#### STATE OF NEBRASKA

# DEPARTMENT OF NATURAL RESOURCES

ORDER GRANTING PERMIT I-25 TO TRANSFER GROUNDWATER FOR INDUSTRIAL USE

# BACKGROUND

- On December 13, 2019, Archer Daniels Midland Company (ADM) and Vantage Corn Processing, LLC, (Applicants) filed Application I-25 for a permit to transfer groundwater for industrial purposes from 12 existing groundwater wells located at Applicants' facilities in located in Sections 23, 26, 27, Township 17 North, Range 01 East of the 6th P.M., Platte County.
- 2. Groundwater has been withdrawn and transferred for industrial purposes throughout the Applicants' facilities since the early 1990's, with two wells constructed in 1992 and expanded to twelve wells by 2014. These industrial purposes generally include grain processing, corn wet milling and dry milling processes, ethanol production, power co-generation and cooling.
- 3. The application requests an industrial groundwater transfer of up to 11,200 acre-feet per annum at a peak rate of 8000 gallons per minute (gpm) which represent Applicants' existing groundwater use with some allowance for additional use which may occur based on an increasing historical pumping trend and process variation. The Application indicates there are no current plans for construction of new wells or new processing ADM and Vantage are operating legally without a permit facilities. afforded under the Industrial Groundwater Transfers Act Neb. Rev. Stat. § 46-676, however, the application is being sought in order to provide protection for Applicants' water supply due potential legal organizational change which may include a change in ownership of facilities or wells thereby necessitating an industrial transfer permit.

## FINDINGS

- 1. When considering an application for a permit to transfer groundwater for industrial purposes the Director must determine the criteria for approval described in Neb. Rev. Stat. § 46-683(1) are specifically considered as follows:
- a. Possible adverse effects on existing surface or ground water users;

No significant adverse effects on surrounding surface or groundwater users are anticipated as the result of approving this application. The application is primarily for existing groundwater use which began in the early 1990's. The existing wells are located in a highly transmissive aquifer which is hydraulically connected to the Platte River, tributary streams and canals, which has been sufficient to meet Applicants' demand and that of surrounding groundwater users. According to groundwater modeling results provided in the application, the continued operations and potential expansion of groundwater withdrawals at Applicants' facility may increase drawdown at surrounding wells, however, the drawdown is not predicted to reduce groundwater levels to where the wells owned by other nearby users would be operationally impaired for domestic and agricultural demands.

No increased effects on downstream surface water users are anticipated because the predominant share of water use requested under the application is from pre-existing groundwater withdrawals. Any stream depletion caused by increasing groundwater withdrawals up to the maximum amount requested under the permit will be addressed by the limits established with the Lower Loup Natural Resources District's Integrated Management Plan (IMP) and thus not harm downstream domestic, municipal, agricultural and environmental surface water users. In addition, approximately 50% of the groundwater pumped at the facility, after being processed at ADM's wastewater treatment plant, is returned to the Platte River via the Columbus-Genoa Power Canal Return.

b. The effect of the withdrawal and any transfer of ground water on surface or ground water supplies needed to meet reasonably anticipated domestic and agricultural demands in the area of the proposed ground water withdrawal;

The basin within which this industrial use occurs is not fully appropriated. As such, there is allowance under the effective integrated management plans for more development of groundwater resources. More specifically, the Lower Loup Natural Resources District's IMP has allowance for increased depletions due to groundwater development. The existing use of groundwater at this plant was part of the baseline uses considered during the development of the IMP. The increase allowed within this permit approval is within what is allowed by the IMP while still allowing for additional agricultural and domestic uses in the area.

c. The availability of alternative sources of surface or ground water reasonably accessible to the applicant in or near the region of the proposed withdrawal or use;

The Applicants' facilities are underlain by a transmissive, alluvial sand and gravel aquifer with excellent hydraulic properties leading to a reliable water supply for the existing groundwater wells. The facilities are also located near surface water supplies including the Platte River & Columbus-Genoa Canal hydropower return. Groundwater wells are a reasonable supply choice over surface water due to ease of access, continuous availability, and filtration of water.

d. The economic benefit of the applicant's proposed use;

The application shows ADM and Vantage Corn Processing represent a substantial economic benefit to the city of Columbus, Platte County, and the surrounding region. Together, the plants employ 400 fulltime employees and approximately 75 contractors. The plant operators purchase a significant percentage of the corn produced in the region.

e. The social and economic benefits of existing uses of surface or ground water in the area of the applicant's proposed use and any transfer;

Existing uses of groundwater and surface water near the Applicants' facility include domestic, agricultural, environmental, and industrial purposes, all of which have positive social and economic benefits to the

surrounding community. The application will not materially affect surface water and groundwater uses in the area.

f. Any waivers of liability from existing users filed with the director;

