The AltEn plant near Mead, which the state shut down earlier this year, is shown on Aug. 25. Along with the toxic solids spread on land surrounding the site, the environmental cleanup is also focused on removing pesticides from wastewater on the site.

FINDING A GAP

Records reveal frustration as state dealt with pesticide plant

CHRIS DUNKER
Lincoln Journal Star

After environmental regulators learned that AltEn was using pesticide-treated seed to make ethanol, producing highly contaminated waste products in the process, they also learned there was little they could do about it.

Emails obtained from the Environmental Protection Agency through a Freedom of Information Act request by the Journal Star shed further insight onto the confusion and legal obstacles regulators faced in trying to address complaints from the people of Mead about the plant.

Shortly after an analysis of samples collected from AltEn’s wet distiller’s grains—known as wet cake—showed they contained alarmingly high levels of pesticides in April 2019, Tim Creger, a pesticide program manager at the Nebraska Department of Agriculture, was at a loss for who to go to for regulatory help.

Creger reached out to the USDA, which under the Federal Seed Act determines what language must appear on a seed bag label, but an official there said responsibility for enforcing what the label actually said fell elsewhere.

“The person I spoke with was adamant that USDA only enforces that law in a way that ensures seed companies include all required language on the seed bag,” Creger wrote to officials in the Pesticide Branch of the EPA’s Region 7 office located in Lenexa, Kansas. The official said it wouldn’t be up to the USDA to enforce the provisions on the label related to pesticide-treated seed being used in ethanol production and suggested that responsibility lay with the EPA instead.

“That was a surprise to me and others here,” Creger wrote to the EPA regional office, “since it looks to us from the way the seed label is written it is clearly under the Federal Seed Act, plus, I’ve been told for years EPA can’t enforce a label that isn’t classified as a registered pesticide.”

The Federal Insecticide, Fungicide and Rodenticide Act, known better as FIFRA, is the federal law govern

Please see MEAD, Page A5

WATCH THE DOCUMENTARY | @JOURNALSTAR.COM

It took years and persistence for residents and scientists who believed the ethanol plant near Mead was causing changes to the environment to convince anyone to do anything about it. Their story—“Bad Seed: Mead’s fight against a toxic ethanol plant”—is online now @JournalStar.com.
LINCOLN JOURNAL STAR

Mead
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ing the registration, sale and application of pesticides by household spray, tractor or airplane.

Since the 1980s, the so-called "treated article exemption" in the law allows products treated with pesticides or fungicides, including corn and soybean seed, are not covered by FIFRA once they leave the factory, meaning the EPA's authority is limited.

Creager followed up with EPA Region 7 a few days later after state regulators met to discuss their options moving forward, according to sources.

While the Nebraska Department of Agriculture had considered classifying the wet cake as a pesticide based upon the number of chemicals present, as well as the high concentration, the state agency wasn't confident that approach would be successful, Creager said.

"Our discussion here believes that if USDA and EPA are unwilling to enforce that label provision under the Federal Seed Act or FIFRA, and it is not mentioned in any state seed certification or pesticide law," Creager wrote, "we may have an issue where the statement is unenforceable and the ethanol company can operate with impunity?

Firstly, sampling of old wet cake stockpiled at Alten gave the state Ag Department zoom to cancel an ethanol company's sex condition permit in the summer of 2016, but the lack of statutory authority prevented the EPA from doing more than filing a scientific complaint with the state regulator.

A year later, on July 27, 2020, Jim Macy, director of the Nebraska Department of Environment and Energy, and Steve Wellman, director of the Nebraska Department of Agriculture, penned a joint letter to the EPA asking for help resolving "a problematic issue and potential environmental concern."?

"We believe getting value from this old wet cake through ethanol is beneficial, but want to do so in a safe and sustainable manner," the letter said. "We are looking for assistance to solve the problem and resolve issues in the wet cake stockpiled at the ethanol plant that would bring additional value and benefits to the company and protect Nebraska's environment."

The EPA provided a pair of official responses, stating it couldn't conclude that land application of either the wet cake or the wastewater would not "result in unacceptable adverse effects on humans or the environment."

Ultimately, Alten was forced to shut down after the Nebraska Department of Environment and Energy issued an emergency order to the company directing it to stop pumping wastewater into its damaged landfill system.

The EPA continues to offer technical expertise regarding cleanup at Alten, particularly after a tank at the facility burst, releasing 4 million gallons of contaminated wastewater, but the Department of Environment and Energy is the agency actively monitoring the ongoing cleanup of the site.

