Fertilizer Control Act - Local Prohibition Clause

The Texas Agriculture Industry Association in collaboration with the Office of the Texas State Chemist will propose an amendment to the Texas Commercial Fertilizer Control Act to limit local legislation below the state level. The wording for this change is adopted from the Association of American Plant Food Control Officials Uniform State Fertilizer Bill that states “No political subdivision shall regulate the registration, packaging, labeling, sale, storage, distribution, use and application of fertilizers; and, in addition, no political subdivision shall adopt or continue in effect local legislation relating to the registration, packaging, labeling, sale, storage, distribution, use or application of fertilizers.”

In conjunction with this activity, the Office of the Texas State Chemist is proposing several changes to the ammonium nitrate section of the Act to bring Texas law in alignment with Federal legislation. The federal law extends to companies that manufacture and store ammonium nitrate in addition to those who sell or offer for sale.

The proposed changes were discussed with the agriculture council in Austin during February 2009.

Mycotoxin Working Group

Texas AgriLife faculty conducting mycotoxin research and extension activities met the second week of January to discuss their advances involving aflatoxin and fumonisin research. The meeting was held in conjunction with the Texas AgriLife Conference that is conducted annually in College Station. Highlights of the meeting included a presentation on the high incidence of fumonisins in the Texas Panhandle and possible causes for this problem. The work was conducted by Drs. Gary Odvody and Wenwei Xu and collaborators included the Office of the Texas State Chemist and Texas Corn Growers Association.

Drs. Joe Dixon and Youjen Deng reported on their research involving clay binders for the control of aflatoxin. Advances in this work include successful trials conducted by the Mineralogy group at Texas A&M in bentonite binding of aflatoxin. Continuation of these trials will result in a guide to the selection of clays as aflatoxin binders. Currently, aflatoxin binders are not approved for use in the United States. David Baltensberger highlighted advances in forming a Aflatoxin Center of Excellence of the South. This project is a collaborative effort involving southern corn producers, private industry and State Experiment Stations in Texas, North Carolina, Georgia, Alabama and Mississippi. While other states may participate the primary effort will be in these States. Research outlined in this project will focus on four aspects:

- Biological Control & Ecology
- Breeding and Genetics for Resistance
- Best Management Practices
- Remediation of Contaminated Grain

Grain Stakeholders also spoke during the meeting. Highlights of their comments include a request to develop export best management practices (BMPs) similar to those developed by stakeholders, faculty at Texas A&M and OTSC during 2006. Other topics of interest included clarification of probability statistics involving aflatoxin and state-federal agency interface. Stakeholders supported the proposed aflatoxin research initiative and were pleased with Texas A&M’s leadership role.
2nd International Feed Regulators Meeting

The International Feed Industry Federation hosted the 2nd International Feed Regulators meeting held on January 26-27, 2009 in Atlanta, GA. The meeting agenda was based upon risk analysis principles including risk assessment and risk management. “Risk analysis is used to develop an estimate of the risks to human health and safety, to identify and implement appropriate measures to control the risks, and to communicate with stakeholders about the risks and measures applied. It can be used to support and improve the development of standards, as well as to address food safety issues that result from emerging hazards or breakdowns in food control systems. It provides food safety regulators with the information and evidence they need for effective decision-making, contributing to better food safety outcomes and improvements in public health. Regardless of the institutional context, the discipline of risk analysis offers a tool that all food safety authorities can use to make significant gains in food safety. The three main components of risk analysis have been defined by Codex as follows:

**Risk assessment:** A scientifically based process consisting of the following steps: i) hazard identification; ii) hazard characterization; iii) exposure assessment; and iv) risk characterization.

**Risk management:** The process, distinct from risk assessment, of 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.

**Risk communication:** The interactive exchange of information and opinions throughout the risk analysis process concerning risk, risk-related factors and risk perceptions, among risk assessors, risk managers, consumers, industry, the academic community and other interested parties, including the explanation of risk assessment findings and the basis of risk management decisions (Food Safety Risk Analysis, FAO 87, http://www.who.int/foodsafety/publications/micro/riskanalysis06.pdf).”

