Date of Hearing: July 9, 2025

ASSEMBLY COMMITTEE ON UTILITIES AND ENERGY
Cottie Petrie-Norris, Chair
SB 614 (Stern) – As Amended May 5, 2025

SENATE VOTE: 38-0

SUBJECT: Carbon dioxide transport

SUMMARY: Adds carbon dioxide (CO_2) to the substances included in the Elder California Pipeline Safety Act of 1981 (Elder Act), which currently applies to petroleum and other hazardous liquids. Requires the Office of the State Fire Marshall (OSFM) to adopt regulations governing the safe transportation of CO_2 by April 1, 2026, as specified, and lifts the statewide moratorium on pipelines transporting CO_2 to or from a carbon capture, removal, or sequestration project. Specifically, **this bill**:

1) Modifies provisions of the Elder Act to include CO_2 throughout.

2) Requires the OSFM to develop regulations by April 1, 2026, that at minimum meet the standards proposed by the draft regulations issued by the federal Pipeline and Hazardous Materials Safety Administration (PHMSA) on January 10, 2025, and requires OSFM to post those federal draft regulations on its website by January 15, 2026.

3) Requires the OSFM to coordinate with relevant agencies to ensure the regulations require a project applicant to demonstrate that the transportation of CO_2 in a pipeline complies with all of the following:
    a. The California Endangered Species Act.
    b. The Porter-Cologne Water Quality Control Act.
    c. The California Environmental Quality Act.
    d. Other Applicable state laws and regulations.
    e. Applicable local land use and zoning regulations.

4) Requires all pipelines permitted to transport CO_2 to be newly constructed and not converted from existing pipelines.

5) Authorizes the OSFM to protect the public health and welfare and the environment to require additional safety standards, including, but not limited to:
    a. Pipeline design.
    b. Fracture mechanics.
    c. Pipeline materials.
    d. Valve materials.
    e. Conversion of existing pipeline.
    f. Pipeline location.
    g. Potential impact areas of a release.
    h. Land movement.
    i. Operation.
    j. Odorant requirements.
    k. Leak detection.
    l. Emergency response.

m. Monitoring and detection of contaminants entering the pipeline.
n. Maintenance.
o. Other factors deemed appropriate by the SFM.

6) Requires the OSFM, at least once every five years, to assess the safety standards and shall amend the regulations to increase safety standards, including adopting those safety standards that are technically feasible and commercially available for use in future pipelines.

7) Requires, until January 1, 2036, the OSFM to establish the Carbon Dioxide Pipeline Safety Advisory Committee (Committee) for both of the following purposes:

   a. Making recommendations, as necessary, to the SFM regarding additional safety standards as described above.
   b. Informing local agencies and every pipeline operator transporting CO_2 of changes in applicable laws and regulations affecting the operations of pipelines and reviews proposed CO_2 pipeline safety regulations as described above.

8) Authorizes the OSFM, for a pipeline transporting CO_2, to order a pipeline shutdown for violations of the provisions of this bill or if continued pipeline operations present an immediate danger to health, welfare, or the environment.

9) Authorizes assessed civil penalties to be used to provide fire responder training for hazardous gas suppression training to local fire departments. Existing law assesses a civil penalty for a violation of the Act or regulations pursuant to the Act and requires these penalties, upon appropriation by the Legislature, to be available to provide hazardous liquid fire suppression training to local fire departments.

10) Lifts the moratorium on intrastate CO_2 pipelines used in CO_2 capture, removal, or sequestration projects only if the pipelines are regulated by the OSFM under the above regulations, and the project operator demonstrates that the pipeline meets those regulations.

11) Establishes findings related to CO_2 pipelines, largely focused on carbon capture being part of the state's climate strategy and the intent that CO_2 pipelines operate in a manner that minimizes risks.