The application was Noticed on January 30, February 6, and February 13, 2020, in the Columbus Telegram in accordance with Neb. Rev. Stat. § 46-683(1). No waivers of liability were filed in the Department, and no objections to the granting of application I-25 were received.

g. The effects on interstate compacts or decrees and the fulfillment of the provisions of any other state contract or agreement;

No interstate compacts, decrees, or other agreements would be affected by the granting of application I-25.

h. Other factors reasonably affecting the equity of granting the permit;

The Columbus Area Groundwater Recharge Project which is being developed by the Lower Loup NRD with the support of stakeholders, including ADM, is expected to provide groundwater recharge at areas near the ADM facility. The project should mitigate additional drawdown to area wells which could occur after issuance of this industrial groundwater transfer permit, if water withdrawal from Applicants' wells increases to the maximum level indicated in the Application.

2. Neb. Rev. Stat. § 46-683(2) authorizes the Director to grant a permit for less water than requested by the Applicant and to impose reasonable conditions deemed necessary to protect existing users of groundwater. The application establishes the Applicants' existing groundwater use and demonstrates that the requested volume of water provides for a reasonable increase to current use made in order to protect the Applicants' water supply during organizational change. While the application and included technical analysis demonstrates the future water use could be in excess of historical use, it likely would not affect water supplies currently available to existing surface water and groundwater users. Therefore, the application should be approved in the amount requested.

#### ORDRER

IT IS HEREBY ORDERED:

Application I-25 for a permit for an industrial groundwater transfer is APPROVED. The terms and conditions of the permit are as follows:

- Permit I-25 authorizes Applicants to withdraw and transfer groundwater from 12 industrial water wells. Withdrawal and transfer of groundwater under permit I-25 from all wells shall not exceed 8,000 gallons per minute maximum.
- 2. The total amount of groundwater that may be withdrawn and transferred in a one-year period shall not exceed 11,200 acre-feet.
- Groundwater may be withdrawn and transferred from the existing industrial water wells identified as follows: G-074995, G-074994, G-157490, G-083813, G-083814, G-083815, G-083816, G-099840, G-132820, G-132821,

G-153755, and G-157491, located in Sections 23, 26, 27, Township 17 North, Range 01 East of the 6th P.M., Platte County.

- 4. The water shall be used for industrial purposes at facilities generally located in Sections 23, 26, 27, Township 17 North, Range 01 East of the 6th P.M., Platte County as described in Application I-25. These facilities currently include those of ADM, Vantage Corn Processing, LLC, and Prairie Catalytic.
- 5. The owners of the wells are responsible for complying with the terms and conditions of this Order. If a change in ownership of these wells occurs in the future, the Department must be provided with a written plan, signed by all well owners describing how the terms and conditions of this Order will be followed and acknowledge responsibility for this compliance. The plan must be filed before the ownership of the wells is transferred.
- 6. Approval of this permit is based on the information included and representations made in Application I-25 by ADM and Vantage Corn Processing. That information and those representations are considered terms of this approval, to which Applicants must adhere.
- 7. Applicants (well owners)shall install a flow meter on each well, and, by January 31 of each year, shall file in the office of the Department a completed "Industrial Ground Water Well Report", on a form provided by the Department.
- 8. Applicants must comply with all state and federal laws and the regulations of the Department and the Lower Loup Natural Resources District (NRD), including, but not limited to, the following:
  - A. Any new or replacement water wells must be registered as required by Neb. Rev. Stat. § 46-602(1).
  - B. Applicants shall notify the Department of any changes in the place of use or nature of use, as provided in *Neb. Rev. Stat.* § 46-683.01.
  - C. All current and future owners of the wells identified in the Application are responsible for complying with terms of this permit and must faithfully coordinate to operate wells within the limits identified herein.
- 9. If Applicants (well owners) have ceased to use water for beneficial purposes under this permit for more than three consecutive years, the permit may be revoked or modified by the Director pursuant to *Neb. Rev. Stat.* § 46-684(1).

THIS PERMIT MAY BE REVOKED OR MODIFIED BY THE DEPARTMENT FOR FAILURE TO COMPLY WITH THE TERMS AND CONDITIONS OF THE PERMIT.

DEPARTMENT OF NATURAL RESOURCES In Jesse Bradley, P.G., Interim Director

May 1, 2020

A copy of this Order granting Permit I-25 was posted on the Department's website and provided to the Department's field office in Ord, Nebraska. A copy of this Order was mailed on May 1, 2020, to the following:

Archer Daniels Midland Company & Vantage Corn Processing, LLC Bob Bauer, Environmental Manager 3000 East 8<sup>th</sup> Street Columbus, Nebraska 68601

Russ Callan, General Manager Lower Loup Natural Resources District 2620 Airport Road Ord, Nebraska 68862