

## **Resolution to Protect Citizens and First Responders from the Dangers of Supercritical Carbon Dioxide Pipeline Ruptures**

Whereas, Navigator CO2 Ventures has proposed to construct a large high-pressure supercritical carbon dioxide pipeline through Buckhart Township, Christian County for a total of approximately 11 miles;

Whereas, no supercritical carbon dioxide pipelines currently exist in Christian County;

Whereas, carbon dioxide gas in high concentrations can asphyxiate and at lower concentrations can intoxicate humans and livestock, thereby creating a risk of injury or even death;

Whereas, a rupture of the Navigator pipeline has the potential to release a large quantity of carbon dioxide gas at high concentration levels over a potentially large geographic area within Christian County;

Whereas, carbon dioxide gas is colorless and odorless and may not be detected by human senses, making exposure difficult to detect and avoid and danger zones challenging to define;

Whereas, carbon dioxide gas can intoxicate citizens and first responders and cause disorientation and confusion, limiting the potential for self-evacuation by citizens and making first responder rescue operations challenging;

Whereas, carbon dioxide gas is heavier than air and can settle in low lying areas and closed structures for significant periods of time;

Whereas, high concentrations of carbon dioxide following a rupture of the Navigator pipeline could cause internal combustion engines in motor vehicles to malfunction or even stop operating, limiting the ability of citizens to use their trucks and cars to self-evacuate, and limiting the ability of first responders to use rescue vehicles;

Whereas, emergency alert systems exist, such as Amber alerts and automatic phone calls, that should be used to alert Christian County residents within the danger zone for a rupture of the Navigator pipeline;

Whereas, computer modeling is available to estimate the distance that carbon dioxide can disperse from a pipeline rupture assuming a range of weather conditions and topographies, but such modeling has not been provided to Christian County for use by its county board, first responders, and residents, such that Christian County has no reliable information about the geographic extent of the potential danger zone following a rupture of the Navigator pipeline;

Whereas, large high-pressure supercritical carbon dioxide pipelines may rupture with substantial force as the supercritical carbon dioxide depressurizes into a gas, producing explosive running ductile fracturing for extensive distances unless stopped through use of sufficiently strong pipe steel or crack arrestors, putting nearby citizens and properties in danger;

Whereas, Illinois has enacted statutes and issued regulations that provide state and county emergency planning agencies with authority to plan and prepare for a wide range of emergencies, including release of large quantities of supercritical carbon dioxide; and


Whereas, Christian County first responders should not bear the cost of the specialized emergency response equipment, training, and other resources uniquely necessary for response to a supercritical carbon dioxide pipeline rupture;

Now therefore, be it resolved:

That Buckhart Township, Christian County requests that Illinois' emergency planning, first response, and pipeline permitting agencies take the following actions:

- investigate the risks of and emergency planning needed for a potential rupture of the Navigator pipeline in Christian County, and in cooperation with Christian County first responders prepare an emergency response plan for Christian County in the event of such rupture;
- conduct or direct Navigator CO2 Ventures to conduct CO2 dispersion computer modeling to identify the possible extent of CO2 intoxication and asphyxiation zones from a rupture of the Navigator pipeline in Christian County, taking into account a range of weather conditions and the county's topography, to ensure that Christian County can define a danger zone for a rupture of the Navigator pipeline for emergency planning, response, and rescue purposes;
- identify and recommend emergency response training, equipment, and communication needs of Christian County to respond to a rupture of the Navigator pipeline and require that Navigator CO2 Ventures bear the cost of such needs;
- identify and recommend emergency communication resources needed to alert Christian County residents, businesses, and first responders in the event of a rupture of the Navigator pipeline, such as automated alert phone calls and text messaging, and require that Navigator CO2 Ventures bear the costs of implementing any new alert system or modifying existing alert systems deemed necessary by Christian County;
- ensure that to the maximum extent allowed by law, Illinois agencies condition their permit approvals by including a requirement that Navigator CO2 Ventures pay for all training, equipment, and communication needs of Christian County to respond to a rupture of the Navigator pipeline as long as the pipeline is operational; and
- not grant any state permits for the Navigator pipeline before completion of all actions requested by this resolution.

Adopted by the Buckhart Township Board, Christian County, Illinois on the 31<sup>st</sup> day of May in the year 2022.

  
(Kyle Kocarek)  
Trustee  
Signature of authorized representative

Nancy C. Whitcomb, Secy

Blake Seaton, Road commissioner  
James R. Newdy, trustee  
Gana Seaton, Clerk  
Bruce Buckelsky, Trustee  
Kathy Adden, trustee