

FEED ♦ FERTILIZER ♦ MILK ♦ SEED ♦ SEED TESTING ♦ SOIL TESTING



2001 Poundstone Award



The Poundstone Award was created by Wilbur Fry to honor an outstanding Regulatory Services employee. Bruce Poundstone was Director of Regulatory Services from 1946 to 1971. He was nationally renowned for his leadership and innovations in the agricultural-regulatory arena. Because of his highly respected reputation as a leader in agriculture and at Regulatory Services, it is quite appropriate that the award be named in his honor.

The award is presented to the employee who has demonstrated outstanding service to the Division and has contributed to its positive image through interaction with co-workers and our clientele. The first recipient of this award is Sue Stone.

Sue has been an employee of Regulatory Services for 23 years. She began her career at UK as secretary for the seed program. Later, she moved to a position in our Division's data processing section. She is currently responsible for maintaining the financial records of receipts for the each program, mailing and receiving tonnage reports and managing the daily processing of computer reports. Even though her responsibilities sometimes become quite complicated, she somehow manages to keep everything in order. Sue always has a smile and a friendly greeting for everyone. Her positive attitude is reflected in the reliable, accurate and efficient

manner in which she performs her duties.

We are honored to present the first Poundstone Award to Sue Stone for her dedication to the Division and the positive example she sets for all of us.

Eli Miller – Director



World Wide Web

We have a new web page!

Our new web page is <http://www.rs.uky.edu>, however we will still maintain the old one at <http://www.uky.edu/Agriculture/RegulatoryServices/welcome.html>. Our laws, regulations and activities are listed there, as well as last quarter's newsletter. Any software we provide for public use will be placed on the downloads page. Currently, software is under development for soil testing and milk tank calibration. We plan to allow access to our database of registered products so that producers and retailers can verify that their products can be sold in Kentucky. The web site is maintained by Tony Bengé. Please send any suggestions for any data you want to have available on our web page to: benge@rs.uky.edu.

Tony Bengé – Information Services Manager

DIRECTOR

Eli Miller
emiller@ca.uky.edu

FERTILIZER PROGRAM

Coordinator – David Terry
dterry@ca.uky.edu

MILK PROGRAM

Coordinator – Chris Thompson
cthompso@ca.uky.edu

SEED PROGRAM

Coordinator – Dave Buckingham
dbucking@ca.uky.edu

SOIL PROGRAM

Coordinator – Frank Sikora
fsikora@ca.uky.edu

FEED PROGRAM

Coordinator – Steve Traylor
straylor@ca.uky.edu

LABORATORY

Coordinator – Bob Beine
rbeine@ca.uky.edu

What's Inside.....

Poundstone Award	1
New Web Site	1
Feed Program	2-3
Fertilizer Program	4
Seed Program	5-6
Milk Program	7-8
Upcoming Events	8

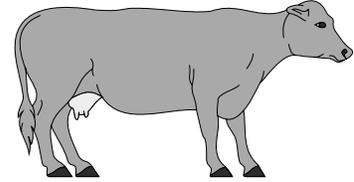
BSE Revisited

The topic of Bovine Spongiform Encephalopathy (BSE), commonly called “Mad Cow Disease” is back in the news forefront again. Public concern has surfaced at a higher level than before because of the popular press headlines. Most of the attention has been the continued news pouring out of Europe and their government’s battle with BSE and more recently foot and mouth disease. Although the public concern about BSE has heightened, regulatory agencies have been continually monitoring this area. There has been an ongoing effort to protect the public and livestock industries’ interest by conducting inspections and monitoring feed manufacturing and rendering facilities.

What is the BSE Rule and it’s intent?