EXISTING LAW:

1) Provides that pipelines shall only be utilized to transport CO_2 to or from a CO_2 capture, removal, or sequestration (CCS) project once the federal PHMSA has concluded its pending rulemaking regarding minimum federal safety standards for transportation of CO_2 by pipeline and the CO_2 project operator demonstrates that the pipeline meets those standards. This provision does not apply to carbon captured at a permitted facility and transported within that facility or property. (Public Resources Code § 71465(a))

2) Requires the Natural Resources Agency, in consultation with the California Public Utilities Commission (CPUC), to provide a proposal to the Legislature to establish a state

framework and standards for the design, operation, siting, and maintenance of intrastate pipelines carrying CO_2 fluids. (Public Resources Code § 71465(b))

3) Pursuant to the Elder Act:

   a) Grants the OSFM exclusive safety, regulatory, and enforcement authority over intrastate hazardous liquid pipelines. (Government Code § 51010)

   b) Defines "pipeline" for the purposes of the Elder Act as every intrastate pipeline used for the transportation of hazardous liquid substances or highly volatile liquid substances; and does not include an interstate pipeline subject to federal regulations, a pipeline that transports hazardous substances in a gaseous state, and other specified exclusions. (Government Code § 51010.5)

   c) Requires OSFM to adopt hazardous liquid pipeline safety regulations in compliance with the federal law relating to hazardous liquid pipeline safety, including, but not limited to, compliance orders, penalties, and inspection and maintenance provisions. (Government Code § 51011)

   d) Requires each pipeline operator to file with OSFM an inspection, maintenance, improvement, or replacement assessment for older pipelines. This includes pipelines built before January 1, 1960 and any pipeline installed on or after January 1, 1960, for which regular internal inspections cannot be conducted, or which shows diminished integrity due to corrosion or inadequate cathodic protection. (Government Code § 51012.4)

   e) Requires every newly constructed pipeline, existing pipeline, or part of a pipeline system that has been relocated or replaced, and every pipeline that transports a hazardous liquid substance or highly volatile liquid substance, to be tested in accordance with federal regulations. It also requires that every pipeline more than 10 years of age and not provided with effective cathodic protection to be hydrostatically tested every three years, except for those on the OSFM's list of higher risk pipelines, which shall be hydrostatically tested annually. (Government Code § 51013.5)

   f) Defines "hydrostatic testing" as the application of internal pressure above the normal or maximum operating pressure to a segment of pipeline, under no-flow conditions for a fixed period of time, utilizing a liquid test medium. (Government Code § 51010.5 (c))

   g) Requires every operator of an intrastate pipeline to maintain each valve and check valve necessary for safe pipeline operations, and requires OSFM to promulgate regulations for maintaining, testing, and inspecting these valves. (Government Code § 51015.4)

   h) Authorizes OSFM to assess and collect from every pipeline operator an annual administrative fee. (Government Code § 51019)

4) Pursuant to federal law:

   a) Grants the United States Secretary of Transportation the regulatory and enforcement authority over gas and hazardous liquid pipelines, including CO_2 pipelines. (49 United States Code § 60102)

   b) Prohibits the Secretary of Transportation from prescribing or enforcing safety standards and practices for an intrastate pipeline or intrastate pipeline facility to the extent that the safety standards and practices are regulated by a state authority, except as provided. (49 United States Code § 60105)

   c) Defines "carbon dioxide," for the purposes of the United States Department of Transportation PHMSA regulations, as a fluid consisting of more than 90% carbon dioxide molecules compressed to a supercritical state. (49 Code of Federal Regulations § 195.2)

   d) Defines "hazardous liquid" as petroleum, petroleum products, anhydrous ammonia, and ethanol or other non-petroleum fuel, including biofuel, which is flammable, toxic, or would be harmful to the environment if released in significant quantities. (49 Code of Federal Regulations § 195.2)

FISCAL EFFECT: According to the Senate Committee on Appropriations, this bill will result in unknown, potentially absorbable costs to the OSFM. The committee notes the actual fiscal impact will depend on the extent OSFM may absorb this bill's workload into existing responsibilities and whether costs may be offset by pipeline operator annual fees.

CONSUMER COST IMPACTS: Unknown.

BACKGROUND:

CO_2 – There are a number of CO_2 sources. An abundant source is from underground reservoirs where CO_2 under pressure occurs naturally. It can also be produced commercially in natural gas plants, ammonia plants, and recovered from power plant stack gas with carbon capture technology.

At normal temperatures and atmospheric pressure, CO_2 is an odorless and colorless gas, not flammable, and denser than air. It will not combust, but it can be fatal to humans due to the potential for suffocation. CO_2 may exist either as a solid or gas depending on temperature and pressure. Dry ice for refrigeration is a common use of CO_2 in solid form. When pressurized to extremely high pressures (1,200 pounds per square inch gauge (psig)), CO_2 enters a supercritical state. Supercritical CO_2 is a fluid state where CO_2 is held at or above its critical temperature and critical pressure, where its properties are midway between a gas and a liquid.

