
SENATE COMMITTEE ON EMERGENCY MANAGEMENT

Senator Henry Stern

Chair

2025 - 2026 Regular

Bill No:	SB 804	Hearing Date:	8/27/26
Author:	Archuleta		
Version:	8/17/2026 Amended		
Urgency:	No	Fiscal:	Yes
Consultant:	Cassie Royce		

SUBJECT: Hydrogen Pipeline Safety Act

SUMMARY: This bill establishes the Hydrogen Pipeline Safety Act to govern the regulation of pipelines that transport hydrogen, to be administered by the State Fire Marshal (SFM), as specified.

ANALYSIS:

Existing federal law:

- 1) Grants the United States Secretary of Transportation (Secretary) the regulatory and enforcement authority over gas and hazardous liquid pipelines, including hydrogen pipelines.
- 2) Generally prohibits, with specified exceptions, the Secretary 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.

Existing state law:

- 1) Establishes the SFM, within the Department of Forestry and Fire Protection (CAL FIRE) to protect life and property through the development and application of fire prevention, engineering, training and education, and enforcement.
- 2) Requires the SFM to adopt hazardous liquid pipeline safety regulations that comply with federal law relating to hazardous liquid (oil) pipeline safety and include certain recordkeeping and reporting requirements for hazardous liquid pipeline operators.

- 3) Directs the SFM to establish a Pipeline Safety Advisory Committee for purposes of informing local agencies and every pipeline operator of changes in applicable laws and regulations affecting the operations of pipelines and reviewing proposed hazardous liquid pipeline safety regulations.
- 4) Requires the SFM to adopt regulations by July 1, 2026, governing the transportation of carbon dioxide (CO₂) in a pipeline, including certain specified safety standards that, at a minimum, are as protective as the draft regulations proposed by the federal Pipeline and Hazardous Materials Safety Administration (PHMSA).
- 5) Authorizes the California Public Utilities Commission (CPUC) to supervise and regulate every public utility in the state and to do anything that is necessary and convenient to exercise its power and jurisdiction.
- 6) Requires gas corporations to develop a plan with specified components for the safe and reliable operation of CPUC-regulated gas pipeline facilities and requires the CPUC to review and approve, modify, or reject the plan.

This bill:

- 1) Establishes the Hydrogen Pipeline Safety Act and declares that the SFM exercises exclusive safety regulatory and enforcement authority over intrastate hydrogen pipelines, as specified.
- 2) Defines various terms for purposes of this bill, including “hydrogen pipeline” to mean a dedicated pipeline that has been constructed on or after the effective date of the hydrogen pipeline safety standards established by the SFM pursuant to this bill, for the purpose of transporting hydrogen gas.
- 3) Specifies that the definition of “hydrogen pipeline” includes every intrastate pipeline used solely for the transportation of hydrogen and excludes the following:
 - a) A pipeline for the transportation of hydrogen through an onshore production, refining, or manufacturing facility, including a storage or in-plant piping system associated with that facility.
 - b) Transportation of hydrogen by vessel, aircraft, tank truck, tank car, or other vehicle or terminal facilities used exclusively to transfer hydrogen between those modes of transportation.

- 4) Requires the SFM, by July 1, 2028, to adopt in regulation hydrogen pipeline safety standards in compliance with the federal law relating to hydrogen pipeline safety, including, but not limited to, compliance orders, penalties, and inspection and maintenance provisions, and including amendments to those laws and regulations that may be hereafter enacted and adopted.
- 5) Provides that the SFM may exempt the application of regulations adopted pursuant to this bill to any hydrogen pipeline, or portion thereof, when the SFM determines that the risk to public safety is slight and the probability of injury or damage remote.
- 6) Specifies that notifications of exemptions shall be written and include a discussion of those factors that the SFM considers significant to the granting of the exemption.
- 7) Directs the SFM, by July 1, 2028, to adopt in regulation a percentage, in excess of 90%, of hydrogen gas by volume carried in a pipeline for the purpose of identifying hydrogen pipelines.
- 8) Requires the CPUC, by March 1, 2028, to develop and submit a report to the Legislature with recommendations for the appropriate safety regulatory framework and division of jurisdictional responsibility applicable to pipelines carrying blends of hydrogen below the adopted percentage threshold in 7) above, as specified, and repeals this reporting requirement on January 1, 2031.
- 9) Specifies that each hydrogen pipeline operator with pipelines constructed before the effective date of the SFM's hydrogen pipeline safety standards shall file an assessment with the SFM, by July 1, 2028, for inspection, maintenance, improvement or replacement of those pipelines and information documenting any prior hydrogen release and subsequent investigations.
- 10) Directs the SFM to require hydrogen pipelines to comply with federal regulations enforced by the PHMSA and meet specified design and monitoring requirements.
- 11) Permits the SFM, by July 1, 2028, to establish hydrogen pipeline safety standards that meet or exceed the requirements in 10) above.
- 12) Requires the SFM to ensure alignment of standards, and periodically review and update the hydrogen pipeline safety standards, incorporating technological advancements and industry best practices.