The intent is to prevent the establishment and amplification of BSE through animal feed in the United States; therefore, FDA implemented a final rule that prohibited the use of ruminant derived proteins in feeds for cattle and other

ruminants. This rule, Title 21 Part 589.2000 of the Code of Federal Regulations, became effective on August 4, 1997. The products that are excluded from the rule (permitted to be fed to ruminants) are: blood and blood products, gelatin, inspected meat products (which have been cooked and offered for human food and further heat processed for feed i.e. plate waste and used cellulosic food casings), milk products (milk and milk proteins), and any product whose only mammalian protein consists entirely of porcine or equine protein. Non-mammalian protein products, such as those from poultry, marine (fish) and vegetable protein are also exempt. Porcine meat meal, porcine meat and bone meal, poultry meal, tallow, choice white grease, blood meal are all products that can be permitted for use in ruminant diets. The following table is a list of feed ingredients that are prohibited for use in ruminant rations unless the are of pork or equine origin.



Ruminant derived feed ingredients that are prohibited for use in cattle and other ruminant rations, concentrates, supplements, or premixes.

Meat	Meat by-products	Animal liver
Dried meat solubles	Fleshings hydrolysate	Meat meal
Meat and bone meal	Animal by-product meal	Meat meal tankage
Meat and bone meal tankage	Hydrolyzed hair	Hydrolyzed leather meal
Glandular meal	Leather hydrolysate	Unborn calf carcasses
Extracted glandular meal	Bone meal, steamed	Meat protein isolate
Cooked bone marrow	Bone meal, cooked	Dehydrated food-waste
Stock	Animal digest	Dehydrated garbage
Mechanically separated bone marrow		

Source: FDA Guidance for Industry 69 and 70.

How does a producer determine if their feed contains any prohibited proteins?

All livestock producers in states requiring producers to sign a Livestock Owners Certificate are now asking this question. The certificate states the animals offered for sale were not fed prohibited proteins and that they will not have an illegal drug residue level. The answer is the feed label. Labeling of all feeds is the key to determining if an animal feed contains any prohibited proteins. If the feed may contain any prohibited protein, the feed label is required to have the warning statement “**Do not feed to cattle or other ruminants**”. The labeling applies to registered and custom mixed feeds delivered in bulk or bag and to all ingredients, concentrates, supplements, and premixes that contain any of the prohibited animal protein products. If there are any questions or if a

producer needs further assurance that their cattle feed does not contain prohibited proteins, they should contact their feed supplier.

Another labeling concern of noted interest has been the use of the collective term “animal protein products” on feed labels. There are 46 approved feed ingredients that would fall under the collective term of animal protein products. The listing of animal protein products does not imply that the feed contains prohibited ruminant proteins. For example, animal dried blood, dried buttermilk, fish meal, meat and bone meal, dried whey, and poultry by-product meal (just to name a few) are under the collective term of animal protein products. For feeds labeled with “animal protein products” as an ingredient, the producer would have to rely on the warning statement to determine if the product does indeed contain any prohibited proteins.

Compliance with the Ruminant-to-Ruminant Feeding Ban and Monitoring of Compliance.

Regulatory Services, in cooperation with FDA, has conducted BSE compliance inspections of feed manufacturing plants and renderers throughout the state of Kentucky. The results of the first round of inspections revealed that most feed manufacturers are not using prohibited proteins in their formulations for any species and that they do not mix any prohibited proteins in their plants. Thus, these firms are exempt from the BSE Rule.

There are a small number of firms still using prohibited proteins in their formulations. Most of these firms are largely in compliance with the BSE rule; however, a small number of mills do have some minor labeling or administrative compliance concerns. Because of the implementation of the BSE feeding ban, most feed manufacturers have switched to a non-ruminant source of meat and bone meal or deleted all prohibited proteins from their formulations. FDA and the Division of Regulatory Services has a continuing program to inspect all feed manufacturing facilities (medicated and non-medicated) to assure compliance with the ruminant-to-ruminant feed ban. Starting in July 2001, the Division of Regulatory Services will begin the second round of inspections for all firms manufacturing feed in the state of Kentucky.

Can chicken litter be fed to cattle even if the poultry might have been fed diets containing prohibited material?

