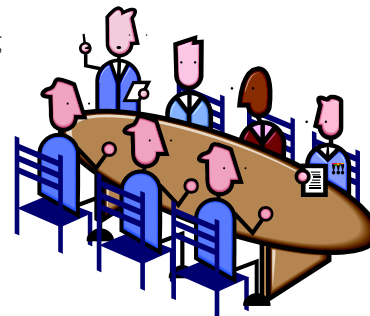
2013 Fall OTSC Advisory Committee Meeting

On October 18, 2013 fifteen members of the OTSC Advisory committee met in College Station. They were joined by thirteen OTSC staff and seventeen visitors. After Brad Johnson called the meeting to order, updates on the Food Safety Modernization Act, the One Sample Aflatoxin Strategy, and a corn blending risk assessment were given.

Following these updates, a significant part of the meeting concerned the handling and use of ammonium nitrate fertilizer and the West explosion. Representatives from the State Fire Marshall's office and the TAMU Chemical Engineering department presented a summary of their efforts.

In the afternoon, other topics discussed were the Regulatory Science online course program, the use of a Balanced Scorecard approach for implementing continuous improvement, and this fall's successful accreditation of the laboratory to ISO 17025 standards.

At the conclusion of the meeting Darren Turley assumed Chairmanship of the Committee and Mark Hebert was elected Vice-Chair.



Agricultural Analytical Services Proficiency Testing

The Agricultural Analytical Services (AAS) enables OTSC to accomplish their mission by providing high quality, timely analyses of feed and fertilizer samples to the Texas Feed and Fertilizer Control Service (FFCS) and by ensuring that all data generated will be scientifically valid, of known precision and accuracy, of acceptable completeness and, where appropriate, legally defensible.

Therefore, laboratory analysis is a vital and critical part of OTSC's regulatory activities as performed by FFCS.

As required by ISO17025 guidelines, it is the policy of the OTSC laboratory to, whenever possible, participate in inter-laboratory proficiency programs. The OTSC laboratory participates in a variety of programs covering a wide range of analytical methods. These programs include: The Association of American Feed Control Officials (AAFCO) for feeds, the Association of American Plant Food Control Officials (AAPFCO) for fertilizers, The Association of American Oil Chemists for mycotoxins and microscopy, and the American Association of Cereal Chemists for microbiology, plus those proficiency testing programs, conducted by the Food Emergency Response Network.



Even though the original purpose of such programs was to evaluate analytical methods and compare procedures a greater benefit of participating in such programs has been the demonstration of the accuracy and repeatability of our laboratory's test results.

A common statistical way of evaluating and standardizing proficiency results is to compare Z values or Z scores. Calculating a Z value tells a laboratory how many standard deviations the laboratory's result is from the consensus mean value. A Z value <3 is acceptable while a Z value <1 is excellent. During the 2012-2013 year the AAS laboratory submitted 43 results to the AAPFCO fertilizer program with 38 results having a Z value of <1 . The laboratory reported 16 results to the AAFCO feed program with 13 having a Z value of <1 . The laboratory reported 22 aflatoxin and fumonisin results to the AOCS program with 21 having a Z value <1 .

The Laboratory also participates in non-quantitative programs. We participate in the AACC International microbiology testing program and send in 8 qualitative results a year for Salmonella. All 8 of these samples were identified correctly.

Another non-quantitative program the laboratory participates in is the AOCS Feed Microscopy program. Our feed microscopist examines 8 samples per year and reports all ingredients.

The laboratory continued its excellent performance during the past year by being rated 1st place in Aflatoxin in corn by HPLC, 1st place in Fumonisin in corn, Honorable Mention in Aflatoxin in corn by test kit, and Honorable Mention in Feed Microscopy.

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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.

FSMA Proposed Rule: For Animal Food

Implementation of hazard analysis and preventative food safety controls by feed manufacturers is required in the 2011 Food Safety Modernization Act (FSMA). Many feed firms have already begun to implement preventative controls using Hazard Analysis and Critical Control Point (HACCP) principles to address their customers' needs, retain competitiveness in a global market, and prepare for the FDA regulations, first published in 2013 in draft form.

The first step toward adoption of HACCP principles is the selection of a group of knowledgeable employees for the HACCP team. Once established, the HACCP team will be tasked to apply a science-based approach to identify and manage hazards in feed ingredients and finished feed through pre-requisite programs and the



development of a written HACCP plan to prevent feed and food safety hazards.

To equip feed manufacturers and distributors with the task of developing a HACCP plan in a team environ-

ment and comply with the proposed rules by FDA, Texas A&M University Department of Soil & Crop Sciences, in partnership with the Office of the Texas State Chemist, offers feed industry HACCP training online.

During the 10-week course, participants work in teams to gain an understanding of the relationship between prerequisite programs and the HACCP principles, learn the process for assessing feed hazards, study quality assurance and FDA proposed rules for animal feed, and prepare a model HACCP based Food Safety Plan.

The course includes elements of the FDA draft rule on Current Good Manufacturing Practices and Hazard Analysis and Risk-Based Preventive Controls for Food for Animals. While the proposed rule is still open for comment, most elements of the rule have already been adopted by firms that learned HACCP principles through this course. The online course has been offered since 2007, and the face-to-face version since 2003. Since its initial offering, the online and face-to-face courses have reached over 600 individuals from 17 countries.