Closing the gap

With the inability of both the EPA and Alten to regulate the disposal of seed coated with pesticides, several states have proposed or passed legislation that would prevent the products from being sold to use ethanol since Alten's practices received national headlines.

The Nebraska Legislature, through LB97 introduced by Sen. Bruce Behrens of Brainard, essentially made the language on seed bag labels a state law, outlawing using coated seed in ethanol production if the byproducts couldn't be consumed by livestock or applied to farmland.

LB97 was drafted with the help of the Renewable Fuels Association and, after passing a 48-0 vote in May, went into effect immediately.

State lawmakers here have also considered bills assigning liability for cleaning up sites like Alten to the original manufacturers of the treated seed, and have discussed legislation providing lawsuits impacted by the ethanol plant more time to use if they develop illnesses down the road.

A bill introduced in the Minnesota House of Representatives in early February took a broader approach in prohibiting seed coated with pesticides and methods of being used or sold as "food, feed, oil, or ethanol feedstuff." That legislation died in committee, however.

The Illinois General Assembly considered a bill similar to Minnesota's earlier this year. As the third-largest ethanol producing state, according to the U.S. Energy Information Administration, facilities operate across Illinois.

Drafted by the Illinois Environmental Council and introduced by Rep. Will Gochnauer of Chicago, the bill would have provided a blanket ban on any pretreated seed being used in ethanol production.

Elliott Clay, the director of agriculture and water programs at the Illinois Environmental Council, said Alten highlighted a practice of disposing of treated seed many had never considered before.

While the Assembly's Energy and Environment Committee did not advance the legislation this year, Clay said he believes there is a consensus to help push it across the finish line.

Banning the use of treated seed in ethanol production ensures biofuel farmers source their feedstock from local farmers — something supported by agricultural groups, he said.

Other states, including California and New York, have considered banning neonicotinoid and seed coated with the pesticide alter- 

gether — something the European Union imposed in 2013.

A measure limiting the use of neonicotinoid pesticides has already passed the New York State Senate, and the New York General Assembly considered a similar bill at a hearing in September that would have banned the use of treated seed in the Empire State.

The hearing pits doctors, environmental groups and entomologists, who argued the use of neonicotinoids was harmful to wildlife and humans, against the seed and agricultural industries, who said the method of controlling pests was becoming ever important to help farmers respond to climate change.

Scott McArt, an assistant professor of entomology at Cornell University in Ithaca, New York, who testified during the hearing, said a review of 5,000 field trials and 400 peer-reviewed studies showed less than 1% of the neonicotinoids coating seed are ultimately absorbed into the plant.

"The effects of the remaining 99.5% of the neonicotinoids enter the soil, where they can persist for 10 to 20 years," McArt said at the committee hearing. "So our goal is to get rid of the vast majority of neonicotinoids from that soil.

Testifying against the bill was Chicago, one of the world's largest pesticide companies, which is also part of the team of agricultural companies now cleaning up Alten.

Syracuse's Syngenta Sarettzke, a pollinator and integrated pest management partner and leader of the committee that neonicotinoids were essential in battling future pest outbreaks, as well as keeping the cost of food affordable.

Who should do the regulating?

The question of who should be regulating companies like Alten — individual states or the federal government — and at what level depends on who you ask.

Kim Ernst-Pitcher, a habitat and agricultural programs specialist with the Prairie Rivers Network in Illinois, said the widespread use of treated seed — nearly all corn and soybean acres in the U.S. are planted with seed coated in pesticides — raises the issue to a federal level.

"I think it's bigger than the individual states," she said. "This is a way we can go to a company and eliminate the unnecessary use of these pesticides, but that needs to come from a national level. The piecemeal effort that states are doing isn't going to be enough.

"Crafting regulations that allow agencies to stop harmful practices without being overly burdensome on companies is a difficult balance to achieve," said Guis Hurvitz, a professor of law at the University of Nebraska-Lincoln and the director of the Nebraska Governance and Technology Center.

Also a difficult target to hit: Rules that apply at both large and small scales, Hurvitz said.

While the vast majority of farmers follow the application requirements outlined on seed bag labels, those regulations did not or could not control the variation in the use of treated seed across regions where millions of pounds of treated seed might be used through the ethanol process.

"Alten wasn't operating at an individual scale; they were doing what a million farmers would do with their seed in the space of a couple of acres," Hurvitz said.

So, suddenly, the warnings, the compliance requirements, they were completely unattainable to the application.

Hurvitz said the need to solve those challenges is becoming more common in a high-tech, high-requirement, requiring greater collaboration and cooperation between government and industry to determine the right level of regulations, as well as an understanding that regulation needs to occur.