- 13) Authorizes the SFM to determine whether a pipeline constructed before July 1, 2028, may be safely retrofitted for service as a hydrogen pipeline.
- 14) Provides that the SFM may adopt regulations to allow for the use of new technology, including, but not limited to, technology related to retrofitted pipelines.
- 15) Requires a hydrogen pipeline owner to maintain accurate operational records and submit a report to the SFM by March 30 of each year.
- 16) Establishes various pressure testing, including independent testing, requirements for hydrogen pipelines and pressure testing notification requirements for operators.
- 17) Requires the SFM to adopt regulations by July 1, 2028, for the appropriate frequency of tests and inspections, as specified.
- 18) Specifies various siting, construction and visibility requirements with respect to any hydrogen pipeline easement.
- 19) Requires operators to share pipeline maps, safety data sheets, and emergency contingency plans with local fire departments, and meet with them at a frequency to be determined by the SFM.
- 20) Directs the SFM to establish and maintain a public centralized database containing information about intrastate hydrogen pipelines, as specified.
- 21) Requires all intrastate hydrogen pipelines to be inspected annually by the SFM starting January 1, 2027, as specified.
- 22) Establishes various requirements related to safe hydrogen pipeline operation and requires immediate reporting of any rupture, explosion, or fire to the local fire department and the Office of Emergency Services, which must then notify the SFM.
- 23) Allows the SFM to shut down pipelines for safety violations or immediate danger and requires pipelines to stay offline after a rupture until the cause is determined, as specified.
- 24) Establishes enforcement provisions with specified civil and criminal penalties for violations and creates the California Hydrogen Pipeline Safety Fund (with a Pipeline Operations Account and Local Training Account) funded by annual fees on hydrogen operators.

25) Preserves the CPUC's authority over public utilities and provides that where this Act and CPUC rules conflict, the more protective rule applies.

Background

Senate Rule 29.10(d). SB 804 is being heard in this committee pursuant to Senate Rule 29.10(d). SB 804 was substantially amended in the Assembly to assign hydrogen pipeline oversight responsibilities to the SFM instead of the CPUC.

Author's statement. According to the author, "California is leading the clean energy transition, and hydrogen is poised to play a critical role in decarbonizing sectors such as heavy-duty transportation, ports, maritime shipping, aviation fuels and other industrial manufacturing applications where electrification alone may not be sufficient. As hydrogen infrastructure expands, safety must remain the top priority for California's pipeline network. Yet existing regulations have not kept pace with the growth of hydrogen projects. Senate Bill 804, the Hydrogen Pipeline Safety Act, addresses this gap by requiring the [SFM] to develop safety standards specifically tailored to hydrogen's unique characteristics and risks. By strengthening oversight and establishing clear safety requirements, SB 804 will support the responsible deployment of hydrogen infrastructure while protecting public health, safeguarding the environment, and maintaining public confidence in California's clean energy future."

Hydrogen as an energy carrier. According to the U.S. Department of Energy (DOE), hydrogen is an energy carrier, not an energy source. Hydrogen can store and deliver usable energy, but it does not typically exist by itself in nature and must be produced from compounds that contain it. Currently, most hydrogen is produced from fossil fuels, specifically natural gas. Electricity from the grid or from renewable sources, such as biomass, geothermal, solar, or wind, is also currently used to produce hydrogen. The DOE notes hydrogen is commonly used in petroleum refining and fertilizer production, while transportation and utilities are emerging markets.

