

## **VILLAGE OF TOLONO**

*Champaign County, Illinois - Resolution No. 2024-R-3*

### **A RESOLUTION SUPPORTING SENATE BILL 3963 TO PROTECT THE MAHOMET AQUAFER**

WHEREAS, the Village of Tolono Board of Trustees is charged with the health, care and safety of its citizens; and

WHEREAS, the Governor of the State of Illinois has signed into a law Senate Bill 1289 which would allow for carbon sequestration under the Mahomet Aquifer which is partially situated in Champaign County, Illinois; and

WHEREAS, the Mahomet Aquifer is comprised of about 1,260,000 acres of land in east-central Illinois spanning 15 counties and consists of subterranean sand and gravel flowing along the Mahomet Bedrock Valley forming the western part of the Teays-Mahomet Bedrock Valley System being a regional system of underground fresh water providing about 900,000 individuals with water including the residents of Champaign County, Illinois and Tolono, Illinois; and

WHEREAS, the Illinois General Assembly created the Mahomet Aquifer Protection Task Force in 2017 which issued findings and recommendations in 2018 which assessed the extreme importance of the Aquifer as the primary source of potable water for the area and which identified risks of contamination from legacy landfills and abandoned wells but which predated the technique of CO<sub>2</sub> sequestration; and

WHEREAS, the USDA has established that exposure to CO<sub>2</sub> in the air can range from mild respiratory stimulation at 15,000 ppm (1.5%) to immediately dangerous to life or health at 40,000 ppm (4.0%) to unconsciousness and possible death at 80,000 ppm (8.0%); and

WHEREAS, CO<sub>2</sub> released into aquifers results in a decline in water PH, causes concentrations of manganese, cobalt, nickel and iron potentially increasing uranium and barium according to publications in the American Chemical Society and Environmental Science & Technology; and

WHEREAS, CO<sub>2</sub> forms carbonic acid H<sub>2</sub>CO<sub>3</sub> when escaping into underground water sources which, in modest quantities is not harmful to humans but in excessive quantities can irritate the respiratory system and the eyes; and

WHEREAS, one of the sources for sediment that was used for these studies through the US Geological Survey included the Mahomet Aquifer; and

WHEREAS, the U.S. EPA in its "Class VI – Wells used for Geologic Sequestration of Carbon Dioxide" guidelines for Underground Injection Control provides injection well criteria and monitor wells stressing the importance of avoiding contamination of ground water; and

WHEREAS, in surface water systems including lakes, rivers and tributaries, concentrations of carbon dioxide creates toxicity which is lethal to fish; and

WHEREAS, the Carbon Capture and Storage industry is in its infancy with the technology being developed as the industry develops; and

WHEREAS, the collection, transport and sequestration of CO<sub>2</sub> involves high pressure lines and underground injection into natural geological formations subjecting it to the risk of leakage and pressure line explosions; and

WHEREAS, leakage can come in the form of geological features such as fractures and fissures or even well blowouts such as the Sheep Mountain CO<sub>2</sub> Dome blow out in 1982 releasing 7K to 11K tons of CO<sub>2</sub>; and

WHEREAS, the Village finds that CO<sub>2</sub> sequestration in the vicinity of the Mahomet Aquifer puts the aquifer at unacceptable risk of being contaminated, puts the safety of the public at significant and unacceptable risk both through contamination of the primary water source, and puts the regional economy at risk due to potential disruption of potable water; and

WHEREAS Senate Bill 3963 has been proposed which would ban carbon sequestration activity over the Mahomet Aquifer; and

WHEREAS the Village Board has considered this matter and is supportive of the effort to protect the Mahomet Aquifer and is supportive of Senate Bill 3963.

NOW, THEREFORE, BE IT HEREBY RESOLVED BY THE PRESIDENT AND MEMBERS OF THE BOARD OF TRUSTEES OF THE VILLAGE OF TOLONO, ILLINOIS AS FOLLOWS:

1. The Village finds that the risk posed by utilizing new technology to permanently sequester carbon dioxide poses unnecessary and unacceptable risk to the water supply of many east central Illinois communities and to any of those downstream of the Mahomet Aquifer in addition to the atmospheric risks from leaks and blowouts.
2. The Village strongly supports Senate Bill 3963 and encourages its state officials to protect the Mahomet Aquifer and approve Senate Bill 3963.

Duly adopted and approved this 1st day of October, 2024.

VILLAGE OF TOLONO

BY: \_\_\_\_\_

Robert Murphy, Its President

ATTEST:

Brandy Dalton

Brandy Dalton, Its Clerk