Ernst-Pitcher said she thinks Alten regulation showed regulation around the use of pesticides like neonicotinoids needs to be strengthened, adding there is momentum to do so after Alten heightened the issue in a new way.

"We need much better oversight on the use and distribution of these chemicals," she said. "I think we're going to get to a point where we don't have any choice, and we're not very far from that."

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TIME LINE

2015
Alten Ethanol reopens near Mead. Unlike other ethanol plants, the plant is made coated with pesticides rather than harvested grain as a fermentor for its fuel production.

2017
UNL entomologist Judy Wu, Smart watch pesticide use by bee colonies at the university's research center near Goodell. Residents of Mead notice a fainting odor coming from Alten and the wet distiller's grains it delivered to area farms. They begin to lobby state regulators to choose the company with state regulators.

May — The state forces the company to stop selling its soil conditioner after tests determine it's leached with concentrations of pesticides that far exceed rates deemed safe by the Environmental Protection Agency.

September — The state orders Alten to stop depositing its wastewaster on farm fields because of the high levels of contamination.

2020
May-October — Alten starts hauling more than 41,000 tons of wet cake to three Waste Connections landfills in Nebraska and Iowa, but an estimated 84,000 tons remain on site.

2021
Feb. 4 — The Nebraska Department of Environment and Energy orders the company to cease making ethanol until it disposes of excess contaminated wastewaster and repair damaged lagoons at the plant. It completes the shutdown on Feb. 8.

Feb. 12 — A frozen pipe bursts on a 4.4 million gallon tank at the facility, flooding a combination of thin sludge and cow manure into drainage ditches running from the property.

Feb. 23 — The Saunders County Board of Supervisors declares an emergency, which allows county officials to spend emergency funds, initiate mutual aid and apply for emergency assistance from the state.

March — The Nebraska Attorney General's Office sues Alten, alleging 18 violations of the state's environmental regulation.

April — Senators pass a state law (LB309) prohibiting the use of pesticide-treated seed to make ethanol.

June — Six major seed companies that supplied Alten with pesticide-treated seed, including Bayer, Syngenta and DuPont, pledge to start cleaning up the site.

Nov. 1 — The Alten Facility Response Team submits a plan to the state for how it will remediate the ethanol plant.

IN THE NEWS

LINCOLN JOURNAL STAR

JUSTIN WARREN, JOURNAL STAR FILE PHOTO

Mead: An environmental disaster

In February, when it was shuttered by state regulators who ran into conflict and legal obstacles when it tried to address complaints from the people of Mead about the excess.

In Illinois, said the widespread use of treated seed — nearly all corn and soybean acres in the U.S. are planted with seed coated in pesticides — raises the issue to a federal level.
Mead official says village’s water supply is safe to drink

CHRIS DUNKER
Lincoln Journal Star

MEAD — Even before the potential for groundwater contamination originating at ALTEn was discovered, Mead officials made an investment to overhaul the village’s aging infrastructure.

Two new groundwater wells, a new water tower, and a state-of-the-art filtration system totaling $3 million went into operation in the last few years, Board of Trustees Chair Bill Tsson said.

The system was designed by Lincoln engineering firm Olson to address rusty water that signaled high levels of iron, as well as magnesium and arsenic that were within tolerable levels but on the rise.

The water tower, roughly twice the size of a typical tower that stands next to Mead’s downtown, was built with future growth in mind, Tsson said.

Mead received a grant from the U.S. Department of Agriculture to help get the project going, and added a surcharge to residents’ water bills to pay the rest.

Tsson said the filtration system’s operators can monitor the system remotely from a phone application, but spend 8-10 hours a week testing the quality of the water.

“Most people don’t know that we have this,” he said. “Mead’s probably got the cleanest water in Saunders County right now.”

Tsson said he wants to share news of the project to alleviate any fears current or future residents of Mead may have about the village’s drinking water.

Groundwater wells downstream from ALTEn have shown the presence of pesticides in recent tests.

Mead is situated upstream from ALTEn.

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When the Nebraska Department of Agriculture first reached out to the USDA, which regulates what language must appear on seed bag labels, it was told enforcing what the label said was the responsibility of the EPA, whose authority is limited when it comes to products treated with pesticides or fungicides.

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When a coalition of seed companies first arrived to determine the scope of cleanup at the ALTEn site they found an estimated 250,000 cubic yards of pesticide-laden wet cake — a volume of solid byproduct that would cover the area of a football field at a depth of 150 feet — stockpiled at three sites on ALTEn’s property. Wet cake is seen piling up in March 2021.

Lincoln Journal Star