PHMSA regulations define CO_2 as a fluid consisting of more than 90% CO_2 molecules compressed to a supercritical state. The remaining 10% may be comprised of gases such as water, nitrogen, oxygen, methane, or other impurities. Federal standards set CO_2 impurity limits for transportation pipelines.

Pipeline transportation of CO_2 in the supercritical state is more practical than transportation in the gaseous state. As a dense vapor in the supercritical state, CO_2 can be transported more

economically and efficiently using smaller pipelines and pumps because greater volumes of fluid may be transported. Most CO_2 is transported in the supercritical state in steel pipelines kept at 2,200 psig.

As of May 2023, there were just over 5,000 miles of CO_2 pipelines in the United States, compared to 229,287 miles of hazardous liquid transmission pipelines carrying products such as crude oil, gasoline, jet fuel, and other liquid commodities.[1] The majority of CO_2 pipelines are currently used for enhanced oil recovery (EOR), where supercritical CO_2 is pumped into existing oil wells to extract more product. Most of the CO_2 being transported through these existing pipelines comes from high pressure, higher purity natural underground sources.[2]

What are the commercial applications of CO_2? – Unsurprisingly, the beverage market is the largest segment of CO_2 use; however, the beverage market requires food grade CO_2 with a much higher purity rating than required in industrial or pipeline applications. CO_2 has been used for many years to aid in the production of crude oil. Because of its high degree of solubility in crude oil and its abundance, CO_2 is a popular extraction tool in EOR projects. In EOR, the CO_2 mixes with crude oil, making the oil more mobile and easier to extract.[3] There is currently a statutory moratorium on CO_2 in EOR in the state.[4] Supercritical CO_2 has also grown in popularity as a solvent in the chemical industry, where it can replace more toxic, volatile organic compounds.[5]

Carbon Neutrality – Reaching carbon neutrality means that all CO_2 emissions are either completely eliminated or balanced out by removing an equal amount from the atmosphere. This is necessary to limit global temperature rise above historic levels. While the term "carbon neutrality" is often used in the same way as "net zero GHG emissions," the latter is inclusive of all greenhouse gases – not just CO_2 – such as nitrous oxide, as defined by AB 32 (Nunez, Chapter 488, Statutes of 2006).

California set a target to reach carbon neutrality by 2045 under Governor Brown's Executive Order B-55-18. This target became law in 2022 through AB 1279, authored by Assemblymember Muratsuchi. The law requires that at least 85% of emissions be directly reduced, and no more than 15% can be offset through technologies that remove emissions from the atmosphere.

Interstate vs. Intrastate Jurisdictions – PHMSA has exclusive federal authority over ***inter***state pipeline facilities.[6] An interstate pipeline is one used in the transportation of hazardous liquid or carbon dioxide in interstate or foreign commerce. Typically, these lines cross state borders or begin in federal waters. As of 2015, there were 1,188 miles of interstate pipeline in California.[7] State agencies may regulate portions of interstate pipelines located within the state if there is an

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[1] Pipeline Safety Trust; "Carbon Dioxide Pipeline Safety;" *Summary for Policymakers*; May 2023.
[2] Pipeline Safety Trust, May 2023; *Ibid.*
[3] Federal Register, Vol. 56, No. 113; June 12, 1991; 49 C.F.R. Part 195 "Transportation of Carbon Dioxide by Pipeline."
[4] Public Resources Code § 3132, added by SB 1314 (Limon, Chapter 336, Statutes of 2022)
[5] Chemical Engineering; "Supercritical CO2: A Green Solvent;" February 1, 2010; https://www.chemengonline.com/supercritical-co2-a-green-solvent/?printmode=1
[6] 49 USC § 60101, et seq.
[7] Cal FIRE-OSFM Pipeline Safety Division "Information Sheet"; October 21, 2015; https://antr.assembly.ca.gov/sites/antr.assembly.ca.gov/files/Pipeline%20Hearing%20%2810%2021%2015%29_CALFIRE%20FactSheet%20.pdf

agreement between PHMSA and the agency. For hazardous liquid pipelines, that agreement is with OSFM; for gas pipelines, it is the CPUC. These agencies are only allowed to enter into an agreement with PHMSA if given all regulatory and enforcement authority of the pipelines subject to the agreement. PHMSA maintains these agreements as certifications through the Office of Pipeline Safety, which are updated annually.[8]

