Report to the Executive Board of the Legislative Council

University of Nebraska
University of Nebraska Medical Center
College of Public Health
Study of the Impact of contamination at the AltEn plant in Mead, NE, on human health and the environment

The University of Nebraska Medical Center (UNMC) College of Public Health through the $1 million federal American Rescue Plan Act funding appropriated in LB1068 will assess and evaluate the impact of toxic chemicals present at the AltEn ethanol plant in Mead, NE, on human health and the environment.

The purpose of this project, as originally outlined in LB 1048 (2022), is to assess and evaluate the environmental and human health effects of the toxic chemicals contained in the dry residue (ñwetcakeò) and wastewater produced and stored at the AltEn ethanol-production plant in Mead, Nebraska. Ethanol production at the AltEn plant continued until February 8, 2021, and most of the solid byproduct and the wastewater produced daily are still stored on site (84,000 tons of wet-cake and 176 million gallons of wastewater) or field-applied near the community, leading to high concentrations of pesticides in the area.

This proposed assessment and evaluation of the contaminants and potential health effects of the activities and stored waste at the AltEn site is being conducted by faculty members at UNMC, the University of Nebraska-Lincoln (UNL), and Creighton University. As appropriate, we plan to continue working with the town of Mead, Saunders County, the Lower Platte North NRD, and UNL-ENREC.

During June, 2022, the group working on this project continued with their various activities:

1. The effects of AltEn contaminants on water, soil, small wildlife, birds, and pollinator insects were sampled and sent for analysis.
2. The survey of perceived human health effects was closed and analysis of the responses was begun. The survey was sent to approximately 1000 households and 459 completed responses were received. The analysis is continuing.
3. The group held a townhall meeting in Mead on the evening of June 16. Approximately 50 people attended. Several faculty members (5-UNMC and 2-UNL) presented their initial findings in water, air, small wildlife, birds, and insects. In addition, the results from sampling one home in Mead were presented. All of these presentations led to lively discussions and questions.

We will continue to disseminate the findings of our work to the public. People living and working in the area are concerned about the contamination of air, water and soil in the vicinity of

environment. In addition, the human health information can help citizens know whether their health is at risk.

This project will also help the State of Nebraska identify and deal with the contamination of waterways, and possibly groundwater, to protect the health of the citizens of the State and our natural resources needed for agricultural production and other industries.