Yes. The FDA has no evidence that the agent that causes BSE would survive the chicken intestinal tract. FDA expects states to require recycled animal waste to conform to the definitions promulgated by the Association of American Feed Control Officials (AAFCO) as published in its Official Publication and as described in its "Model Regulations for Processed Animal Waste Products as Animal Feed Ingredients." Under the AAFCO Model Regulation, in order for this product to be used in a commercial feed, it must be registered/licensed within a state, and be assayed periodically for Salmonella and E. coli bacteria, heavy metals, pesticides, drugs, parasitic larva or ova, and mycotoxins. Producers and livestock leaders have discussed the possibility of prohibited proteins being present in poultry litter. At this time, FDA is unaware of any research on this issue that

would indicate the agency should take regulatory action on poultry litter.

After consulting with University of Kentucky Poultry extension personnel and review of BSE inspections conducted by Regulatory Services, it was determined that few poultry feeds marketed and/or fed to poultry contain the ruminant derived prohibited proteins in Kentucky. The feeding of poultry litter to ruminant animals is currently acceptable.

What other ingredients might cause a compliance problem?

The manufacture of livestock feeds containing pet food or fish feed (e.g., chicken and game bird feed) are of great concern to regulatory agencies. This is mainly because pet foods are exempt from the labeling requirement. Therefore, a feed manufacturer has no idea if a pet food product contains any prohibited proteins. Pet food labels do have collective terms on them. They are also not required to list the origin of meat or meat by-products used in the formulation of these feeds. To gain compliance with the BSE Rule, the feed manufacturer must have appropriate clean-out procedures in place to prevent carryover into feed for cattle or other ruminants when pet food products are used in formulation of these feeds.

The required written clean-out procedures, which describe the controls to prevent carryover, also apply to trucks and other transportation vehicles and to conveying and mixing equipment. Any firm that mixes ruminant feed and uses prohibited proteins must have controls in place for the receiving, grinding, mixing, and load-out areas of the operation. There have been reports of warning letters issued to firms in other states because these firms lacked the proper controls for the receipt and use of ruminant derived proteins. Therefore, this area will be closely scrutinized during the upcoming Kentucky inspections.

Other ingredients which may be ruminant derived and that manufacturers may not be aware of include: chondroitin sulfate (bovine trachea), peptones (commonly found in horse supplements), bone meal or bone meal by-products, liver meal and glandular meal. This list highlights several ingredients that have been seen on feed and supplement labels reviewed by the Division of Regulatory Services' feed program. In all cases, we routinely question their origin and ask for verification that these ingredients are not ruminant derived.

Steve Traylor, Coordinator – Feed Program

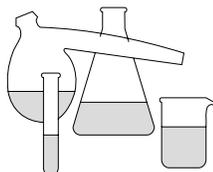
CUSTOM MIX FERTILIZER LABELING

All nutrients claimed must be guaranteed.

The Kentucky fertilizer law allows **two** ways of stating the guarantees for a custom mix fertilizer.

KRS 250.376(2) states: "A custom-mixed farm fertilizer shall be labeled to show the net weight, the guaranteed analysis, or the guaranteed analysis and net weight of each material used in the formulation or both, and the name and address of the licensee and the consumer."

First: The Guaranteed Analysis of the mix may be stated. This requires one to calculate the percentages of N, P₂O₅, K₂O, and any other nutrient claimed to be in the mix and to state them in the Guaranteed Analysis format as shown below:



GUARANTEED ANALYSIS

Total Nitrogen (N)..... XX%
 Avail. Phosphate (P₂O₅).....YY%
 Soluble Potash (K₂O).....ZZ%
 Sulfur (S).....S%
 Boron (B).....B%
 Zinc (Zn).....Z%

NOTE: The basis of the percentage is the 'total' weight of the mix including not only the fertilizer materials (primary, secondary, and micro-nutrient) but also all non-fertilizer materials such as, filler, pelleted limestone, pesticides, seed (farmer's or purchased), etc.

