



## 103RD GENERAL ASSEMBLY

### State of Illinois

2023 and 2024

SB3441

Introduced 2/8/2024, by Sen. Steve McClure

#### SYNOPSIS AS INTRODUCED:

New Act

Creates the Safety Moratorium on Carbon Dioxide Pipelines Act. Establishes a temporary statewide moratorium on construction of carbon dioxide pipelines until certain studies at the federal and State levels are conducted. Details requirements for the State study regarding the safety of carbon dioxide pipelines, which include receiving input from first responders, analyzing pipeline ruptures or leaks in a variety of settings, and recommending setbacks and funding based on that analysis. Provides that pending applications for carbon dioxide pipelines shall be held in abeyance. Provides for expiration of the temporary moratorium after four years, or when new safety standards pursuant to required studies are established, or upon adoption of certain ensuing legislation, which is detailed as including setbacks for safe evacuation, specifications limiting eminent domain, funding for first responders, funding for required actions at carbon sequestration sites, expanded monitoring at carbon sequestration sites, specification for long-term liability in the event of a disaster, a ban on the use of captured carbon dioxide for enhanced oil recovery, emissions limits for air pollutants, requirements regarding greenhouse gas lifecycle analysis with prohibitions on carbon capture unless certain showings are made, a mandate that alternatives to capture be evaluated, public participation opportunities, and additional protections, including a prohibition related to protecting "sole source" aquifers designated by the United States Environmental Protection Agency. Defines terms. Makes findings. Effective immediately.

LRB103 37551 BDA 67675 b

1 AN ACT concerning utilities.

2 **Be it enacted by the People of the State of Illinois,**  
3 **represented in the General Assembly:**

4 Section 1. Short title. This Act may be cited as the Safety  
5 Moratorium on Carbon Dioxide Pipelines Act.

6 Section 5. Legislative findings. The General Assembly  
7 finds and determines that:

8 (1) Pipelines are being proposed in the State by companies  
9 for the purposes of transportation of carbon dioxide both from  
10 within the State and from locations outside the State;

11 (2) The transport of carbon dioxide via pipelines  
12 significantly affects landowners' rights to enjoy their  
13 property. Carbon dioxide pipelines may impede access to  
14 property and fields, place permanent restrictions on the use  
15 of land, reduce crop yield from construction activities, and  
16 pose a risk of grave harm to humans, livestock, and other  
17 animals if there is a release of carbon dioxide;

18 (3) As specified in the Carbon Dioxide Transportation and  
19 Sequestration Act, regulation of the construction,  
20 maintenance, and operation of pipelines transporting carbon  
21 dioxide is within the statutory and regulatory jurisdiction of  
22 the Pipeline and Hazardous Materials Safety Administration  
23 (PHMSA) of the federal Department of Transportation; and

1 (4) in response to a major carbon dioxide pipeline failure  
2 in Satartia, Mississippi in 2020 that resulted in local  
3 evacuations and caused almost 50 people to seek medical  
4 attention, PHMSA conducted an investigation of the risks to  
5 human health and the environment presented by carbon dioxide  
6 pipelines. PHMSA announced, on May 26, 2022, that to  
7 strengthen CO<sub>2</sub> pipeline safety and oversight, PHMSA is  
8 initiating new rulemaking to update standards for carbon  
9 dioxide pipelines, including requirements related to improved  
10 safety, oversight, and emergency preparedness and response.

11 Section 10. Definitions. As used in this Act:

12 "Carbon dioxide pipeline" or "pipeline" means the in-state  
13 portion of a pipeline, including appurtenant facilities,  
14 property rights, and easements, that are used exclusively for  
15 the purpose of transporting carbon dioxide to a point of sale,  
16 storage, or another carbon management application.

17 "Commission" means the Illinois Commerce Commission.

18 "Criteria pollutants" are the pollutants that have been  
19 identified as "criteria pollutants" by the United States  
20 Environmental Protection Agency under Section 108 of the Clean  
21 Air Act.

22 "Hazardous air pollutants" are the pollutants that have  
23 been identified as "hazardous air pollutants" by the United  
24 States Environmental Protection Agency under Section 112 of  
25 the Clean Air Act.

