

Biosecurity essential at Koch Foods mill

Feed Facility of the Year: Integrator Category Winner

By SARAH MUIRHEAD

LOCATED in the Mississippi Flyway, where wild birds infected with avian influenza (AI) spend their winters, the Koch Foods Inc. operations in Mississippi are rightfully leery of the disease.

The poultry integrator kills 2 million large and small chickens in the region each week, all of which are fed from its feed mill located in Morton, Miss.

“If AI were to be allowed on our grounds, we could transmit it to the 400-plus farms we feed within three days,” said Frank Garczynski, Koch Foods feed mill manager, Mississippi. During a recent visit to the Morton facility, the plant’s commitment to good housekeeping practices and solid biosecurity procedures were quite evident.

“We have approximately 11 million birds on feed all the time. Quality and output are essential,” Garczynski said.

Koch Foods’ Morton mill, built in 2009, is the Integrator Category winner of the 2018 American Feed Industry Assn./Feedstuffs Feed Facility of the Year award. The mill has an annual capacity of nearly 800,000 tons, runs three production shifts each business day and produces about 125 semi-truck loads of feed per day.

Garczynski noted that if the rail service doesn’t perform on schedule, they have to truck corn from elevators located in the middle of the Mississippi Delta. Infected birds may be everywhere around these corn origins, so every truck must be disinfected. To get that done, the plant added a biosecurity spray station in the early fall of 2015, finishing it that same year just before AI hit in Wisconsin, Minnesota and Iowa.

The mill already was using a curbed “tire bath.” The additional spray equipment was designed in house and had to be built very strong for this use yet still allow for quick repair/replacement of any driver-damaged parts, Garczynski said. He noted that the company sought the advice and, in some cases, equipment from a car wash company, which specifically was helpful when it came to pump and nozzle recommendations.

The station operates through one lane, with trucks waiting to enter/exit through the vertical spray arms and tire baths. The mill’s employees and security staff

have been trained to know that their jobs depend on no AI getting into or out of the mill. “They take personal and vehicle precautions against association/contraction of all poultry diseases,” Garczynski said.

Another lane has an overhead barrier to prevent anything taller than a van from entering without being sprayed. All mill employees go through this tire bath when entering and leaving the facility.

The levels of biocide in the bath, spray arms and holding pond are checked daily. The biocide reverts to water un-



der exposure to ultraviolet rays in 24-36 hours. When the holding pond levels are showing no activity with the test strips,



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the water is released, Garczynski said.

"We monitor the AI situation every day and start spraying when we see it start emerging," Garczynski said, adding that employees at the plant are well aware of the risk associated with duck hunting and backyard flocks. "The stakes are just too high for us not to be protected from disease," he emphasized.

The Morton mill is one of five mills in the Koch Foods system. It provides feed for all of the company's birds in Mississippi and runs five days a week, Monday through Friday, with the exception of holidays. On Thanksgiving, the staff gets off for dinner but then starts production again on the second shift. The mill doesn't operate on Christmas Eve but does open late morning on Christmas Day. On any major holiday that the mill is open, Koch offers a meal to those who have to work.

A safety meeting is held monthly, with the company's safety department coming to the mill to present safety information on all Occupational Safety & Health Administration-required topics as well as other pertinent issues. A quiz is given to all and signed as record retention with an accompanying sign-in sheet.

"We always talk about our current safety record and any near misses we encountered since the previous meeting. Emphasis is on discussion of the benefits of looking at any near misses," Garczynski said.

Initial and refresher training on confined spaces is done every year using an

outside vendor. Quarterly vibration tests are run on all elevator leg drives, hammermills, pellet mills and high-horsepower electric motors.

Garczynski noted that the Morton mill has not had any lost time accident in four years of heavy production. The mill is considered in the top 5% of individual mill capacities worldwide, and it is all done in just five days a week.

On the live product side of the business, Garczynski said the company achieves some of the best feed conversions in the industry. In fact, its cost of production per pound of meat is considered to be in the top 5%.

The Morton mill operates with 18 production employees, six maintenance employees, four clerical employees, three supervisory employees and 12 Koch truck drivers. In addition to its own fleet of trucks, the mill relies on a dedicated contractor fleet.

The fully automated areas of the mill are receiving, grain processing, batching, hand-add ingredients, pelleting and bulk loadout. A 100-car corn train can be unloaded at the mill in 12-14 hours. A 100-ton soybean meal car can be unloaded in 15 minutes in the winter. The facility has a scale built directly into its rail line so individual car weights can be recorded and billing adjusted as necessary.

"I can't tell you how many times the cars don't weigh what they are supposed to weigh. We then pay off of our weights," Garczynski said.

The mill has six mixing scales. A Hays

& Stolz 10-ton double-shaft mixer with an average mixing time of 100 seconds allows for 420 tons to be produced per hour. Three CPM pellet mills with double 16 ft. conditioners allow for the production of 225 tons per hour. Three Ghelen counterflow pellet coolers and two pairs of crumble rolls round out the process.

One safety precaution taken when the mill was constructed was to keep the mill's legs out of the tower so the tower's integrity would not be jeopardized in the unlikely event of an explosion. The mill also has a built-in vacuum system for cleaning.

Cleanliness is important not only from a safety and quality standpoint, but it also helps with employee morale, Garczynski said. He noted, too, that the facility is often visited by the Koch management team and potential and existing customers.

Garczynski is rightly proud of the Morton facility and the team there. "Many of our folks started working in the 1964 mill that this facility replaced," he said. "Similar to myself, where I've managed 100-year-old converted wooden flour mills to 1947 models with 1880s-era warehouses and even five- to seven-year-old facilities, they know the gem that we have here, and it shows in everything they do. In fact, the team cares enough to often bring things to our attention should we not notice soon enough." ■