OSFM and the CPUC share the regulation over ***intra***state pipeline facilities. OSFM regulates intrastate hazardous *liquid* pipelines pursuant to the Elder California Pipeline Safety Act of 1981.[9] Whereas the CPUC regulates intrastate *gas* pipelines (both natural gas and liquid petroleum gas). An intrastate pipeline is defined as a pipeline that is located entirely within state borders, including offshore state waters. As of 2015, there were 4,500 miles of intrastate pipeline in California, although that number was predicted to grow.[10] The vast majority of pipelines in California carry petroleum based hazardous liquids.[11]

According to a 2023 California Natural Resources Agency report to the Legislature, PHMSA has delegated regulatory authority for intrastate CO_2 pipelines to OSFM.[12] However, OSFM's jurisdiction under this delegation is limited to enforcing the federal standards, rather than establishing state standards.[13] Currently, PHMSA has only established safety standards regarding the transport of CO_2 in a supercritical state at a concentration of 90% or higher.[14] The transport of CO_2 in concentrations of less than 90%, or in liquid or gas form is unregulated.[15] PHMSA has noted this regulatory gap is due to the limited (supercritical-phase only) CO_2 pipelines in operation in 1991 during the creation of the original federal rules.[16]

PHMSA was in the process of updating their safety standards for CO_2 pipelines,[17] and on January 10, 2025, issued draft regulations as part of a Notice of Proposed Rulemaking.[18] These draft regulations included 18 proposals, including:

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[8] U.S. Department of Transportation, PHMSA website; "Regulatory Fact Sheet: California;" https://primis.phmsa.dot.gov/comm/FactSheets/States/CA_State_PL_Safety_Regulatory_Fact_Sheet.htm?nocache=1716; accessed April 16, 2025.
[9] Gov. Code, § 51010, et seq.
[10] Cal FIRE-OSFM Pipeline Safety Division "Information Sheet"; October 21, 2015; https://antr.assembly.ca.gov/sites/antr.assembly.ca.gov/files/Pipeline%20Hearing%20%2810%2021%2015%29_CALFIRE%20FactSheet%20.pdf
[11] According to a 2015 background paper prepared by the Assembly Committee on Natural Resources for "Joint Informational Hearing: Oil Pipeline Safety: Testing Methods and Frequency;" Santa Barbara, CA; October 21, 2015.
[12] CNRA, *Proposal to the Legislature for Establishing a State Framework and Standards for Intrastate Pipelines Transporting Carbon Dioxide*, March 2023, https://resources.ca.gov/-/media/CNRA-Website/Files/Initiatives/Transitioning-to-Clean-Energy/SB-905--CO2-Pipeline-Regulatory-Framework--Stds-March-2023.pdf.
[13] *Id.* at 6.
[14] Richard B. Kuprewicz, ACCUFACTS INC., *Accufacts' Perspectives on the State of Federal Carbon Dioxide Transmission Pipeline Safety Regulations as it Relates to Carbon Capture, Utilization, and Sequestration within the U.S.* 1 (2022), https://pstrust.org/wp-content/uploads/2022/03/3-23-22-Final-Accufacts-CO2-Pipeline-Report2.pdf..
[15] *Ibid*
[16] Pg. 8, PHMSA, Notice of Proposed Rulemaking; "Pipeline Safety: Safety of Carbon Dioxide and Hazardous Liquid Pipelines;" Docket PHMSA-2022-0125; RIN 2137-AF60; https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/2025-01/PHMSA%20Notice%20of%20Proposed%20Rulemaking%20for%20CO2%20Pipelines%20-%202137-AF60.pdf
[17] pg 1. Paul W. Parfomak, Congressional Research Service, *Carbon Dioxide (CO2) Pipeline Development: Federal Initiatives* 1 (2023), https://crsreports.congress.gov/product/pdf/IN/IN12169.