Second: Each fertilizer material in the mix may be listed along with its guarantee and net

weight. This is the most common practice in use today. While a guarantee for each nutrient is not explicitly stated there is an implied guarantee based on the list of materials in the mix. This works quite well for NPK materials but gets complicated when secondary and/or micro-nutrient materials are added. For micro-nutrient materials with only one nutrient such as, zinc sulfate or sodium borate then you simply list the material with the Zn or B guarantee. For example:

Sulfate of Potash Magnesia 0-0-22 11%Mg 22%S
 Boron Material 15% B
 Zinc sulfate 25% Zn

If you use a micro-nutrient mix with several micro-nutrient guarantees then it may be easier to attach the Guaranteed Analysis of the mix to the custom mix invoice.

NOTE: If you claim that a fertilizer nutrient is in the custom mix then it must be guaranteed. A note on the invoice about a micro mix or 'minors' requires a guarantee.

If you have questions about how to state your custom mix guarantees, please give us a call at: 859/257-2668.

COMMERCIAL FERTILIZERS 2000

A Summary of Fertilizer use in the US
 Published of the Association of American Plant
 Food Control Officials

The annual publication of fertilizer use statistics in the US for the fertilizer year July 1999 - June 2000 by state is now available. To order, use the order form below.

D. L. Terry, , Fertilizer Coordinator

✂-----
ORDER FORM FOR: COMMERCIAL FERTILIZERS 2000

(For earlier issues please note below.)

Name: _____
 Company: _____
 Address: _____
 City: _____
 State: _____ ZIP: _____
 Country (If Applicable): _____

(For issues other than CF2000 list here: _____)

Number of copies requested _____ x
 \$30(USD)per copy = \$ _____

Make checks payable and mail to:

The Fertilizer Institute
 501 Second St. , NE
 ATTN: Valerie Brown
 Washington, D.C. 20002

OR CALL:
 Valerie Brown
 at: (202) 608-5916
 OR EMAIL: Vbrown@tfi.org

Starlink Corn

Since the first of this year a new type of Bt corn has received a lot of attention, not only in agricultural circles, but also nationally and internationally. This new version of Bt corn is referred to as "Starlink."

Starlink corn has been in use since 1998. During that year, about 10,000 acres were planted in the US. This past year, the number had grown to 350,000 acres. Approximately 9,000 acres were reportedly grown in Kentucky this past crop year.

The critical difference between the newer version Starlink Bt corn and the older version of Bt corn is that the Starlink Bt corn was approved only for animal feed use. The earlier versions of Bt corn were approved for food and feed use. The dual usage approval for Bt corn hybrids did not require any special handling requirements to maintain separation. The newer version Starlink required separation from the dual use hybrid corn because of its single use approval.

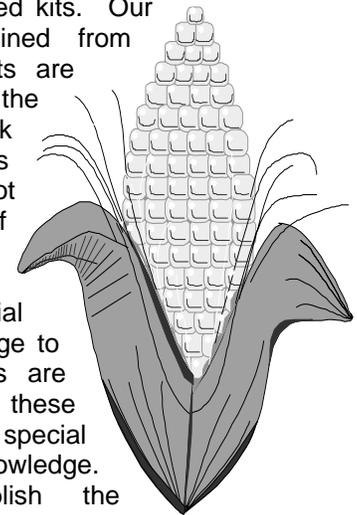
Genetically modified crops must gain approval from three different government agencies prior to their release. These agencies are the USDA, EPA, and FDA. The Animal and Plant Health Inspection Service (APHIS) of USDA regulates field testing of genetically engineered plants. The EPA ensures the safety and safe use of pesticidal and herbicidal substances in the environment. The FDA governs the safety and labeling of the nation's food and feed supply and is responsible for testing genetically modified crops for safety as food and feed.

Bt corn is genetically modified to produce biochemicals that are toxic to targeted plant pests. The European corn borer is the primary target of Bt corn. The technical difference between the Starlink Bt corn and the earlier versions of Bt corn is in the specific proteins that are placed in the plants genetic makeup to produce the biochemical that is toxic to the targeted plant pest. The earlier versions utilized proteins referred to as Cry1Ab and Cry1Ac. The newer version Starlink Bt corn utilized a protein referred to as Cry9C. Testing for the presence of Bt and which version of Bt is present is based on the isolation of these proteins.