Current pipeline safety oversight. Hazardous liquid pipelines may transport crude oil, gasoline, propane, and other hydrocarbons. At the federal level, PHMSA retains exclusive authority over interstate hazardous liquid pipelines, which are pipelines that cross state borders or begin in federal waters. States can establish their own pipeline safety programs if they receive certification from PHMSA to operate that program.

In California, the SFM is certified by PHMSA to exercise exclusive safety regulatory and enforcement authority over intrastate hazardous liquid pipelines,

meaning pipelines located entirely within the state's borders, including offshore state waters. Other California agencies also have separate but related responsibilities: the California Geologic Energy Management Division regulates certain production pipelines and wells, the State Lands Commission oversees offshore production activities within three miles of the coast, and the CPUC has jurisdiction over intrastate natural gas and liquefied petroleum gas pipelines. Currently, according to the CPUC, none of the CPUC-regulated public utilities operate hydrogen pipelines. Continued coordination among PHMSA, the SFM, and the CPUC ensures consistent oversight while recognizing each agency's distinct statutory responsibilities.

The unique properties of hydrogen pipelines. Previously, this bill assigned regulatory oversight to the CPUC, and, as noted in the Senate Energy, Utilities and Communications Committee analysis, hydrogen, as a molecule, is relatively small, increasing the potential for leaks. Hydrogen increases the combustibility of leaks when those leaks ignite. Hydrogen can also embrittle certain pipeline materials, increasing the potential for cracks and leaks. These factors necessitate a hydrogen-specific safety framework as laid out in this bill for pressure testing, leak detection, monitoring, material selection, and emergency response that would be administered by the SFM.

Prior/Related Legislation

AB 716 (Carillo) of 2025 would have required the SFM to adopt hydrogen-related standards that primarily govern hydrogen facilities and installations, rather than interstate or intrastate pipeline transportation, from the National Fire Protection Association as the statewide fire safety standards and guidelines for hydrogen production, storage, and distribution facilities, as specified. (Held in Senate Appropriations Committee)

SB 614 (Stern), Chapter 529, Statutes of 2025, requires the SFM to adopt regulations to regulate the transportation of carbon dioxide in a pipeline, including certain specified safety standards that, at a minimum, meet those proposed by the PHMSA.

AB 443 (Bennett) of 2025 would have required the California Energy Commission to assess the potential for using curtailed solar and wind generation to produce hydrogen, as specified. (Held in Senate Appropriations Committee)

SB 1418 (Archuleta), Chapter 607, Statutes of 2024, requires every city and county to adopt an ordinance to create an expedited, streamlined permitting process for hydrogen-fueling stations, as specified.

SB 1291 (Archuleta), Chapter 373, Statutes of 2022, requires, until January 1, 2030, cities and counties to administratively review applications for hydrogen-fueling stations and allows for denials based only on health or safety impacts.

FISCAL EFFECT: Appropriation: No Fiscal Com.: Yes Local: Yes

According to the Assembly Appropriations Committee, this bill requires significant new regulatory and enforcement work of the SFM. CAL FIRE estimates this workload to require additional resources valued at \$2.1 million in year one, \$2.9 million in year two, and \$2.8 million annually thereafter (California Hazardous Liquid Pipeline Safety Fund), for eleven additional staff positions - an executive, two pipeline safety engineers and one pipeline safety supervisor, an office manager and supervisor, four analysts and one data specialist - and equipment and training.

SUPPORT:

Burbank Water and Power
California State Pipe Trades Council
Environmental Defense Fund
State Building and Construction Trades Council of California

OPPOSITION:

Air Products and Chemicals, Inc. (unless amended)
Pipeline Safety Trust

ARGUMENTS IN SUPPORT: In support of this bill, the Environmental Defense Fund and California State Pipe Trades Council write that, “This [bill] is smart policy that anticipates the future, addresses a regulatory blind spot, and protects the health and well-being of Californians.”

ARGUMENTS IN OPPOSITION: In opposition to this bill, Pipeline Safety Trust states that, “this bill would incorrectly delegate critical pipeline safety oversight authority of hydrogen pipelines to the Office of the State Fire Marshal instead of the California Public Utilities Commission....It is the Trust’s position that this legislation has the potential to create unnecessary conflict and confusion among the two pipeline safety regulators in the state of California.” Air Products and Chemicals, Inc. opposes this bill unless it is amended to address their remaining concern related to the requirement that a pipeline remain out of

operation in the event of a rupture until an investigation is completed.