- Redefining "carbon dioxide" to be a fluid of more than 50% CO_2 molecules in any combination of gas, liquid, or supercritical phases.
- Establishment of procedures to convert steel pipelines for CO_2 or hazardous liquid transport.
- Requiring all carbon dioxide pipeline operators to provide training to emergency responders that addresses threats specific to carbon dioxide releases and provide equipment to local first responders for use during an emergency on a carbon dioxide pipeline.
- Requiring leak detection, fixed vapor detection, and alarm systems for CO_2 pipelines.
- Requiring operators of all carbon dioxide pipelines to establish emergency planning zones extending two miles on either side of their pipelines that will inform operators' efforts in ensuring members of the public have adequate emergency response information.[19]

There are still many steps to go before the PHMSA rules become finalized. First, the Office of the Federal Register needs to publish the official NPRM, which has yet to occur. PHMSA then undergoes an extensive public process with advisory committee meetings, as well as receiving public comments from the Federal Register posting. PHMSA incorporates that public process in its final rule.

However, in compliance with a January 20, 2025, memorandum issued by President Trump,[20] PHMSA withdrew the NPRM from Federal Register publication, rendering it not open for public comment. How PHMSA will proceed with its NPRM is uncertain, although the agency may separately consider other regulatory changes related to CO_2 pipeline safety. On June 4, 2025, following a series of executive orders issued by President Trump, PHMSA published an advance notice of proposed rulemaking soliciting "stakeholder feedback on whether to repeal or amend" any of its pipeline safety requirements.[21]

Safety Considerations of CO_2 – CO_2 is not currently defined as a hazardous substance under PHMSA regulations. As noted above, the most dangerous hazard of CO_2 is asphyxiation. Because CO_2 is denser than air, it may pool in enclosed spaces or fail to disburse when released in areas without strong air circulation. The most deadly incident involving CO_2 occurred in 1986 in Lake Nyos, Cameroon which is one of only three lakes in the world known to be naturally saturated with CO_2. An eruption of dissolved CO_2 in the lake suddenly released an estimated 1.6 million tons of CO_2 into the air, killing 1,700 people and 3,500 livestock. However, industrial CO_2 accidents may also occur, such as a 2008 leak at a fire extinguishing installation in

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[18] Dept. of Transportation, PHMSA; "Pipeline Safety: Safety of Carbon Dioxide and Hazardous Liquid Pipelines:" PHMSA-2022-0125; https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/2025-01/PHMSA%20Notice%20of%20Proposed%20Rulemaking%20for%20CO2%20Pipelines%20-%202137-AF60.pdf

[19] PHMSA, Notice of Proposed Rulemaking; "Pipeline Safety: Safety of Carbon Dioxide and Hazardous Liquid Pipelines;" Docket PHMSA-2022-0125; RIN 2137-AF60; https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/2025-01/PHMSA%20Notice%20of%20Proposed%20Rulemaking%20for%20CO2%20Pipelines%20-%202137-AF60.pdf

[20] https://www.whitehouse.gov/presidential-actions/2025/01/regulatory-freeze-pending-review/

[21] https://www.federalregister.gov/documents/2025/06/04/2025-10090/pipeline-safety-mandatory-regulatory-reviews-to-unleash-american-energy-and-improve-government

Germany, which led to the hospitalization of 19 people.[22] More recently, a CO_2 pipeline accident occurred in Satartia, Mississippi in February 2020, when a pipeline that was part of a network used for EOR ruptured, causing the evacuation of local residents and the hospitalization of 46 people. Emergency responders were not notified by the company that owned the pipeline about the leak and did not know what type of leak they were responding to.[23] The subsequent investigation by PHMSA found the operator's actions and omissions contributed to the accident and its severity.[24]

COMMENTS:

1) *Author's Statement.* According to the author, "Communities deserve safety and a robust public process whenever a project carrying hazardous materials will be traveling through their communities. While the permitting and building of carbon dioxide pipelines are an important part of the state's carbon capture and sequestration efforts, it cannot come at the expense of community safety. SB 614 aims to enshrine the Biden administration draft regulations in state law to ensure best-in-class safety practices. This bill sets a high standard for establishing when transportation of carbon dioxide by pipeline would be allowed, and would provide experts with the ability to increase safety standards and stringency."