Testing for the presence of the Starlink version of Bt corn was implemented into our seed regulatory program early this year to identify

hybrid field corn seed lots which were possibly contaminated with the Starlink genetics. This version of Bt corn was withdrawn from the seed corn market because of the issue of contamination of corn being used to produce food. USDA recommended testing of seed corn supplies at the end of December. Seed corn lots, which our inspection staff sampled, have been tested for the presence of Starlink genetics. We have continued this testing because some hybrid field corn samples are continuing to be obtained by our inspectors. The bulk of these samples were in our lab and tested by the middle of March. Every effort was made to accomplish the testing in a timely manner and report any problems to the seed corn distributors for their follow-up.

Our testing for Starlink was accomplished using a test approved by USDA. At the time I began the process of getting the testing set up, there were only two approved kits. Our test kits were obtained from Enviroligix. These kits are intended to identify the presence of Starlink genetics. The test is qualitative and does not establish the amount of contamination. The test kit does not require any special equipment or knowledge to use. Other test kits are available to use, but these tests require special equipment and knowledge. These tests establish the quantity of Starlink contamination.



We have tested 239 samples for the presence of Starlink. We have identified three of these as being positive for the presence of Starlink. The companies who distributed these three have been contacted and asked to reexamine their testing and to retest the lots involved. The companies I contacted indicated their policy to be one of zero tolerance and stated they would immediately withdraw the seed lots if their investigation verified our findings. The positive samples were found prior to the start of the planting season. Seed corn companies were advised by USDA to test for Starlink and asked to not distribute the seed corn if Starlink was found.

(continued on page 6)

(Starlink continued from page 5)

There is no authority in state or federal law or regulation that prohibits the distribution of Starlink seed corn. The product has been voluntarily withdrawn from the market because of the problems associated with food contamination by Starlink corn. The problem with Starlink corn is that it has been discovered in a number of food products and it is not approved for use in food products. It is against federal law to use products for food if those products are not approved for food use. Another major concern is with marketability. Some of our major foreign markets will not purchase our corn if it contains Starlink. These concerns have resulted in the withdrawal of the Starlink corn varieties from the seed corn market. It is my understanding that Starlink varieties will not be reintroduced in the future if they are not approved for feed and food use.

David Buckingham, Coordinator – Seed Regulatory Program

Dormancy of Small Grains

Harvest time for small grains is arriving soon in Kentucky. The seed laboratory is preparing for the samples that will arrive from about mid-July through the end of September. Small grains: wheat, rye, barley and oats are among those seeds that exhibit dormancy. There are several ways to break dormancy in seed. First, the seed analyst must recognize that dormancy exists in a seed lot and determine the approach that can break the dormancy. Seeds have evolved many unique ways to maintain dormancy. Therefore, the analyst must use various methods to break the dormancy mechanism(s). In some cases, a single treatment is sufficient.

A combination of low temperatures and moist conditions break the seed dormancy in a number of temperate region species. This low temperature process is called “prechilling”. **Prechill** is defined by the Rules for Testing Seeds as “a cold, moist treatment applied to seeds to overcome dormancy prior to the germination test.” The prechill procedure is usually accomplished by placing dry seeds on a wet, low temperature substrate (usually 5 or 10 degrees Centigrade) where imbibition generally

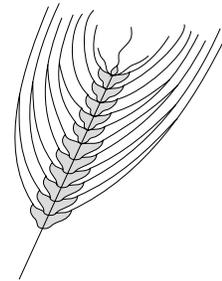


occurs within 24 to 48 hours. The time period that the imbibed seed remains prechilled varies among species and is determined by the Rules for Testing Seed.

Following the prechill, seeds are then germinated using standard germination testing procedures. This is the method that the Kentucky Seed Laboratory normally uses for breaking dormancy of small grains and grasses.

