Message

From: McCabe, Janet [McCabe.Janet@epa.gov]
Sent: 11/23/2021 2:04:14 AM
To: Freedhoff, Michal [Freedhoff.Michal@epa.gov]
CC: Utech, Dan [Utech.Dan@epa.gov]
Subject: FW: AltEn Journal Star Article

Hi Michal—Ed Chu shared this with me today. Can we discuss? Thanks,
Janet

From: Chu, Ed <Chu.Ed@epa.gov>
Sent: Monday, November 22, 2021 11:16 AM
To: McCabe, Janet <McCabe.Janet@epa.gov>
Subject: FW: AltEn Journal Star Article

From: Chu, Ed
Sent: Monday, November 22, 2021 8:40 AM
To: Freedhoff, Michal <Freedhoff.Michal@epa.gov>; Keigwin, Richard <Keigwin.Richard@epa.gov>
Subject: AltEn Journal Star Article

Michal and Rick, for your situational awareness. Please let me know if you have any questions or would like a full briefing on this.

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LINCOLN JOURNAL STAR

https://journalstar.com/news/state-and-regional/nebraska/public-records-reveal-frustration-as-state-sought-to-deal-with-pesticide-dangers-from-ethanol-plant/article_60cc64ea-0e7b-5081-8148-d453be8cce90.html

AltEn: A JOURNAL STAR SPECIAL REPORT

Public records reveal frustration as state sought to deal with pesticide dangers from ethanol plant

Chris Dunker Nov 21, 2021 Updated 8 hrs ago

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."

Timeline

2015

AltEn Ethanol reopens near Mead. Unlike other ethanol plants, the plant uses seed coated with pesticides rather than harvested grain as a feedstock for its fuel production.

2017

UNL entomologist Judy Wu-Smart watches dozens of bee colonies at the university's research center near Mead collapse. Residents of Mead notice a nauseating odor coming from AltEn and the wet distiller's grains it delivered to area fields. They begin to lodge a series of complaints against the company with state regulators.

2019

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

September — The state orders AltEn to halt disposing of its wastewater on farm fields because of the high levels of contamination.

2020

May-October — AltEn starts hauling more than 43,000 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 wastewater and repairs damaged lagoons at the plant. It completes the shutdown on Feb. 8.

Feb. 12 — A frozen pipe bursts on a 4 million gallon tank at the facility, releasing a combination of thin stillage 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, invoke mutual aid and apply for emergency assistance from the state.

March 1 — The Nebraska Attorney General's Office sues AltEn, alleging 18 violations of the state's environmental regulations.

April — Senators pass a state law (LB507) prohibiting the use of pesticide-treated seed to make ethanol.

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

Nov. 1 — The AltEn Facility Response Group submits its plan to the state for how it will remediate the ethanol plant.

The Federal Insecticide, Fungicide and Rodenticide Act, known better as FIFRA, is the federal law governing the registration, sale and application of pesticides by handheld sprayer, tractor or airplane.

Since the 1980s, the so-called "treated article exemption" in the law says 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.

Creger followed up with the EPA Region 7 office a few days later after state regulators met to discuss their options moving forward, according to email records.

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 concentrations, the state agency wasn't confident that approach would be successful, Creger 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, soil conditioner or pesticide law," Creger wrote, "we may have an issue where the statement is unenforceable and the ethanol company can operate with impunity."

Further sampling of older wet cake stockpiled at AltEn gave the state Ag Department room to cancel the ethanol company's soil conditioner permit in the summer of 2019, but the lack of statutory authority prevented the EPA from doing more than lending scientific expertise to state regulators.

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 unused seed through ethanol is beneficial, but want to do so in a safe and sustainable manner," the letter states. "We are looking for assistance to solve the problem of residual pesticides in the wet cake 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 could not conclude that land application of either the wet cake or the wastewater would not "result in unreasonable 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 lagoon 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 waste downstream, but the Department of Environment and Energy is the agency effectively monitoring the ongoing cleanup of the site.

Closing the gap

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

The Nebraska Legislature, through LB507 introduced by Sen. Bruce Bostelman of Brainard, essentially made the language on seed bag labels a state law, which outlawed using treated seed in ethanol production if the byproducts couldn't be consumed by livestock or applied to farmland.

LB507 was drafted with the help of the Renewable Fuels Association and, after passing on 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 humans impacted by the ethanol plant more time to sue 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 in neonicotinoids from being used or sold as "food, feed, oil, or ethanol feedstock." That legislation remains stuck 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, 13 refineries operate across Illinois.

Drafted by the Illinois Environmental Council and introduced by Rep. Will Guzzardi of Chicago, the bill would have put a blanket ban on any pre-treated seed being used in ethanol production.

Eliot 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 line.

Banning the use of treated seed in ethanol production ensures biofuel plants 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 altogether — 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 pit 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 5% of the neonicotinoids coating seed are ultimately absorbed into the plant.

That means as much as the remaining 95% of the neonicotinoids enter the soil, where they can persist for years before breaking down to safe levels — evidence he says shows the potential downsides outweigh any benefits.

"If you have 40 parts per billion in the soil, after 19 years, you're down to 20 parts per billion," McArt said in a phone interview. "So that's going to take an entire person's lifetime to get rid of the vast majority of neonicotinoids from that soil."

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

Syngenta's Caydee Savinelli, a pollinator and integrated pest management stewardship team leader, told 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 Erndt-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. "There has to be a way we can greatly reduce or eliminate the unnecessary use of these pesticides, but that needs to come from a national level. This 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 Gus Hurwitz, 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, Hurwitz said.

While the vast majority of farmers follow the application requirements outlined on seed bag labels, those regulations did not or could not conceive of a single location where millions of pounds of treated seed would be run 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," Hurwitz said. "So, suddenly, the warnings, the compliance requirements, they were completely unnatural to the application."

Hurwitz said the need to solve those challenges is becoming more common in a high-tech economy, 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.

Erndt-Pitcher said she thinks AltEn showed regulation around the use of pesticides like neonicotinoids needs to be strengthened, adding there is momentum to do so after AltEn highlighted 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."

Mead official says village's water supply is safe to drink

Researchers seeking clues in nature to track Mead ethanol plant's trauma

Companies submit plan to clean up AltEn waste, including enough wet cake to cover football field 150 feet deep