2) *Purpose of Bill. Implementing SB 905's CO_2 Framework.* In 2022, SB 905 (Caballero, Chapter 359, Statutes of 2022) was signed by Governor Newsom. The bill prohibits the use of intrastate pipelines to transport CO_2 until PHMSA completes its rulemaking process. SB 905 required the California Natural Resources Agency (CNRA) to "provide a proposal to the Legislature to establish a state framework and standards for the design, operation, siting, and maintenance of intrastate pipelines carrying CO_2 fluids of varying composition and phase to minimize the risk posed to public and environmental health and safety."[25]

   The proposal was released in March 2023, and included various recommendations "aimed at informing additional legislation that would be necessary to create a robust regulatory framework governing CO_2 pipelines so as to protect public, health, safety, and the environment. These recommendations are made with the recognition that CCS and carbon removal projects, and CO_2 transport, represent a new set of technologies and infrastructure and accordingly, poses, new risks and potential adverse impact to human health, safety, and the environment should a pipeline failure occur."[26]

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[22] P. 4; Harper, P., et al.; "Assessment of the Major Hazard Potential of Carbon Dioxide;" *Health and Safety Executive*; June 2011.
[23] U.S. Department of Transportation, *Failure Investigation Report - Denbury Gulf Coast Pipelines, LLC - Pipeline Rupture/Natural Force Damage* (2022), https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/2022-05/Failure%20Investigation%20Report%20-%20Denbury%20Gulf%20Coast%20Pipeline.pdf.
[24] DOT, *Failure Investigation Report*; *Ibid.*
[25] PRC § 71465 (b)
[26] Pg. 8, CNRA, *Proposal to the Legislature for Establishing a State Framework and Standards for Intrastate Pipelines Transporting Carbon Dioxide;* March 2023; https://resources.ca.gov/-/media/CNRA-Website/Files/Initiatives/Transitioning-to-Clean-Energy/SB-905--CO2-Pipeline-Regulatory-Framework--Stds-March-2023.pdf

One of the recommendations included providing the OSFM with clear regulatory authority over pipeline transportation of CO_2 in liquid, gas, and supercritical state to protect public safety. As part of this recommendation the CNRA stated that "clear authority to draft safety-related regulations governing intrastate CO_2 pipelines will avoid ambiguity about which state agency is charged with regulating liquid, gas, and supercritical CO_2 pipelines. It will also ensure a well-defined and understood regulatory process that includes robust public process and allows time to incorporate emerging information from new research and development studies."[27] Additionally, CNRA recommended OSFM be designated clear administrative and enforcement authority to order intrastate CO_2 pipelines shutdown immediately when safety regulations are violated.[28]

This bill is an effort to implement many of these recommendations.

3) *CTRL V.* The Elder Act was written in the 1980s to address petroleum pipelines. It has been updated over the years in the wake of petroleum pipeline accidents to add safety requirements, most recently following the 2015 Refugio spill in Santa Barbara County. However, the original Act, as well as the updates, are geared towards petroleum infrastructure and characteristics, as well as lessons learned from petroleum pipeline accidents.

   This bill inserts "carbon dioxide" wherever the Elder Act refers to hazardous liquid. In some cases, this may be inappropriate. For example, the bill exempts offshore CO_2 pipelines in federal waters and flow lines. These existing exemptions are based on petroleum production infrastructure and may not make sense for CO_2. The bill also exempts CO_2 pipelines on onshore production, refining, and manufacturing facilities, which again is based on petroleum infrastructure and may be inappropriate given the characteristics of CO_2 and likelihood that a pipeline rupture may have impacts well beyond the boundaries of the production, refining, or manufacturing facility where the pipeline is located.

   CO_2 safety regulations may need to be tailored to the unique characteristics of CO_2 and may need to be more stringent than petroleum pipelines, at least while the industry builds knowledge and experience. The bill acknowledges this distinction by highlighting potential amendments to regulations of CO_2 pipelines to address other issues not addressed in the Elder Act, such as standards for impurities and added odorants. *Given this, the committee recommends striking the provisions of this bill in the Elder Act that exempt certain types of CO_2 transport that are unique to petroleum pipelines, specifically in GOV § 51010.5 (a)(4)-(7) and (b).*

4) *Timing and Overlap.* As mentioned above, PHMSA is currently undergoing a rulemaking to update their safety standards around CO_2 pipelines, and issued a draft Notice of Proposed Rulemaking (NPRM) in January 2025.[29] It is unclear how long this process

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[27] Pg. 8-9, CNRA March 2023 Proposal, *Ibid.*
[28] Recommendation #3, pg. 9, CNRA March 2023 Proposal, *Ibid.*
[29] PHMSA, Notice of Proposed Rulemaking; "Pipeline Safety: Safety of Carbon Dioxide and Hazardous Liquid Pipelines;" Docket PHMSA-2022-0125; RIN 2137-AF60;

may take, or what level of priority this rulemaking has under the new federal administration.