However, there are instances when prechilling does not achieve the desired results. Some lots of barley exhibit this tendency. When this occurs, there are other ways to break dormancy. In contrast to low temperatures, some seeds require exposures to high temperatures to break seed dormancy. This process is known as “**predrying**” and is accomplished by placing seeds in a shallow layer at a specified high temperature (35 to 40 degrees Centigrade) for a period of 5 to 7 days with provision for air circulation. In contrast to prechilling, predried seeds are not imbibed. The use of high temperatures to break dormancy is a common practice with many cereals. It is also interesting to note that these same species respond to prechilling to break dormancy. One assumption is that the high temperatures for short periods are required to accelerate the shifts in inhibitor-promoter hormonal balance to favor the promoter that would normally occur in dry seeds stored for a longer duration.

Last season, the seed laboratory observed a few lots of barley that did not adequately respond to the prechilling process. Because of this, the seed laboratory will be applying the predrying method on lots of barley this season. There is also the possibility that predrying will be used on other lots of small grains if we determine that prechilling has not accomplished the desired results.



The analysts at Regulatory Services' seed laboratory are looking forward to receiving your seed samples and are working diligently to provide the services needed by the seedsman of Kentucky. Happy Harvest!

Tina Tillery, Service Lab Supervisor – Seed Laboratory

MILK PROGRAM LICENSE RENEWALS

Each year licenses issued by Regulatory Services' milk program expire on June 30. All licensees (milk handlers, laboratories, transfer stations, testers, and sampler-weighers) should receive a renewal notice and application by early June. If you do not receive a renewal notice by June 15, 2001, contact our office to request an application.

It is important for all licensees to submit their application and fee to Regulatory Services promptly. *License fees for renewals that are past due are subject to a penalty fee.* To avoid this late penalty, be sure to submit your application and fee to Regulatory Services prior to July 1, 2001.

If you have any questions, or if you need a license renewal application, you may contact Chris Thompson at (859) 257-2785 or by e-mail at cthompso@ca.uky.edu.

Chris Thompson – Milk Coordinator

THE HEAT IS ON!

Warm weather is upon us and if this year's Kentucky weather is normal, hot weather is just around the corner. Hot weather effects just about every aspect of the dairy industry. Cows become uncomfortable, production typically drops and producers have to prepare their bulk-milk cooling equipment for the strains put on them by summer's hot temperatures.



Those of us who sample, handle, and store milk samples need to be ready for hot weather as well. All milk samples used for payment purposes are required to be stored in a manner to protect sample integrity and to maintain a temperature in the range of 0.5 - 4.4^o C (33 - 40^o F). For sampler-weighers, this means using a suitable insulated cooler, floaters or racks, and ice and water. Before leaving to pick-up milk, it is important for sampler-weighers to do a careful check of all equipment and supplies, including ice. A short supply of ice during the summer months can result in samples becoming too warm before a load of milk is delivered to its final destination. We all know that packing extra ice during hot weather is "common sense", but it is

also an item that can be easily overlooked if we're in a hurry.

Milk processors, transfer stations and laboratories are also required to properly store milk samples used for payment. These locations are required to have a minimum storage capacity for samples typically representing three days bulk-milk shipments. A few of these locations use insulated coolers for sample storage. In these instances, samples are required to be stored in the same manner as required of sampler-weighers. However, most of these locations use refrigerators for sample storage. Sample storage refrigerators are required to be monitored daily with an accurate thermometer to ensure the proper storage temperature range. This monitoring is required to be documented by either a recording device or a licensed sampler-weigher's or tester's written record. The written record is required to include the following:

- Date;
- Time (including a.m. or p.m.);
- Temperature; and
- Licensed person's initials.

A few additional items are worth noting about refrigerator storage. Perform routine maintenance on your refrigeration unit to avoid potential problems before hot weather and humidity arrives. Have the unit's compressor, freon level and door gaskets examined. Also, make sure that every one who uses the refrigerator places samples inside the unit in a careful and orderly manner. Most importantly, make sure that the refrigerator's doors remain closed and sealed except when samples are being transferred into or out of the unit.

