It’s a cloudy, blustery and cold morning in east-central Nebraska, a typical April day in the Cornhusker state. Agriculture Inspection Specialist Chelsea Mills pulls into the parking lot of a large farm supply store, parks her vehicle, and opens the hatch to retrieve the tools she needs for the next hour or so.

The contents of her leather bag include metal probes, a plastic scoop, various stickers, plastic sample bags and other miscellaneous items. She grabs the necessary items, her laptop, a pen and a clipboard, and heads into the store to begin work for the day. Mills is one of five Nebraska Department of Agriculture (NDA) field inspectors across the state who are part of the Commercial Feed Program administered through the Animal and Plant Health Protection focus area.

The program’s mission is twofold: safeguard human food derived from animals as well as animal health; and ensure feed is safe, unadulterated and honestly prepared.

The program has a large list of responsibilities including inspecting manufacturing and retail facilities where livestock feed and/or pet food are processed or sold.

“We certainly want to make sure that all livestock feed and pet food are stored in an environment that prevents contamination and keeps the products safe for consumption,” NDA Program Manager Steve Gramlich who oversees the Commercial Feed Program said. “Just as important is to make sure what manufacturers put on the label is what is really in the bag.”
With the inspection completed and samples collected, Mills jumps into her vehicle and is off to a feed manufacturer about a 30-minute drive away.

“When we analyze the ingredients in livestock feed or pet food we are protecting both the consumer and the manufacturer,” said Gramlich. “If a label says there is X amount of protein and a certain percentage of fat in a product we want to make sure that is what the consumer is getting. We also are making sure that all sizes of manufacturers are on a level playing field.”

Gramlich added that there are approximately 280 livestock feed and pet food manufacturers in Nebraska which are all inspected on a routine basis. Products sold in Nebraska but manufactured outside of the state still must meet ingredient standards, labeling requirements and nutrient guarantees. If a product is found to be non-compliant, the manufacturer is notified.

Meanwhile, Mills continues her workday. A long, dusty road eventually ends at a feed manufacturing facility. She has been here before and knows they take great pride in making sure all their products match what is on their labels. Nonetheless, Mills tries to inspect such facilities on an annual basis as schedules allow. It gives her the opportunity to interact with the manager to exchange questions and answers.
The inspection at the manufacturer is more involved than the retail outlet. The grounds at the facility cover a much larger area, and there are several steps in the manufacturing process to review.

“We’re going to take a look at their processes to make sure the feeds are manufactured properly,” said Mills. “We’re also going to review their log books to make sure everything is recorded appropriately. And then we’ll check to see that the scale is maintained to ensure that the ingredients and final products are weighed accurately.”

A friendly discussion takes place between Mills and the manager as they go through each stage of the process, which can be different for different types of feed. This particular manufacturer produces some feed with medications so extra steps have to be taken to make sure new U.S. Food and Drug Administration (FDA) guidelines are met.

After checking out the facilities and equipment, Mills heads to the warehouse where she has to move more bags and collect more samples. After writing down ingredients from the label, she has the manager sign the paperwork and completes the onsite portion of the inspection.

Gramlich says while many of the NDA inspections are similar to the two Mills conducted that day, the Department has several other duties that fall under the Commercial Feed Program.

“Our list of responsibilities is fairly long,” said Gramlich. “It includes such tasks as following up on complaints, processing commercial feed licenses, annual Salmonella checks on pet foods and BSE (Bovine Spongiform Encephalopathy) inspections which we contract with the FDA.”
For Mills, her day does not end after the feed manufacturing facility inspection. The hour drive back to her home office is followed by a couple hours of paperwork. A few days later, she drops off the samples at the NDA FFAL Laboratory in southwest Lincoln.

It’s a Monday morning and the chemists are glad to see Mills when she dropped off the recently collected feed samples. They know it will keep them busy but they have enough time to enjoy the fresh-baked cinnamon rolls that she included with her delivery.

NDA Chemists Sally Tieso and Bill Steinbach, begin the examination process by splitting the feed sample into a smaller portion and placing it into an electric mill where it is ground, mixed and poured into a small plastic sample container. Both workers are meticulous in creating log sheets and labels for each sample container to prevent any cross contamination.

“We will be analyzing these samples for protein, calcium and phosphorus to make sure they match what’s on the label,” said Tai Ha, supervisor for the FFAL laboratory. “If we do find a sample that is non-compliant, we will regrind the rest of the original sample and run a second test.”

The ground portion of the sample is taken into the lab where Steinbach weighs and prepares it. The sample is given to Ha to analyze for protein, calcium and phosphorus using sophisticated instruments.

“Last fiscal year we performed 14,095 analyses on 1,669 feed samples but some years we have done as many as 20,000 analyses,” said Ha. “On average we find 7 to 8 percent of the samples to be non-compliant, which we consider to be pretty low.”

Recently the NDA FFAL laboratory earned ISO 17025 accreditation which is an internationally-recognized system of quality management in testing laboratories. It demonstrates the effort the staff members have put in to achieve and maintain a high level of proficiency in lab testing.

“We have a great deal of confidence in the work our feed lab conducts,” said Gramlich. “They do a lot of important work for us. Not only in analyzing ingredients but checking products for possible contamination and diseases.”

The Commercial Feed Program in itself is multi-faceted, but it is just one of the many programs that NDA’s Animal and Plant Health focus area administers to provide consumer confidence and protection.

“We all take great pride in our work,” said Gramlich. “We know what we do is important and we want to deliver the best results possible for Nebraskans.”