1 "Sequester" has the meaning given to that term in Section  
2 1-10 of the Illinois Power Agency Act.

3 "Sequestration" means to sequester or be sequestered.

4 "Sequestration facility" means the carbon dioxide  
5 sequestration reservoir, underground equipment, and surface  
6 facilities and equipment used or proposed to be used in a  
7 geologic storage operation. "Sequestration facility" includes  
8 an injection well and equipment used to connect the surface  
9 facility and equipment to the carbon dioxide sequestration  
10 reservoir and underground equipment. "Sequestration facility"  
11 does not include pipelines used to transport carbon dioxide to  
12 a sequestration facility.

13 "Transportation" or "transport" means the physical  
14 movement of carbon dioxide by pipeline conducted for a  
15 person's or an entity's own use or account or the use or  
16 account of another person, persons, or entity.

17 Section 15. Temporary statewide moratorium on construction  
18 of carbon dioxide pipelines.

19 (a) No certificate of authority for the construction and  
20 operation of a pipeline intended for transport of carbon  
21 dioxide shall be issued by the Commission until:

22 (1) the Pipeline and Hazardous Materials Safety  
23 Administration has adopted revised federal safety  
24 standards for transportation of carbon dioxide; and

25 (2) the State of Illinois has commissioned and

1 finalized a study, which shall be made available to the  
2 public, determining how far carbon dioxide pipelines must  
3 be separated from livestock, residences, hospitals,  
4 schools, nursing homes, places of worship, jails, prisons,  
5 businesses, industry, and other locations where people  
6 congregate, in order to ensure adequate time for the safe  
7 evacuation or rescue of people and animals in the event of  
8 a pipeline rupture or leak. The study shall:

9 (A) include input from first responders, including  
10 both voluntary and paid professionals, law enforcement  
11 officials, medical and veterinary professionals;  
12 transportation experts; carbon dioxide pipeline  
13 engineers; meteorologists, geologists, persons trained  
14 in computational fluid dynamic modeling and other  
15 modeling of carbon dioxide plumes, the Illinois  
16 Emergency Management Agency, Illinois Department of  
17 Public Health, County Emergency Management Agencies,  
18 township officials, county boards, village boards,  
19 city councils, and the general public;

20 (B) evaluate CO<sub>2</sub> concentrations resulting from  
21 pipeline ruptures or leaks in a variety of urban,  
22 suburban, and rural settings present in Illinois,  
23 including concentrations resulting from leaks or  
24 ruptures of carbon dioxide pipelines with varying  
25 diameters and carbon dioxide flow rates, based on  
26 predictions of the most precise available

1 computational fluid dynamic model of CO<sub>2</sub> plume  
2 movement;

3 (C) recommend setbacks for each such setting,  
4 pipeline diameter, and flow rate, based on: (1) the  
5 concentrations of CO<sub>2</sub> released in the event of a leak  
6 or rupture, (2) the time humans and, where  
7 appropriate, livestock would be exposed to those  
8 concentrations, and (3) the ability to, and time  
9 necessary to, self-evacuate or be rescued before  
10 oxygen deprivation leads to serious health effects,  
11 including, but not limited to, convulsions,  
12 unconsciousness, coma, or death; among other  
13 considerations, the study shall account for the  
14 decreased mobility of elderly persons, young children,  
15 persons who depend primarily on public transportation,  
16 incarcerated persons, and persons gathered in spaces  
17 where large numbers of people assemble, as well as the  
18 availability of electric vehicles or other transport  
19 options that do not use combustion engines; and

20 (D) recommend an initial amount of funding  
21 sufficient to provide first responders, medical  
22 professionals, local governments, and other entities  
23 involved in the evacuation or rescue of persons  
24 potentially affected by a CO<sub>2</sub> pipeline rupture with  
25 the equipment, training, staffing, and other items  
26 necessary to carry out safe and timely evacuations and

1 rescues in the event of a rupture; the study shall also  
2 recommend fees to be required of pipeline operators to  
3 ensure availability of the necessary sum, as well as a  
4 method for updating the amount of funding and fee  
5 changes to account for changing costs, inflation, and  
6 other relevant factors.