Everyone involved in collecting or handling milk samples has a responsibility to protect the samples' integrity and ensure a proper storage temperature. As I stated earlier, most of the requirements and precautions I have mentioned are indeed "common sense". However, in today's hurried business, it's sometimes easy to overlook even the simplest details. This summer, be sure to do your part. Remember, the heat is on!

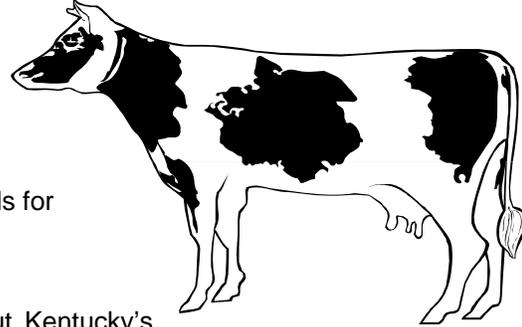
Chris Thompson – Milk Coordinator

NEW MILK PROGRAM REGULATIONS

The new administrative regulations for the Kentucky Farm Milk Handlers Law became effective March 19, 2001. The regulations were modernized to reflect new testing and payment procedures and to take into account the modern “movement” of bulk milk.

The regulations address these key areas:

- Licensing requirements;
- Testing procedures and test samples;
- Sampling and weighing procedures;
- Purchases from farm bulk tanks and uniform standards for payment; and
- Inspection procedures.



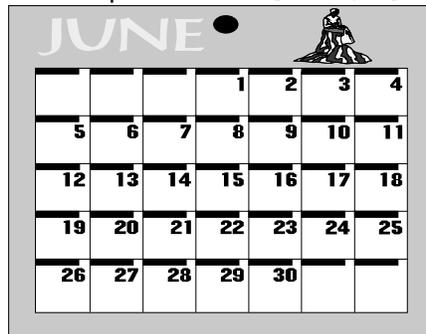
The new requirements have been distributed throughout Kentucky's dairy industry. To obtain a copy of the regulations, visit our website at www.rs.uky.edu or you can contact our office. Sampler-weighers will receive a copy of the regulations applicable to their procedures with their license renewal forms in early June.

Chris Thompson – Milk Coordinator

BE SURE TO MARK YOUR CALENDARS FOR THESE UPCOMING EVENTS!

FEED QUALITY ASSURANCE WORKSHOP

The National Grain and Feed Association and the Kentucky Feed and Grain Association will present a Feed Quality Assurance workshop June 19-21. The workshop will be held at the Galt House East in Louisville, KY. The workshop features national experts to discuss topics on feed quality assurance, GMP compliance, purchasing and receiving grains and ingredients, milling process control, finished feed inspection and labeling, feed shipment and delivery, investigating customer complaints, recall and BSE rules. This program is designed for mill operators, managers, ingredient buyers, and delivery and safety personnel from all size feed mills. The central location is expected to draw participants from Kentucky and surrounding states. For more information, contact the National Grain and Feed Association or your home state's feed and grain association.



ASFFPCO SUMMER MEETING

The Association of Southern Feed, Fertilizer, and Pesticide Control Officials has a membership of regulatory agencies located in fourteen southern states. The meeting's program and seminars are designed for regulatory officials, industry leaders, chemists, and inspectors. Members and representatives of the region's agricultural industry are encouraged to attend.

The meeting will be held June 17-20 at the Galt House East in Louisville, KY.

To obtain more information on the meetings, you can visit the organization's website at www.asffpco.org or contact Bob Beine at the Division of Regulatory Services, (859) 257-2789, or e-mail rbeine@ca.uky.edu.

Eli Miller - Director

Regulatory Services News is published quarterly for the milk, feed, fertilizer and seed regulatory programs and the seed and soil testing program. It is provided free to persons interested in these programs. Editor: Chris Thompson

The College of Agriculture is an Equal Opportunity Organization.

**Division of Regulatory Services
College of Agriculture
University of Kentucky
103 Regulatory Services Building
Lexington, KY 40546-0275**

**NON PROFIT
ORGANIZATION
U.S. POSTAGE PAID
LEXINGTON, KY
PERMIT NO. 51**

Return Service Requested