The IFIF agenda and discussions focused on strategies to achieve equivalency in risk assessment and management methodologies among the participating countries. Equivalency, defined by Codex (CAC/GL 60-2006 Principles for Traceability) is the capability of different inspection and certification systems to meet the same objective. Countries represented during the meeting included the United Kingdom, Ghana, Japan, China, Brazil, United States and a representative from the European Commission. Industry Association representatives also spoke during the meeting.

Re-engineering of the OTSC Laboratory

A significant step in laboratory reorganization has taken place through the establishment of four self-directed work teams.

The Elemental Analysis Team is responsible for minerals, micro-nutrient metals, nitrogen and protein in feed or fertilizer material. Methodology used for these analytes range from instrumental techniques such as inductively coupled plasma spectroscopy to traditional gravimetric analysis. The Microbiological Team members are responsible for a number of feed and food safety methods. Samples are analyzed for pathogens in our Biosafety Level 2 lab. The presence of prohibited mammalian material is determined by microscopic techniques and confirmed by PCR (polymerase chain reaction). As a member of FERN, the national Food Emergency Response Network, OTSC is engaged in a number of FERN projects including verification of the latest technologies for pathogen and toxin analysis.

The Chromatographic Separations Team’s main responsibility is liquid chromatographic analysis of mycotoxins, drugs, and vitamins using traditional HPLC techniques and detectors. Samples are screened for violative levels of aflatoxin using ELISA (Enzyme-Linked ImmunoSorbent Assay). HPLC is used for final quantitation. The Mass Spectrometry Team has two new highly sensitive instruments available for use. One is an ultra performance liquid chromatograph coupled to a triple quadrapole mass spectrometer. The other is a gas chromatograph coupled to an ultra-sensitive mass selective detector. The team is developing methods to identify and quantitate multiple analytes in complex feed, food and fertilizer matrices.
List of active Feed/Fertilizer Registrants:

Under Reports section of the OTSC website, the link to Active Feed License and Active Fertilizer Registrants provides the real-time OTSC licensed/registered information for both commercial feed and fertilizer manufactures. These reports provide timely information to the customer to conduct business with those manufactures.
In Memory of Dr. Dennis Shelly, Associate Professor

It is with deep sadness that we report, that on November 21, 2008, Dr. Dennis Shelly was tragically killed in an automobile accident.

Dr. Shelly was trained as an analytical chemist (Ph.D.-TAMU-1982) and had worked in industry (Eli Lilly & Co.-1983) and academia (Postdoc.-Indiana University-Bloomington, IN, Asst. Prof.-Stevens Institute of Technology, Hoboken, NJ and Texas Tech University, Lubbock, TX) since 1984. He was a Associate Professor of Chemistry and Biochemistry on Development Leave for one year at OTSC. Dr. Shelly was the Director of the Engineered Protein Materials Lab and the Leather Research Institute at Texas Tech. He had become a leather chemist beginning in 1997 and had served in many offices with the American Leather Chemists Association, ultimately he had served as their President in 2006. Dr. Shelly had 57 peer-reviewed publications and 210 personal and contributed presentations.

While working at OTSC Dr. Shelly had hopes of learning the operations of analytical testing for food-borne toxins in a regulatory environment while on developmental leave at OTSC. Prior to his tragic death he had been working on the implementation of rapid screening procedures for fungal mycotoxins in animal feeds and related products using liquid chromatography with tandem triple quadrupole mass spectrometry. Dr. Shelly had hopes to ultimately fuse his knowledge learned at OTSC with his leather chemistry background to benefit animal agriculture interests enabling them to develop better raw materials (hides and pelts) for the US leather industry.

Aside from his parents, Dr. Shelly is survived by his two sons, Ian M. Shelly of Columbia, MO and Lieutenant Graham P. Shelly, United States Army, of Lacey, WA; and one sister, Cindy and brother-in-law Peter VanderWerff of West Chester, PA., along with one niece and one nephew.

Although Dr. Shelly’s time here at OTSC was short he will be greatly missed by the OTSC family. We would like to send out our deepest sympathies to his family, friends and colleagues.