The statewide moratorium on CO_2 pipeline transport for CCS projects, adopted in 2022 under SB 905 (Caballero, Chapter 359, Statutes of 2022), lifts once PHMSA concludes this rulemaking, and pipeline operators demonstrate their pipelines meet the new federal standards. Given the uncertainty with the federal rules, this bill lifts the moratorium before the federal action and introduces new safety regulation development at the state level through the OSFM.

The bill requires the OSFM to adopt state rules under a very ambitious timeline – 3 months – by April 1, 2026. This quick timeline seems to be motivated, in part, by millions of dollars in federal tax credits that these projects are currently eligible to receive.[30] The recent federal tax bill, H.R.1, kept the 45Q tax credits for carbon capture but at a much less generous level.[31]

Moreover, the bill requires OSFM to ensure the regulations not only meet the standards of the NPRM, but also that OSFM consult with various agencies to ensure the regulations require applicants to demonstrate compliance with specified California laws. The bill further requires OSFM to establish a Carbon Dioxide Pipeline Safety Advisory Committee to make recommendations for these safety standards, and provides 15 additional considerations for potential inclusion. The bill does not provide any exemption to the Administrative Procedures Act (APA), which governs the development of administrative regulations to ensure they are comprehensible, authorized by statute, consistent with other laws, and undertaken in a process that is accessible and transparent to the public. While fair and transparent, the APA process can take time. It is unclear how such an effort, with many new requirements on regulatory development and consultations, may occur within 3 months.

The author has asserted the federal draft NPRM are largely comprehensive and "establish a workable framework for California." However, the bill currently offers a structure for regulatory development that is highly ambitious and potentially infeasible. *As a result, the committee recommends a number of changes to the structure of OSFM regulatory development, to make completion under the statutory timeline more likely:*

1) *Clarify that the regulations shall be "adopted" by April 1, 2026, not just "developed."*
2) *Require the initial regulations to be adopted in 3 months be "equivalent to" the draft federal regulations, and that any additional requirements for OSFM to incorporate in regulation – except for consideration of odorants and the requirement that the permitted pipelines be newly constructed, which shall both*

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https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/2025-01/PHMSA%20Notice%20of%20Proposed%20Rulemaking%20for%20CO2%20Pipelines%20-%202137-AF60.pdf

[30] Section 45Q of the Internal Revenue Code; https://www.federalregister.gov/documents/2021/01/15/2021-00302/credit-for-carbon-oxide-sequestration

[31] Base credit is now $17/ton of CO2 for industrial facilities (previously $85/ton). Direct air capture is at $36/ton; previously $180/ton. https://www.congress.gov/bill/119th-congress/house-bill/1

be included in the initial regulations – shall be as amendments to these initial regulations.

3) *Provide that the initial regulations be considered emergency regulations, which still provide for a public comment period, but any subsequent amendment must go through the full APA process.*
4) *Strike the establishment of the Carbon Dioxide Pipeline Safety Advisory Committee.*
5) *Clarify that the five-year review of the safety standards in GOV § 51011.5 (c) "may" lead to amendments of the regulations, to align with the existing OSFM directive to "may require" these additional standards.*

5) *Inter and Intra Moratoria.* The author has indicated the intent of this bill is for the CCS moratorium to be lifted only upon the OSFM adopting the PHMSA regulations. However, the bill is unclear in this timing, and seems to apply the moratorium removal to both inter- and intrastate pipelines. A coalition of environmental organizations raise concern around this point, writing in opposition to the bill: "SB 614 would prematurely and unnecessarily end California's partial pause on CO_2 pipelines." Particularly when the future is unclear at the federal level with PHMSA withdrawing the NPRM, it is not clear how secure the leadership taken under this bill will be. *Given the author's stated intent, the committee recommends amendments to clarify the statewide CO_2 pipeline moratorium is only lifted upon OSFM adopting regulations for intrastate pipelines under OSFM jurisdiction, and retaining the moratorium for interstate pipelines until PHMSA concludes its rulemaking.*

