

Researchers call on NDEE for urgent AltEn response

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WHALES: Aerial views of the whales, or bubbles of gases, in AltEn's lagoons. (Photo courtesy of John Schalles)

MEAD – As cleanup continues at the AltEn plant south of Mead, environmental researchers say threats of further disaster are not going away, but instead could be continuing to develop. If such threats are allowed to fester, they could have additional harmful effects on cleanup crews, area residents and nearby groundwater.

Most recently, the AltEn Facility Response Group (AFRG) – which is led by the seed companies who sent their unused treated seeds to AltEn to be used in ethanol production – has had its focus on construction of an emergency lagoon to contain wastewater as part of its efforts to winterize the plant's storage tanks. The tanks have been used onsite since last summer to lower the levels

in the existing lagoons, which have caused concerns regarding their ability to keep wastewater contained.

Mead Village Board Chairman Bill Thorson said while citizens want the cleanup to move quickly, they'll have to be patient.

"We're probably looking at years," he said. "And that's just what they know they have for contamination. The lagoons have been leaking all this time, and they don't know the extent of that contamination yet."

A newer development has been the formation of "whales," or bubbles of gases that formed and continued to expand in multiple lagoons underneath the lagoon liners. The whales are clearly visible in aerial photos and contain high levels of toxic methane and hydrogen sulfide gases. According to the Nebraska Department of Environment and Energy, the AFRG has been at work depressurizing these whales for about a month.

Dr. John Schalles, a biology professor at Creighton University and a member of the AltEn-investigating Perivallon Group, said the tears in the liners could be harmful to the groundwater below, and if the whales were able to continue expanding, the potential consequences could be destructive.

"Not only could there be an explosive shockwave, but it could discharge a whole lot of pesticide material that's in that waste below the liner in volatile forms that would not be good to breathe," he said.

The whales are in the process of being taken care of, using pipes that vacuum the gases into a burner unit that in theory breaks down the gases into less harmful chemicals. However, Schalles has been trying to bring attention to the possibility of creating extremely toxic compounds through the gases not being completely broken down.

"One of the concerns we have is about the other materials that are in volatile form that have been part of this not only explosive but toxic gas mixture," he said. "And will the burning off of those gases cause other problems? If you had substrates, i.e. these pesticides, that were heated to a higher temperature but not completely broken down, that's a potential recipe to create what we know as dioxins."

He said dioxins are some of the most toxic known substances. If they were produced, they could flare into the air and create a major public health concern, he said.

Schalles said his intention in bringing attention to the potential production of dioxins is not to create a panic; rather, he hopes NDEE and the AFRG will take precautions to ensure dioxins are not present.

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“We don’t believe, or at least there was no evidence, that (the AFRG) had much more sophisticated analysis capabilities for the pesticides themselves, let alone dioxins,” Schalles said. “So we think it would be very wise to have those gas products from the flaring analyzed just to be sure that this hasn’t happened.”

Another concern is runoff from pesticide-laden wet cake piles, which local researchers say has continued making its way into drainage systems around the AltEn facility. Janece Mollhoff, who spearheaded a wellhead protection plan in Ashland when she was a member of the city council there, has noted that NDEE is still identifying ammonia and pesticides in the culverts along County Road 9. Mollhoff said she wants to see NDEE taking more action to mitigate the flow of compounds away from AltEn.

“The danger is, wherever it pools, then it soaks into the groundwater,” Mollhoff said. “And working on the Wellhead Protection Area in Ashland, we know that all the water from (AltEn), whether it’s groundwater or surface water, it moves down toward Ashland.”

Earlier this year, AltEn sold the neighboring Mead Cattle Company, which is still in operation, and Mollhoff said NDEE testing has found high amounts of nitrates in the wells on site. But she doesn’t think NDEE is adequately holding AltEn and Mead Cattle Company accountable or is moving forward with litigation against AltEn in a timely manner.

“Once again, NDEE is threatening fines, but as we have seen, there are no teeth behind this threat, since the Nebraska Attorney General has not pursued action on the lawsuit already filed,” Mollhoff said in an email.

NDEE was contacted for this story, but they said they are not fielding media questions at this time due to the pending litigation. They advise that people with questions visit the AltEn information page on the NDEE website.

“Once they contaminate the groundwater, (NDEE) doesn’t seem to have any requirements for them to clean it up,” Mollhoff said. “They just wait for it to flow downstream, I guess.”

NDEE was scheduled to meet with leaders in the Mead community on Wednesday, Dec. 15, but the meeting was postponed because of power outages resulting from storms that day.

Mollhoff wants to see more transparency from NDEE about updates on the cleanup process. Currently, NDEE public information comes from the meetings in Mead and updates on their website.

Thorson said Mead citizens just want to know that progress is being made.

“When people have seen the magnitude of what’s out there, they realize it’s going to take a long time,” he said. “But I think they just want to know that it’s being done, and they’re moving forward on it.”

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