7 (b) Any application for a certificate of authority to  
8 construct or operate a pipeline intended for transportation of  
9 carbon dioxide that, as of the effective date of this Act, is  
10 pending before the Commission shall (1) be held in abeyance,  
11 without prejudice, until the revised safety standards and  
12 study specified in subsection (a) have been finalized or the  
13 temporary moratorium has expired as provided herein, and (2)  
14 will be subject to any revised safety standards if adopted in  
15 legislation.

16 (c) The temporary moratorium is inoperative when any of  
17 the following events occur:

18 (1) Four years have passed since this Act's effective  
19 date;

20 (2) Both the Pipeline and Hazardous Materials Safety  
21 Administration's new safety standards and the study  
22 required by subsection (a) (2) have been finalized; or

23 (3) The State of Illinois has adopted comprehensive  
24 legislation regulating the capture, transport, and  
25 sequestration of carbon dioxide in Illinois, which  
26 legislation includes, among other things:

1 (A) setbacks allowing for the safe evacuation or  
2 rescue of persons and animals in the event of the  
3 rupture or leak of a carbon dioxide pipeline;

4 (B) specifications limiting the use of eminent  
5 domain for carbon dioxide pipelines and limiting the  
6 use of property amalgamation for carbon dioxide  
7 sequestration;

8 (C) the establishment and ongoing funding of an  
9 emergency fund provided by entities that transport or  
10 sequester CO<sub>2</sub> to ensure first responders are able to  
11 perform safe and timely evacuations, rescues, and  
12 other emergency response actions in the event of a  
13 carbon dioxide release from a pipeline or  
14 sequestration site;

15 (D) mandatory financial assurance to cover the  
16 cost of monitoring, corrective action, well-plugging,  
17 and emergency response at sequestration sites, which  
18 does not take the form of insurance, financial  
19 guarantees, financial tests, or other self-bonding  
20 mechanisms;

21 (E) expanded monitoring of carbon sequestration  
22 sites using more methods, and for longer duration,  
23 than the monitoring required by the U.S. Environmental  
24 Protection Agency;

25 (F) specification of long-term liability in the  
26 event of a release of brine or carbon dioxide from a



1 sequestration site;

2 (G) a ban on the use of captured carbon dioxide for  
3 enhanced oil recovery in Illinois;

4 (H) emission limits that ensure that carbon  
5 capture does not contribute to significant increases  
6 in emissions of criteria pollutants or hazardous air  
7 pollutants at facilities from which carbon is captured  
8 or facilities that power capture;

9 (I) a mandate for a greenhouse gas life cycle  
10 analysis for each facility from which carbon dioxide  
11 is captured and a prohibition on carbon capture unless  
12 the company seeking to capture carbon demonstrates  
13 that the mass of carbon dioxide sequestered from the  
14 project will be greater than the mass of greenhouse  
15 gas emissions associated with the lifecycle of  
16 capture, transport, and storage of that carbon  
17 dioxide;

18 (J) a mandate that alternatives to capture be  
19 evaluated, including, but not limited to, renewable  
20 energy, energy efficiency, and battery storage, when  
21 the capture facility is a power plant; and  
22 electric-battery powered vehicles when the capture  
23 facility produces fuel; the evaluation of alternatives  
24 shall compare the greenhouse gas pollution, water use  
25 and water quality impacts, air pollution impacts, and  
26 generation of waste of each alternative to those of

1 the proposed capture, transport, and sequestration of  
2 the CO<sub>2</sub>;

3 (K) robust public participation opportunities for  
4 all carbon capture, pipeline, and sequestration  
5 projects in Illinois and public disclosure of all  
6 documentation; and

7 (L) additional protections, potentially including  
8 prohibition of CO<sub>2</sub> pipelines and sequestration  
9 proximate to drinking water aquifers designated as  
10 sole source aquifers by the United States  
11 Environmental Protection Agency.

12 Section 20. Repealer. This Act is repealed 4 years after  
13 its effective date.

14 Section 99. Effective date. This Act takes effect upon  
15 becoming law.