6) *Additional Amendments.* This bill requires additional clarification or clean-up, such as applying the OSFM authority to order a pipeline to shutdown to any violation of state or federal law, not just the proposed GOV § 51011.5; or striking "conversion of existing pipelines" in the list of additional considerations for OSFM in GOV § 51011.5 (b), as its inclusion is contrary to the requirement in the bill that all CO_2 pipelines "be newly constructed and not converted from existing pipelines." *The committee recommends adopting these changes.*

7) *Related Legislation.*

AB 881 (Petrie-Norris), largely similar to this measure, requires OSFM to adopt regulations for the transportation of CO_2 in a pipeline, including certain specified safety standards that, at a minimum, meet those proposed by the PHMSA. Status: *set for hearing* on July 16, 2025, in the Senate Committee on Environmental Quality, after passage in the Senate Committee on Governmental Organization 14-0-1.

8) *Prior Legislation.*

AB 2623 (Arambula, 2024) added CO_2, compressed to a supercritical state, to the substances included in the Elder Act, giving the OSFM exclusive jurisdiction to regulate intrastate pipeline transportation of CO_2. Also required the OSFM to adopt safety-related regulations governing intrastate CO_2 pipelines that include design, operation, and maintenance requirements on the pipelines themselves, public safety requirements, and reporting requirements, among other requirements as specified; and expanded the

statutory moratorium on CO_2 pipeline usage from being until the federal safety standards are adopted, to being until both the federal and state safety regulations are adopted. Status: *Died* – Assembly Committee on Utilities and Energy.

AB 1676 (Grayson, 2022) added CO_2, compressed to a supercritical state, to the substances included in the Elder Act, giving the OSFM exclusive jurisdiction to regulate intrastate pipeline transportation of CO_2 under the existing provisions of the Elder Act, which currently applies to petroleum and other hazardous liquids. Status: *Died* – Assembly Committee on Natural Resources.

SB 905 (Caballero) requires CARB to establish a Carbon Capture, Removal, Utilization, and Storage (CCRUS) Program and adopt regulations for a model unified permit program for the construction and operation of CCRUS projects. Established a statewide moratorium against utilizing pipelines for transporting CO_2 until the federal standards are promulgated. Status: Chapter 359, Statutes of 2022.

AB 1531 (O'Donnell, 2021) expanded the regulatory oversight of the OSFM to include intrastate pipelines transporting supercritical CO_2, and defines "carbon dioxide" as a fluid consisting of more than 90% carbon dioxide molecules compressed to a supercritical state, mirroring the federal definition. Status: *Died* – Senate Appropriations

9) *Double Referral.* This bill is double referred. Upon passage in this committee, it will be referred to the Assembly Committee on Natural Resources for its review.

REGISTERED SUPPORT / OPPOSITION:

Support

Bloom Energy
California State Pipe Trades Council

Opposition

1000 Grandmothers for Future Generations Bay Area
350 Bay Area Action
350 Contra Costa Action
350 Humboldt
350 Santa Barbara
Asian Pacific Environmental Network
Biofuelwatch
CA Youth Vs. Big Oil
California Environmental Justice Alliance (CEJA) Action
Center for Biological Diversity
Central California Asthma Collaborative
Climate Equity Policy Center
Climate Hawks Vote
Climate Health Now Action Fund
Climate Reality San Francisco Bay Area Chapter
Consumer Watchdog
El Pueblo Para El Aire Y Agua Limpia De Kettleman City

Elders Climate Action
Elders Climate Action Norcal Chapter
Extinction Rebellion San Francisco Bay Area
Food & Water Watch
Food Empowerment Project
Fossil Free California
Good Neighbor Steering Committee of Benicia
Greenpeace USA
Interfaith Climate Action Network of Contra Costa County
Labor Rise Climate Jobs Action Group
Little Manila Rising
Oil and Gas Action Network
Oil Change International
Physicians for Social Responsibility - Los Angeles
Physicians for Social Responsibility Los Angeles
Planning and Conservation League
Progressive Democrats of Benicia
Protect Monterey County
San Francisco Bay Physicians for Social Responsibility
San Francisco Baykeeper
Sandiego350
Santa Cruz Climate Action Network
Science and Environmental Health Network
See (social Eco Education)
Sierra Club California
Solano County Democratic Central Committee
Sunflower Alliance
Unidos Network INC
West Berkeley Alliance for Clean Air and Safe Jobs

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